
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(B) OR 12(G) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020.

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____.

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report _____

Commission file number: 001-39328

Genetron Holdings Limited

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Cayman Islands

(Jurisdiction of incorporation or organization)

1-2/F, Building 11, Zone 1
No.8 Life Science Parkway
Changping District, Beijing, 102206
People's Republic of China
(Address of principal executive offices)

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Chief Executive Officer
Tel: +86 10 5090-7500

E-mail: sizhen.wang@genetronhealth.com

At the address of the Company set forth above

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class

Trading
Symbol

Name of each exchange
on which registered

American depositary shares, each ADS representing five ordinary shares, par value US\$0.00002 per share	GTH	The Nasdaq Stock Market LLC (The Nasdaq Global Market)
Ordinary shares, par value US\$0.00002 per share*	N/A	The Nasdaq Stock Market LLC (The Nasdaq Global Market)

* Not for trading, but only in connection with the listing on the Nasdaq Global Market of American depositary shares.

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer’s classes of capital or common stock as of the close of the period covered by the annual report.

441,810,100 ordinary shares, par value US\$0.00002 per share, as of December 31, 2020.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act. Check one:

Large Accelerated Filer ☐ Accelerated Filer ☐ Non-accelerated Filer ☒
Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards † provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Yes ☐ No ☒

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

☐ Item 17 ☐ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

Yes ☐ No ☐

† The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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INTRODUCTION

Except where the context otherwise indicates and for the purpose of this annual report only:

- “ADSs” refers to the American depositary shares, each representing five of our ordinary shares;
- “China” or “PRC” refers to the People’s Republic of China, excluding, for the purpose of this annual report only, Taiwan, Hong Kong and Macau;
- “Greater China,” with respect to our collaboration with CStone Pharmaceuticals (Suzhou) Co., Ltd. (“CStone”), refer to Mainland China, Taiwan, Hong Kong and Macau;
- “IVD” refers to in vitro diagnostics products, including platforms and assays;
- “LDT” refers to laboratory developed tests which examine samples taken from the human body, such as body fluids (blood, urine, cerebrospinal fluid, etc.) and tissue, and are conducted in our laboratories.
- “ordinary shares” refers to our ordinary shares of par value US\$0.00002 per share;
- “RMB” or “Renminbi” refers to the legal currency of the People’s Republic of China;
- “US\$,” “dollars” or “U.S. dollars” refers to the legal currency of the United States;
- “we,” “us,” “our company,” and “our,” refer to Genetron Holdings Limited, a Cayman Islands company, its subsidiaries, variable interest entities and subsidiaries of its variable interest entities; and
- “variable interest entities,” or “VIEs,” refers to Genetron Health (Beijing) Co., Ltd. and Genetron (Wuxi) Biotech Co., Ltd..

We present our financial results in RMB. We make no representation that any RMB or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or RMB, as the case may be, at any particular rate, or at all. The PRC government imposes control over its foreign currency reserves in part through direct regulation of the conversion of RMB into foreign exchange and through restrictions on foreign trade. This annual report contains translations of certain foreign currency amounts into U.S. dollars for the convenience of the reader. Unless otherwise stated, all translations of Renminbi into U.S. dollars were made at the rate at RMB6.5250 to US\$1.00, the exchange rate as set forth in the H.10 statistical release of the Board of Governors of the Federal Reserve System in effect as of December 31, 2020.

FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains forward-looking statements that reflect our current expectations and views of future events. All statements other than statements of historical facts are forward-looking statements. These forward-looking statements are made under the “safe harbor” provision under Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and as defined in the Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. In some cases, you can identify these forward-looking statements by terminology such as “may,” “will,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to,” “potential,” “continue” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, but are not limited to:

- our goals and growth strategies;
- our future business development, results of operations and financial condition;
- relevant government policies and regulations relating to our business and industry;
- our expectations regarding demand for and market acceptance of our diagnosis services and products, cancer early screening services and our IVD products and our ability to expand our customer base;
- our ability to obtain and maintain regulatory approvals from the NMPA, the NCCL and have our laboratory certified or accredited by authorities including the CLIA and the CAP;
- our ability to obtain and maintain intellectual property protections for our technologies and our continued research and development to keep pace with technology developments;
- general economic and business condition in China; and
- assumptions underlying or related to any of the foregoing.

We would like to caution you not to place undue reliance on these forward-looking statements and you should read these statements in conjunction with the risk factors disclosed in “Item 3. Key Information—D. Risk Factors” of this annual report and other risks outlined in our other filings with the Securities and Exchange Commission, or the SEC. Those risks are not exhaustive. We operate in an evolving environment. New risks emerge from time to time and it is impossible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ from those contained in any forward-looking statement. We qualify all of our forward-looking statements by these cautionary statements.

You should not rely upon forward-looking statements as predictions of future events. We do not undertake any obligation to update or revise the forward-looking statements except as required under applicable law. You should read this annual report and the documents that we reference in this annual report completely and with the understanding that our actual future results may be materially different from what we expect.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

3.A. Selected Financial Data

The following selected consolidated statements of comprehensive loss data and selected consolidated cash flow data for the years ended December 31, 2018, 2019 and 2020 and selected consolidated balance sheet data as of December 31, 2019 and 2020 have been derived from our audited consolidated financial statements included in this annual report beginning on page F-1. Our consolidated financial statements are prepared in accordance with the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”). Our historical results are not necessarily indicative of results expected for future periods. We have adopted IFRS 16 retrospectively from January 1, 2019, but have not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognized in the opening balance sheet on January 1, 2019.

The selected consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements and related notes and “Item 5. Operating and Financial Review and Prospects” included elsewhere in this annual report. Our historical results are not necessarily indicative of our results for any future periods.

	For the Year Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
(in thousands, except for percentages, shares and per share data)				
Revenue	225,176	323,425	424,485	65,055
Cost of revenue(1)	(132,450)	(178,435)	(164,268)	(25,175)
Gross profit	92,726	144,990	260,217	39,880
Selling expenses(1)	(182,474)	(253,558)	(246,959)	(37,848)
Administrative expenses(1)	(88,233)	(117,169)	(126,318)	(19,359)
Research and development expenses(1)	(71,411)	(91,697)	(148,999)	(22,835)
Net impairment losses on financial and contract assets	(658)	(2,733)	(14,843)	(2,275)
Other income and gains—net	17,074	13,297	8,526	1,307
Operating expenses	(325,702)	(451,860)	(528,593)	(81,010)
Operating loss	(232,976)	(306,870)	(268,376)	(41,130)
Finance income	1,615	2,483	28,330	4,341
Finance costs	—	(11,704)	(5,627)	(862)
Finance income/(costs)—net	1,615	(9,221)	22,703	3,479
Financial instruments with preferred rights				
—loss on fair value changes	(233,632)	(333,401)	(2,823,370)	(432,700)
—other loss	—	(26,542)	—	—
Loss before income tax	(464,993)	(676,034)	(3,069,043)	(470,351)
Income tax expense	—	—	—	—
Loss for the year	(464,993)	(676,034)	(3,069,043)	(470,351)
Loss attributable to:				
Owners of the Company	(464,993)	(676,034)	(3,069,043)	(470,351)
Loss per share				
—Basic and diluted	(4.09)	(5.41)	(10.18)	(1.56)
Loss for the year	(464,993)	(676,034)	(3,069,043)	(470,351)
Other comprehensive income/(loss)				

Items that may be reclassified to profit or loss

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	For the Year Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands, except for percentages, shares and per share data)			
Exchange differences on translation of foreign operations of the Company's subsidiaries	141	(1,824)	10,325	1,582
<i>Items that will not be reclassified to profit or loss</i>				
Changes in fair value of financial instruments with preferred rights due to own credit risk	(9,061)	(17,299)	(72)	(11)
Exchange differences on translation of foreign operations of the Company	—	—	(161,467)	(24,746)
Other comprehensive loss for the year, net of tax	(8,920)	(19,123)	(151,214)	(23,175)
Total comprehensive loss for the year	(473,913)	(695,157)	(3,220,257)	(493,526)
Total comprehensive loss attributable to:				
Owners of the Company	(473,913)	(695,157)	(3,220,257)	(493,526)

Note:

- (1) Share-based compensation expenses were charged in the following categories:

	Year ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Cost of revenue	234	446	300	46
Selling expenses	1,186	2,720	3,906	599
Administrative expenses	22,259	25,940	15,013	2,300
Research and development expenses	5,965	6,778	10,732	1,645
Total	29,644	35,884	29,951	4,950

The following table presents our selected consolidated balance sheet data as of December 31, 2019 and 2020.

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
	(in thousands)		
Summary Consolidated Balance Sheet Data:			
Cash and cash equivalents	139,954	1,375,766	210,845
Total assets	573,508	1,969,898	301,899
Financial instruments with preferred rights	2,106,334	—	—
Other payables and accruals	109,683	111,164	17,036
Total liabilities	2,351,839	277,353	42,506
Total shareholders' (deficit)/equity	(1,778,331)	1,692,545	259,393

The following table presents our selected consolidated cash flow data for the years ended December 31, 2018, 2019 and 2020.

	For the Year Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Net cash used in operating activities	(201,016)	(196,957)	(300,897)	(46,115)
Net cash generated from/(used in) investing activities	171,489	(96,807)	(84,649)	(12,973)
Net cash generated from financing activities	49,400	371,731	1,744,512	267,358
Net increase in cash and cash equivalents	19,873	77,967	1,358,966	208,270
Cash and cash equivalents at beginning of year	42,030	62,126	139,954	21,449
Exchange differences on cash and cash equivalents	223	(139)	(123,154)	(18,874)
Cash and cash equivalents at end of year	62,126	139,954	1,375,766	210,845

Non-IFRS Financial Measures

We use non-IFRS net loss and non-IFRS net loss per ordinary share for the year, which are non-IFRS financial measures, in evaluating our operating results and for financial and operational decision-making purposes. We believe that non-IFRS net loss and non-IFRS net loss per ordinary share help identify underlying trends in our business that could otherwise be distorted by the effect of certain expenses that we include in our loss for the year. We believe that non-IFRS net loss and non-IFRS net loss per ordinary share for the year provide useful information about our results of operations, enhance the overall understanding of our past performance and future prospects and allows for greater visibility with respect to key metrics used by our management in our financial and operational decision-making.

Non-IFRS net loss and non-IFRS net loss per ordinary share for the year should not be considered in isolation or construed as an alternative to operating profit, net loss for the year or any other measure of performance or as an indicator of its operating performance. Investors are encouraged to review non-IFRS net loss and non-IFRS net loss per ordinary share for the year and the reconciliation to its most directly comparable IFRS measures. Non-IFRS net loss and non-IFRS net loss per ordinary share for the year presented here may not be comparable to similarly titled measures presented by other companies. Other companies may calculate similarly titled measures differently, limiting their usefulness as comparative measures to our data. We encourage investors and others to review our financial information in its entirety and not rely on a single financial measure.

Non-IFRS net loss and non-IFRS net loss per ordinary share for the year represent net loss for the year excluding share-based compensation expenses, fair value changes of financial instruments with preferred rights and other loss of financial instruments with preferred rights (if applicable).

The following table sets forth a reconciliation of non-IFRS net loss for the years ended December 31, 2018, 2019 and 2020, to net loss for the year, its most directly comparable IFRS measure:

	Year ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Loss for the year	(464,993)	(676,034)	(3,069,043)	(470,351)
Adjustments:				
Share-based compensation	29,644	35,884	29,951	4,590
Financial instruments with preferred rights				
-loss on fair value changes	233,632	333,401	2,823,370	432,700
-other loss	—	26,542	—	—
Non-IFRS Loss	<u>(201,717)</u>	<u>(280,207)</u>	<u>(215,722)</u>	<u>(33,061)</u>
Attributable to:				
Owners of the Company	<u>(201,717)</u>	<u>(280,207)</u>	<u>(215,722)</u>	<u>(33,061)</u>

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The following table sets forth a reconciliation of non-IFRS net loss per ordinary share for the years ended December 31, 2018, 2019 and 2020 to net loss per ordinary share for the year, its most directly comparable IFRS measure:

	Year ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Non-IFRS loss per share				
- Basic and diluted	(1.77)	(2.24)	(0.72)	(0.11)
Non-IFRS loss per ADS (5 ordinary shares equal to 1 ADS)				
- Basic and diluted			(3.58)	(0.55)
Share used in non-IFRS loss per ordinary share computation:				
- Basic and diluted	113,757,127	124,894,707	301,379,911	301,379,911
ADS used in non-IFRS loss per ADS computation:				
- Basic and diluted			60,275,982	60,275,982

3.B. Capitalization and Indebtedness

Not applicable.

3.C. Reason for the Offer and Use of Proceeds

Not applicable.

3.D. Risk Factors

RISKS RELATING TO OUR FINANCIAL PROSPECTS AND NEED FOR ADDITIONAL CAPITAL

We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

We commenced our operation in 2015 through Genetron Health (Beijing) Co., Ltd. Since then, we have achieved rapid growth and continue to expand our services and products. For example, we recently launched our early screening services in the second half of 2018. Our limited operating history may make it difficult to evaluate our current business and predict our future performance. Any predictions you make about our future success or viability may be subject to uncertainty and may not be as accurate as they could be if we had a longer operating history. We may encounter risks and difficulties frequently experienced by early-stage companies in rapidly evolving fields as we seek to transit to a company capable of supporting commercial activities. In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. If we do not address these risks and difficulties successfully, our business, financial condition and results of operations may be adversely affected.

We have incurred net losses historically and we may continue to incur net losses in the near future.

We have incurred losses since our inception. For the years ended December 31, 2018, 2019 and 2020, we incurred net losses of RMB465.0 million, RMB676.0 million and RMB3,069.0 million (US\$470.4 million), respectively. To date, we have financed our operations principally from capital contributions from our shareholders and proceeds from our initial public offering. We have devoted substantial resources to the development and commercialization of our diagnosis services and products, and plan to substantially invest in the research and development related to our cancer early screening business and regulatory approvals with respect to our IVD products, including preclinical studies, clinical and regulatory initiatives to obtain marketing approval and sales and marketing activities. We are in varying stages of research and development for other services and products that we may offer. We will need to generate significant additional revenue to achieve profitability, and even if we achieve profitability, we cannot be sure that we will remain profitable for any period of time. Our failure to achieve profitability would negatively affect our business, financial condition, results of operations, and cash flows. If we are unable to execute our sales and marketing strategy for our services and are unable to gain sufficient acceptance in the market, we may be unable to generate sufficient revenues to sustain our business.

We have recorded negative cash flows from operating activities historically and may have a current liabilities position in the future.

We have experienced significant cash outflow from operating activities since our inception. We had net cash used in operating activities of RMB201.0 million, RMB197.0 million and RMB300.9 million (US\$46.1 million) for the years ended December 31, 2018, 2019 and 2020, respectively. The cost of continuing operations could further reduce our cash position, and an increase in our net cash outflow from operating activities could adversely affect our operations by reducing the amount of cash available to meet the cash needs for operating our business and to fund our investments in our business expansion.

Although we had net current assets of RMB1,557.2 million (US\$238.7 million) as of December 31, 2020, we cannot guarantee that we will not have a net current liabilities position in the future, which would expose us to liquidity risk. Our future liquidity and ability to make additional capital investments necessary for our operations and business expansion will depend primarily on our ability to maintain sufficient cash generated from operating activities and to obtain adequate external financing. There can be no assurance that we will be able to renew existing bank facilities or obtain other sources of financing.

The COVID-19 outbreak has brought uncertainties and interruptions to the global economy and caused significant volatility across the financial markets, which had a cooling effect on financing and investing activities in general.

Based on our current business plan, we believe that our current cash and cash equivalents, together with our cash generated from operating activities, financing activities, our initial public offering and pre-IPO private placements, will be sufficient to meet our present anticipated working capital requirements and capital expenditures for at least the next 12 months. However, if the impact of COVID-19 and volatility in the financial markets continue, our financing activities in future to raise additional capital may be materially and adversely affected, which may in turn have an adverse effect on our ability to meet our working capital requirement and our liquidity. For other risks related to COVID-19, see “—COVID-19 may impact our operations.”

We may need to obtain substantial additional financing to fund our growth and operations.

We will need to expend substantial resources for research and development and commercialization of our services and products candidates, including costs associated with:

- clinical trials for our services and products candidates at discovery and pre-commercialization stage;
- research and development on additional services and products; and
- commercialization of our services and products.

To date, we have funded our operations primarily through capital contributions from our shareholders and proceeds from our initial public offering. We have also received government grants of RMB10.7 million, RMB11.7 million and RMB3.9 million (US\$0.6 million) in 2018, 2019 and 2020, respectively. Our operations have consumed substantial amounts of cash since inception. The net cash used in our operating activities was RMB201.0 million, RMB197.0 million and RMB300.9 million (US\$46.1 million) for the years ended December 31, 2018, 2019 and 2020, respectively. Our cash and cash equivalents as of December 31, 2018, 2019 and 2020 was RMB62.1 million, RMB140.0 million and RMB1,375.8 million (US\$210.8 million), respectively. We expect our expenses to increase significantly in connection with our ongoing activities, particularly as we advance the development of our proprietary technologies and invest in commercialization of our full-cycle cancer management products. In addition, we require significant capital to build, maintain, operate and expend our laboratory facilities and engage in research and development activities. Accordingly, we will likely need to obtain substantial additional funding in connection with our continuing operations through public or private equity offerings, debt financing, collaborations or licensing arrangements or other sources. If we are unable to raise capital when needed or on commercially acceptable terms, we could incur losses and be forced to delay, reduce or terminate our research and development programs or any future commercialization efforts.

Raising additional capital may lead to dilution of shareholdings by our existing shareholders, restrict our operations, and may further result in fair value loss adversely affecting our financial results.

We may seek additional funding through a combination of equity and debt financings and collaborations. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of existing holders of our shares and/or ADSs will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our existing shareholders and/or ADS holders.

The incurrence of additional indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations and could also result in certain additional restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license IP rights and other operating restrictions that could adversely impact our ability to conduct our business.

As of the date of this annual report, our revenue is primarily generated from diagnosis and monitoring services and products and we are highly dependent on it for our success.

As of the date of this annual report, our revenue is primarily generated from diagnosis and monitoring services and products. We expect that revenues of our diagnosis and monitoring services and products business will continue to account for the substantial part of our revenues going forward. Our ability to generate profits will therefore largely depend upon the acceptance and adoption of our tests by our customers. The increase in acceptance and adoption of our tests will depend on numerous factors, including the prices we charge for our tests, the broader coverage of our LDT services and IVD products, the availability of clinical data that supports the value of our tests and the recognition of our services and products by hospitals, doctors, KOLs and others in the medical community. We cannot assure you that our diagnosis and monitoring services and products will continue to maintain or gain market acceptance, and any failure to do so would harm our business and results of operations.

We may face certain risks in collecting our receivables, and the failure to collect could adversely effect on our business, financial condition and results of operation.

As of December 31, 2019 and 2020, our trade and other receivables and contract assets was RMB104.3 million and RMB208.1 million (US\$31.9 million), respectively, and the provision for impairment of trade and other receivables and contract assets were RMB4.1 million and RMB18.9 million (US\$2.9 million), respectively. As our business continues to scale, our trade and other receivables and contract assets balance may continue to grow, which may increase our risks for uncollectible receivables. Actual losses on receivables balance could differ from those that we anticipate and reserve in our allowance for doubtful accounts, as a result we might need to adjust our allowance. Macroeconomic conditions could also result in financial difficulties for our clients, including limited access to the credit markets, insolvency or bankruptcy, and as a result could cause clients to delay payments to us, request modifications to their payment arrangements or default on their payment obligations to us. If we are unable to collect our trade and other receivables and contract assets from our customers, our business, financial condition and results of operation may be materially and adversely affected.

RISKS RELATING TO OUR BUSINESS AND INDUSTRY

Our financial prospects depend substantially upon the successful commercialization of our services and products in the future, which may fail or experience significant delays.

Although we have developed and marketed several diagnosis services and products to date, we believe our future success is dependent upon our ability to continuously develop technologies and successfully market our existing cancer genetic offerings to customers within the PRC and expand into overseas markets. Our ability to generate significant revenue in the next several years will depend primarily on the successes of each key stage of our business, including pre-clinical research and development, clinical trial, regulatory approval, manufacture, marketing and commercialization of our services and products, each of which is subject to significant uncertainty. Our pipeline of new IVD products are in various stages of development and may take several more years to develop and may be required to undergo extensive clinical validation. Our ability to generate sales revenue from our products and services and our future profitability depends on a number of factors, including our ability to continue:

- obtaining regulatory approvals and marketing authorizations for our services and products;

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- obtaining market acceptance by patients, hospitals, clinicians, KOLs, biopharmaceutical companies and others in the medical community;
- establishing sufficient testing capacity and commercial manufacturing capabilities, either by expanding our current facility or making arrangements with third parties;
- developing and maintaining our sales network to launch and commercialize our new cancer genomic testing services and products;
- setting appropriate and favorable prices for our cancer genomic testing services and products and obtaining adequate reimbursement from third-party payers;
- maintaining commercially viable supply relationships with third parties and maintaining sufficient research and development capabilities and infrastructure;
- addressing any competing technological and market developments; and
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how.

If we do not achieve one or more of these milestones in a timely manner or at all, we could experience significant delays in our ability to obtain approvals for our services and products or to successfully commercialize our services and products, any of which would materially harm our business and we may not be able to generate sufficient revenues and cash flows to continue our operations.

Our ability to become profitable in the future will depend on various factors, including the market acceptance of our services and products.

We are a growing precision oncology company and have engaged in targeted sales and marketing activities for our services and products. Our services and products are relatively innovative and may never gain significant acceptance in the marketplace or generate substantial revenues or permit us to become profitable. We will need to further expand our products and services offerings through the efforts of research and development and the expansion of our current relationships and development of new relationships with hospitals, KOLs and biopharmaceutical companies. Our ability to achieve and maintain commercial market acceptance of our existing and future products will depend on a number of factors, including:

- our ability to demonstrate the utility and value of our full-cycle cancer clinical treatment to our customers;
- our ability to promote awareness of our services and products;
- the rate of adoption and/or endorsement of our tests by clinicians, KOLs, and biopharmaceutical companies;
- the timing and scope of any regulatory approval for our services and products;
- whether our services are considered superior to those of our competitors;
- absence of negative publicity regarding our or our competitors' products resulting from defects or errors; and
- our ability to further validate our technology through clinical research and accompanying publications

We cannot assure you that we will be successful in addressing each of these criteria or other criteria that might affect the market acceptance of our products and services. Failure to achieve broad market acceptance of our services would materially harm our business, financial condition, and results of operations.

We may be adversely affected by the uncertainties and changes in the regulation of cancer genomic testing service industry in the PRC, and any lack of requisite approvals, permits, registrations or filings in relation to our business may have a material adverse effect on our business, results of operations and prospects.

Due to the relatively short history of the cancer genomic testing service industry in the PRC, a comprehensive regulatory framework governing our industry has not been established. We cannot rule out the possibility that some common practices in our industry which we also adopt might be viewed as not being in full compliance with the existing PRC laws and regulations.

According to the Administration of Clinical Gene Amplification Test Laboratories, a clinical gene amplification testing laboratory shall not conduct the clinical testing items that have not been registered or filed with the relevant health administrative authority in accordance with the Catalogue of Clinical Laboratory Items for Medical Institutions (2013) (“Testing Items Catalogue”). The scope of Testing Items Catalogue is limited and has not been updated since 2013. Many of testing items of our cancer genomic testing services are beyond the scope of Testing Items Catalogue, so that we are not able to register or file such testing items with the applicable health administrative authority. Meanwhile, pursuant to the Notice on Issues Related to the Management of Clinical Laboratory Items, or Circular 167, promulgated by the NHFPC on February 25, 2016, the clinical testing items which are not included in the Testing Items Catalogue, but with clear clinical significance, relatively high specificity and sensitivity, and reasonable price, shall be validated in time to meet clinical needs. Based on our consultation with a competent government authority, medical institutions could conduct testing items beyond the scope of Testing Items Catalogue after validation. However, it remains unclear as to how to validate such testing items based on Circular 167, nor does Circular 167 specify what testing items are “with clear clinical significance, relatively high specificity and sensitivity and reasonable price.” Our PRC Legal Counsel, Shihui Partners, taking into consideration of the consultation with competent government authority, among others, is of the view that the possibility of suspension of our testing items that are beyond Testing Items Catalogue is relatively low. If the government promulgates clear guidelines for validation under Circular 167, we intend to take necessary actions to meet such requirements. Any failure to meet existing and future requirements may prevent us from conducting our testing items, and result in adverse effect on our business operation.

On February 9, 2014, the General Office of NHFPC and the General Office of China Food and Drug Administration, predecessor of the National Medical Products Administration (“NMPA”), have jointly issued the Notice of Strengthening the Administration of Products and Technologies Relating to Clinical Genomic Testing, or Notice No.25, to specifically govern the products and technologies used in genomic testing service. In accordance with Notice No.25, the NHFPC is in charge of the management of clinical use of genomic testing technology, and the pilot enterprises designated by the NHFPC may use genomic testing products on trial and no medical institutions may apply genomic testing technologies or products for clinical use before the issuance of relevant access standards and management regulations. Subsequently, in March 2014, Medical Affairs and Hospital Administration Bureau of the NHFPC issued a notice to start the pilot scheme on clinical use of NGS. The first group of pilot enterprises in cancer genomic testing industry are mainly hospitals, and we have been told that no other enterprises have been approved to become new pilot enterprises after the launch of the first group of pilot enterprises, based on our consultation with a competent government authority. The companies that are not pilot enterprises, including us, may be prohibited from using NGS technology pursuant to Notice No.25. Based on our communication with an industry related authority, we have been informed that (i) the relevant government authority plans to promulgate cancer genomic testing services regulations for clinical laboratories including setting clear requirements for NGS technology approval, (ii) a few provincial centers for clinical laboratories supervised by provincial health commission have started or plan to start organizing technical inspection and quality assessment of the application of NGS technologies that suitable for clinical use, (iii) clinical laboratories conducting cancer genomic testing with a good operation record, including us, may be less likely to be subject to enforcement actions before the above cancer genomic testing services regulations be promulgated. Our PRC Legal Counsel, Shihui Partners, has advised that, taking into consideration of the foregoing consultation, among others, the likelihood of us being prohibited from using NGS technology is relatively low. If the government promulgates the clear requirement for NGS technology approval, we intend to take necessary actions to meet such requirements. Any failure to meet existing and future requirements may result in adverse effect on our continuous business operation of NGS technology utilization.

Based on Notice No.25, genomic testing diagnostic products (including gene sequencing platforms and relevant diagnostic assays or software) shall be deemed as medical devices and governed under the Regulations on the Supervision and Administration of Medical Devices, or Order No.276 of State Council. See “Item 4. Information of the Company—B. Business Overview—Regulation— Regulations Relating to Medical Devices.” Pursuant to Notice 25 and Order No.276 of State Council, the genomic testing diagnostic products used in our cancer genomic testing services shall be registered with NMPA or its local authorities. Any entity that uses unregistered genomic testing diagnostic products in cancer genomic testing services may be subject to fines, confiscation of such products it used and/or suspension of its business. However, there are only few cancer genomic sequencing platforms and assays registered with NMPA in cancer genomic testing industry. According to Frost & Sullivan, no NGS-based cancer genomic testing assay has been registered with NMPA in association with genomic sequencing platforms until a 4-gene assay was registered with NMPA in July 2018. Furthermore, such registered cancer genomic sequencing platforms and assays may not satisfy the demand for comprehensive and high-throughput testing in cancer genomic testing service industry. It is common in our industry that cancer genomic testing laboratories, including us, use unregistered cancer genomic testing diagnostic products while providing cancer genomic testing services considering that the adoption of cancer genomic testing service is time-sensitive while the pathway of registration with NMPA for cancer genomic testing diagnostic product is evolving, which usually leads to uncertain and lengthy registration process. Based on our consultation with an industry-related authority, we have been informed that (i) the relevant government authority plans to promulgate cancer genomic testing service regulations which may allow medical institutions to use unregistered but performance-qualified products in their cancer genomic testing services in future, (ii) it is the wide industry practice that genomic testing laboratories use unregistered diagnostic products in cancer genomic testing services, and (iii) the genomic testing laboratories with a good operation record, including us, may be less likely to be subject to enforcement actions before the promulgation of above cancer genomic testing regulations. In addition, in February 2021, the State Council published the newly revised Regulations on the Supervision and Administration of Medical Device, or Revised Regulations, which will become effective from June 1, 2021. Pursuant to the Revised Regulations, for in-vitro reagents, if no product of the same kind has been allowed to be marketed in PRC, qualified medical institutions may, according to their clinical needs, self-develop these in-vitro reagents and put into use of these reagents under the guidance of practicing physicians. The NMPA and the NHC are authorized to jointly promulgate more detailed regulations relating to such provision. As of the date of this annual report, we have not been subject to any material fines or other penalties related to the above mentioned non-compliance. However, regulatory agencies in China may periodically, and sometimes abruptly, change their enforcement practices. Therefore, prior enforcement activity, or lack of enforcement activity, is not necessarily predictive of future actions. The regulatory framework for this industry is also evolving and may remain uncertain for the foreseeable future. If the government promulgates new requirement for products, including sequencing platforms and assays, used in cancer genomic testing services, we intend to take necessary actions to meet such requirements. Any failure to meet existing and future requirements may adversely affect our business and results of operations as a result of those existing non-compliances or any non-compliance with any new laws or regulations.

If we fail to obtain applicable licenses or registrations for our IVD medical products, we will unable to commercially manufacture, distribute and market our products, and our commercialization of IVD medical products might be substantially harmed.

Our IVD medical products are subject to extensive regulations in China. To produce and sell our IVD medical products, we need to obtain licenses and registrations with the NMPA or their respective provincial counterparts. The sale of unregistered IVD medical products would result in administrative punishments including but not limited to monetary penalties. We currently have obtained approvals for four IVD assays, including a COVID-19 detection kit approved by the U.S. Food and Drug Administration (the “FDA”), and four IVD platforms, and most of our IVD products are still in development or in the process of obtaining registrations. The NMPA registration process is costly, lengthy and uncertain. In particular, we are required to conduct, at our own expenses, adequate and well-controlled clinical trials, and provide the NMPA with clinical data that demonstrates the efficacy and safety of our IVD medical products. The time required to obtain registrations from the NMPA is unpredictable but typically takes years following the commencement of pre-clinical studies and clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, registration policies, regulations or the type and amount of clinical data necessary to gain registration may change during the course of clinical-development and may vary among regions. If we cannot obtain the registration for our IVD medical products, we cannot commercialize such IVD medical products and there will be a material adverse effect on our business of IVD medical products commercialization, financial condition and results of operations. We cannot control whether planned clinical trials will begin on time or whether any of our clinical trials will be completed on schedule, or at all. Our product development costs would likely increase if we encounter delays in testing or obtaining approvals or if we need to perform more or a larger scale of clinical trials than planned. If the delays are significant, the commercial prospects for some of our IVD medical products will be harmed, which will adversely affect the results of operations in our business.

We face risks associated with uncertainties relating to Regulation for the Administration of Human Genetic Resources.

The collection, preservation, usage and outbound provision of human genetic resources in the PRC are governed by Regulation for the Administration of Human Genetic Resources, or HGR Regulation, except for activities relating to human genetic resources conducted for some specific purposes including clinical diagnosis and treatment. Based on our consultation with the competent government authority, we believe that our diagnosis business and early screening business are both for the purpose of clinical diagnosis and treatment, so that such activities relating to human genetic resources in our diagnosis business or early screening business may not be governed by HGR Regulation. However, we cannot assure you that our diagnosis business and early screening business will be continuously deemed as conducted for the purpose of clinical diagnosis and treatment by the relevant government authority. Meanwhile, our collection, preservation and usage of human genetic resources in our development services are governed by HGR Regulation.

Pursuant to HGR Regulation, there are some limitations for foreign entities, individuals and such entities established or actually controlled thereby (“Restricted Entities”, and each, a “Restricted Entity”) to engage in activities relating to human genetic resources. For example, the Restricted Entity is not allowed to collect or preserve human genetic resources of China, while it is prohibited from using human genetic resources of China unless that such Restricted Entity have obtained an approval from relevant government authority or have filed with relevant government authority for international cooperation with a domestic entity. As advised by our PRC Legal Counsel, Shihui Partners, taking into consideration of our consultation with a competent government authority, among others, although an entity controlled, directly or indirectly, by foreign persons through shareholding ownership would be deemed as a Restricted Entity, HGR Regulation remains unclear as to whether a VIE entity controlled by a wholly foreign owned enterprise through contractual arrangements would be deemed as a Restricted Entity. We cannot assure you that our VIE entities will not be deemed as Restricted Entities in the future, given the lack of clear statutory interpretation regarding HGR Regulation. If our VIE entities engaging in development services are deemed as the Restricted Entities by relevant government authority, our development services, among others, would be adversely affected and we may no longer be able to collect or preserve human genetic resources in our development services, and with respect to usage of human genetic resources, we may have to cooperate with domestic entities and be required to obtain approvals or file with relevant government authority for such cooperation which could result in additional cost and our business, financial condition and results of operations will be adversely affected. As of the date of this annual report, we have not been subject to any material fines or other penalties related to our collection, preservation and usage of human genetic resources in our development services. However, regulatory agencies in China may periodically, and sometimes abruptly, change their enforcement practices. Therefore, prior enforcement activity, or lack of enforcement activity, is not necessarily predictive of future actions. The regulatory framework for the administration of human genetic resources is also evolving and may remain uncertain for the foreseeable future.

We rely on third parties to monitor, support and/or conduct our pre-clinical studies and clinical trials. Therefore, we may not be able to directly control the timing, conduct, expense and quality of our clinical trials and we cannot assure these third parties can duly perform their obligations as agreed and expected.

We primarily rely on hospitals that are beyond our control to monitor, support, conduct pre-clinical studies and clinical trials of our cancer genomic testing pipeline products. As a result, we have less control over the quality, timing and cost of these studies and the ability to recruit trial subjects than conducting these trials entirely by ourselves. We cannot assure these third parties can meet expected timetable or can always be in compliance with regulatory requirements. Any failures of these third parties to duly perform their obligations may result in our clinical trials being extended, delayed or terminated, or our data being rejected by NMPA or regulatory agencies. In addition, if we are unable to maintain or enter into agreements with these third parties on acceptable terms, or if any such engagement is terminated, we may be unable to enroll patients on a timely basis or otherwise conduct our trials in the manner we anticipate.

The regulatory pathways for our detection kit for the novel coronavirus (Genetron SARS-CoV-2 RNA Test), the virus that causes COVID-19, are continually evolving, and may result in unexpected or unforeseen challenges.

Our detection kit for the novel coronavirus (Genetron SARS-CoV-2 RNA Test), the virus that causes COVID-19, received Emergency Use Authorization (EUA) from the U.S. Food and Drug Administration (the “FDA”) in June 2020. The FDA has the authority to grant an EUA to allow unapproved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions when, based on the totality of scientific evidence, there is evidence of effectiveness of the medical product, and there are no adequate, approved, and available alternatives. However, commercialization under an EUA is permitted only during the underlying public health emergency (as declared by the Secretary of the Department of Health and Human Services), meaning that once the emergency declaration is terminated, we would be required to obtain NDA approval to continue marketing the product. Furthermore, the FDA may revoke an EUA based on a determination that the product no longer satisfies the criteria for issuance of an EUA—for example, if there is no longer evidence of effectiveness of the product or there are other adequate, approved alternatives. Accordingly, we cannot predict how long, if at all, an EUA for Genetron SARS-CoV-2 RNA Test may remain in place. Any termination or revocation of the EUA for Genetron SARS-CoV-2 RNA Test could adversely impact our business.

Even though we have received breakthrough device designation for our HCCscreen™ for hepatocellular carcinoma, this designation may not expedite the development or review of HCCscreen™ and does not provide assurance ultimately of premarket approval submission or approval by the FDA.

The Breakthrough Devices Program is a voluntary program intended to expedite the review, development, assessment and review of certain medical devices that provide for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human diseases or conditions for which no approved or cleared treatment exists or that offer significant advantages over existing approved or cleared alternatives. All submissions for devices designated as Breakthrough Devices will receive priority review, meaning that the review of the submission is placed at the top of the appropriate review queue and receives additional review resources, as needed.

Although breakthrough designation or access to any other expedited program may expedite the development or approval process, it does not change the standards for approval. Although we obtained breakthrough device designation for HCCscreen™, a blood-based next-generation sequencing test, for hepatocellular carcinoma, we may not experience faster development timelines or achieve faster review or approval compared to conventional FDA procedures. For example, the time required to identify and resolve issues relating to manufacturing and controls, the acquisition of a sufficient supply of our product for clinical trial purposes or the need to conduct additional nonclinical or clinical studies may delay approval by the FDA, even if the product qualifies for breakthrough designation or access to any other expedited program. Access to an expedited program may also be withdrawn by the FDA if it believes that the designation is no longer supported by data from our clinical development program. Additionally, qualification for any expedited review procedure does not ensure that we will ultimately obtain regulatory approval for the product.

If we fail to comply with healthcare laws and regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

In the U.S., we are also subject to healthcare fraud and abuse regulation by both the federal government and the states in which we conduct our business. These laws include, without limitation:

- the federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any good, facility, item or service, including laboratory services, reimbursable, in whole or in part, under Medicare, Medicaid or other federally financed healthcare programs. The term “remuneration” has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor, however, does not make the conduct per se illegal under the Federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Several courts have interpreted the statute’s intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Federal Anti-Kickback Statute has been violated. Further, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it. in order to have committed a violation;

- the federal physician self-referral prohibitions, commonly known as the Stark Law, which prohibit, among other things, physicians who have a financial relationship, including an investment, ownership or compensation relationship with an entity, from referring Medicare and Medicaid patients for designated health services, which include clinical laboratory services, unless an exception applies. Similarly, entities may not bill Medicare, Medicaid or any other party for services furnished pursuant to a prohibited referral;
- the federal civil and criminal false claims law, including the False Claims Act, prohibit, among other things, any person from knowingly presenting or causing to be presented a false claim for payment to the federal government, or knowingly making or causing to be made a false statement to get a false or fraudulent claim paid by the federal government. A claim includes “any request or demand” for money or property presented to the U.S. government. In addition, private individuals have the ability to bring actions under these false claims laws in the name of the government alleging false and fraudulent claims presented to or paid by the government (or other violations of the statutes) and to share in any amounts paid by the entity to the government in fines or settlement. Such suits, known as qui tam actions, have increased significantly in the healthcare industry in recent years. In addition, the government may assert that a claim including items or services resulting from a violation of the Federal Anti-kickback Statute or Stark Law constitutes a false or fraudulent claim for purposes of the False Claims Act;
- the federal civil monetary penalties statute, a person is prohibited from offering or transferring to a Medicare or Medicaid beneficiary any remuneration, including waivers of co-payments and deductible amounts (or any part thereof), that the person knows or should know is likely to influence the beneficiary’s selection of a particular provider, practitioner or supplier of Medicare or Medicaid payable items or services. Moreover, in certain cases, providers who routinely waive copayments and deductibles for Medicare and Medicaid beneficiaries can also be held liable under the Federal Anti-Kickback Statute and civil False Claims Act. One of the statutory exceptions to the prohibition is non-routine, unadvertised waivers of copayments or deductible amounts based on individualized determinations of financial need or exhaustion of reasonable collection efforts. The OIG emphasizes, however, that this exception should only be used occasionally to address special financial needs of a particular patient. Although this prohibition applies only to federal healthcare program beneficiaries, the routine waivers of copayments and deductibles offered to patients covered by commercial payors may implicate applicable state laws related to, among other things, unlawful schemes to defraud, excessive fees for services, tortious interference with patient contracts and statutory or common law fraud;
- the federal Physician Payments Sunshine Act, which, among other things, impose new reporting requirements on manufacturers of certain devices, drugs and biologics for certain payments and transfers of value by them and in some cases their distributors to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain other health care providers beginning in 2022, and teaching hospitals, as well as ownership and investment interests held by physicians (as defined by the statute) and their immediate family members. Manufacturers must submit reports by the 90th day of each calendar year. Because we manufacture our own LDTs solely for use by or within our own laboratory, we believe that we are exempt from these reporting requirements. We cannot assure you, however, that our regulators, principally the federal government, will agree with our determination, and a determination that we have violated these laws and regulations, or a public announcement that we are being investigated for possible violations, could adversely affect our business, prospects, results of operations or financial condition;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection, and unfair competition laws that may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangement as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state laws that require healthcare companies to comply with the industry’s voluntary compliance guidelines, the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers, and other potential referral sources or state-specific standards on financial interactions with healthcare providers; and state laws that require healthcare companies to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensation, and other remuneration and items of value provided to healthcare professionals and entities.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available and lack of clear guidance, it is possible that some of our business activities could, despite our efforts to comply, be subject to challenge under one or more of such laws. Efforts to ensure that our business arrangements will comply with applicable healthcare and other applicable laws may involve substantial costs. In the future, it is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or then-existing statutes, regulations, or case law interpreting applicable fraud and abuse or other healthcare or applicable laws and regulations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to significant penalties, including administrative, civil and/or criminal penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in U.S. federal or state health care programs, such as Medicare and Medicaid in the U.S. and similar programs outside the U.S., a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results.

Complying with numerous regulations pertaining to our business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties.

We are subject to the Clinical Laboratory Improvement Amendment of 1988, or CLIA, which is a federal law regulating clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. Our clinical laboratory in the United States is located in Maryland and must be certified under CLIA in order for us to perform testing on human specimens. CLIA is intended to ensure the quality and reliability of clinical laboratories in the United States by mandating specific standards in the areas of personnel qualifications, administration, and participation in proficiency testing, patient test management, quality control, quality assurance and inspections. We currently hold CLIA certificates to perform high-complexity testing for our laboratories in Maryland and Beijing. Laboratories performing high complexity testing are required to meet more stringent requirements than laboratories performing less complex tests. CLIA regulations require clinical laboratories like ours to comply with various operational, personnel, facilities administration, quality, and proficiency testing requirements intended to ensure that testing services are accurate, reliable and timely. CLIA certification is a prerequisite for reimbursement eligibility for services provided to state and federal health care program beneficiaries. CLIA is user-fee funded. Therefore, all costs of administering the program must be covered by the regulated facilities, including certification and survey costs. To renew this certificate, we are subject to survey and inspection every two years. Moreover, CLIA inspectors may make periodic inspections of our clinical laboratory outside of the renewal process. The failure to comply with CLIA requirements can result in enforcement actions, including the revocation, suspension, or limitation of our CLIA certificate of compliance, as well as a directed plan of correction, state on-site monitoring, civil money penalties, civil injunctive suit and/or criminal penalties. We must maintain CLIA compliance and certification to be eligible to bill for assays provided to Medicare beneficiaries if applicable. If we were to be found out of compliance with CLIA program requirements and subjected to sanctions, our business and reputation could be harmed. Even if it were possible for us to bring our laboratory back into compliance, we could incur significant expenses in doing so.

Additionally, certain states require laboratory licenses in order to test specimens from patients in those states or received from ordering physicians in those states. We may also be subject to regulation in foreign jurisdictions if we seek to expand international distribution of our assays outside the United States.

If we were to lose our CLIA certification or state laboratory licenses, whether as a result of a revocation, suspension or limitation, we would no longer be able to offer our assays, which would limit our revenues and harm our business. If we were to lose, or fail to obtain, a license in any other state where we are required to hold a license, we would not be able to test specimens from those states.

Clinical development involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Many of the factors that may cause or lead to a delay in the commencement or completion of clinical trials may ultimately lead to delay or denial of regulatory clearance or approval. Success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the later trials will replicate the results of prior trials and pre-clinical studies. Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product candidate claims or that the regulatory authorities will agree with our conclusions regarding them. The clinical trial process may fail to demonstrate that our tests are safe and effective for the proposed indicated uses, which could cause us to abandon development of our tests and may delay development of others. Any delay or termination of our clinical trials will delay the filing of our product submissions and, ultimately, may impact our ability to commercialize our tests and generate revenues.

We may face intense competition and our competitors may develop similar, but more advanced services and products than ours, which may adversely affect our business and financial conditions.

We compete with life sciences companies that design, manufacture, and market products for analysis of genetic variations and biological functions and other applications using a wide range of competing technologies in the PRC and overseas. We anticipate that we will continue to face increased competitions as existing companies develop new or improved products and as new companies enter the market with new technologies. One or more of our competitors may render one or more of our technologies obsolete or uneconomical. Some of our competitors have greater financial, technical and personnel resources, broader product lines, more focused product lines, a more established customer base, and more experience in research and development than we do. In addition, as a result of mergers and acquisitions in life science industry, even more resources are being concentrated in our competitors and our up and down streams business partners. Competition may increase further due to the progress/improvements made in the commercial applicability of technologies and the increased capital investment in the industries. Our competitors may develop products which are more effective, less costly and safer than we are able to, or obtain patent protection, regulatory approval, product commercialization, and market penetration more rapidly than we do.

Furthermore, life sciences, clinical genomics, and pharmaceutical companies, which are our potential customers and strategic partners, could also develop competing products, which may result in the decrease of demand of our services and products. Furthermore, we believe that customers in our markets display a significant amount of loyalty to their initial supplier of a particular product; therefore, it may be difficult to generate sales to potential customers who have purchased products from competitors. To the extent we are unable to be the first to develop or supply new services and products, our competitive position may suffer.

The market for cancer genomics is currently limited and highly competitive, with several large companies already having intellectual property portfolios, and regulatory expertise. As a result, these companies may obtain regulatory approval more rapidly than we are able to. Established diagnostic companies also have an installed base of instruments in several markets, including clinical and reference laboratories, which could deter acceptance of our services and products. In addition, some of these companies have formed alliances with genomics companies that provide them access to genetic information that may be incorporated into their diagnostic tests, potentially creating a competitive advantage for them.

We and our competitors also compete on the basis of price. As the cost of analyzing genetic variation and biological function falls over time, as we expect, we cannot be sure that the demand for related services and products will increase proportionately. In the future, if the demand for our services and products proves to be more insensitive to lower sequencing costs than we expect, our business, financial condition, and results of operations will be adversely affected.

Security breaches, loss of data, and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we collect and store sensitive data, including protected health information, personally identifiable information, financial information, intellectual property, and proprietary business information owned or controlled by ourselves or our customers, payers, and other parties. We manage and maintain our applications and data utilizing a combination of on-site systems and cloud-based data centers. We utilize external security and infrastructure vendors to manage parts of our data centers. We also communicate sensitive data, including patient data, electronically, and through relationships with multiple third-party vendors and their subcontractors. These applications and data encompass a wide variety of business-critical information, including research and development information, patient data, commercial information, and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate use or disclosure, inappropriate modification, and the risk of our being unable to adequately monitor, audit, and modify our controls over our critical information. This risk extends to the third-party vendors and subcontractors we use to manage this sensitive data.

The secure processing, storage, maintenance, and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take measures to protect sensitive data from unauthorized access, use or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance, or other malicious or inadvertent disruptions. In addition, while we have implemented security measures and a formal, dedicated enterprise security program to prevent unauthorized access to patient data, such data is currently accessible through multiple channels, and there is no guarantee we can protect our data from breach. Unauthorized access, loss, or dissemination could also result in delays of our services and products development and commercialization as well as damage our reputation, including our ability to conduct our analysis, deliver test results, process claims and appeals, provide customer assistance, conduct research and development activities, collect, process, and prepare company financial information, provide information about our tests and other patient and physician education and outreach efforts through our website, and manage the administrative aspects of our business.

Any such unauthorized access, loss, or dissemination of information could also result in legal claims or proceedings, liabilities under PRC laws and regulations in relation to the protection of personal information and cybersecurity as well as those specifically governing patient and medical data. For example, pursuant to the Administrative Measures for Population Health Information, the medical institutions including our medical laboratories are responsible for collection, management, utilization, safety and privacy protection of personal healthcare data. We shall establish, maintain and execute such internal system to safeguard relevant personal healthcare data. Any failure to comply with above-mentioned regulation would result in administrative liabilities including but not limited to informed criticism.

We face challenges from the evolving regulatory environment and increasing public awareness on privacy, personal data protection and cyber security. Actual or alleged failure to comply with privacy, cybersecurity and data protection-related laws and regulations could adversely affect our business and reputation.

We operate in an environment where privacy, cybersecurity and data protection laws and regulations are constantly evolving and requiring significant efforts of compliance. In our business, we collect and use our tested individuals' personal data, including their age, gender, disease status and medical records, and we use these personal data internally to expand our database and improve our analytics approaches, and also share these personal data with third parties (e.g. service providers, hospitals, biopharmaceutical companies) both in China and globally for research, development and other business purposes. In the PRC, the Civil Code of the PRC, the Cybersecurity Law, Administrative Measures for Population Health Information promulgated by NHFPC and relevant regulations require medical service providers collecting or using population healthcare information, including us, to ensure the information security and protect individual privacy. The increasing regulatory requirements in the PRC may lead to certain limitation to our use of the tested individuals' personal data for improving our analytics or research and development of other new business.

We are faced with constantly evolving privacy and data protection and cybersecurity requirements in many countries where we operate. Any change in the regulatory regime in this regard could potentially subject us to more stringent data privacy regulations and affect our ability with regard to the collection and use of these personal data in these countries, which in turn could have an adverse effect on our business, financial condition and results of operations. Any failure or perceived failure of ours to comply with applicable privacy, data protection and cyber security laws and regulations could result in reputational damage or proceedings or actions against us by governmental authorities, individuals or others. These proceedings or actions could subject us to significant civil or criminal penalties and negative publicity, and materially harm our business, prospects, financial condition and results of operations. Furthermore, a data breach affecting personal data could result in significant legal and financial exposure and reputational damage that could potentially have an adverse effect on our business.

COVID-19 may adversely impact our operations.

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization (the "WHO") declared the COVID-19 coronavirus outbreak a public health emergency of international concern and on March 10, 2020, declared it to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, and quarantines in certain areas, and forced closures for certain types of public places and businesses. The COVID-19 coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the geographical area in which we operate. As a result, the demand for our precision oncology services and products decreased, which adversely affected our business operations in the year of 2020. In the year ended December 31, 2020, we performed approximately 21,900 diagnostic tests compared to approximately 22,900 diagnostic tests for the same period in 2019. In addition to the impact on our financial performance, COVID-19 also had temporary negative impact on our business activities, including our HCCscreen™ prospective cohort studies and advancement of our IVD pipeline registration process.

Although COVID-19 has begun to show signs of stabilization in China and our business has started to recover since the second quarter of 2020, the potential impact brought by and the duration of the COVID-19 outbreak is difficult to assess or predict and the full impact of the virus on our operations will depend on many factors beyond our control. For instance, our business operations may be adversely affected if hospitals, our direct sales team, distributors or other business partners continue to be affected by COVID-19. While it is unknown how long these conditions will last and what the complete financial effect will be to our company, we are closely monitoring its impact on us. Our business, results of operations, financial conditions and prospects could be materially adversely affected to the extent that COVID-19 harms the Chinese and global economy in general, and the trading price of our ADSs may be adversely affected.

We rely on a limited number of suppliers for some of our laboratory devices and may not be able to find replacements or immediately transition to alternative suppliers. A significant interruption in the operations of our suppliers could potentially affect our operations and any material misconduct or disputes against our suppliers could potentially harm our business and reputation.

We rely on several suppliers for certain equipment and laboratory materials used in the chemical reactions incorporated into our processes, reagents, sequencing platforms and other materials which we use in our operations. In 2018, 2019 and 2020, we purchased the majority of our laboratory equipment and supplies from our top three suppliers. An interruption in our operations could occur if we encounter delays or difficulties in securing these reagents, sequencers, or other laboratory materials, and if we cannot then obtain an acceptable substitute. Any such interruption could negatively impact research and development and launches of new services, and significantly affect our business, financial condition, results of operations, and reputation. In addition, any material misconduct or disputes against our suppliers could potentially affect our business and reputation.

We believe that there are only a few other qualified equipment manufacturers that are currently capable of supplying and servicing the equipment necessary for our laboratory operations. The use of equipment or materials furnished by these replacement suppliers would require us to significantly alter our laboratory operations. Transitioning to a new supplier would be time-consuming and expensive, may result in interruptions in our laboratory operations and would likely affect the performance specifications of our laboratory operations. There can be no assurance that we would be able to secure alternative equipment, reagents, sequencing platforms and other materials without experiencing interruptions in our workflow. In the case of an alternative supplier, there can be no assurance that the equipment or materials supplied would be available or meet our quality control and performance requirements for our laboratory operations. If we should encounter delay or difficulties in securing, reconfiguring, or revalidating the equipment, our business financial condition, results of operation, and reputation could be adversely affected.

We rely on third-party suppliers for certain of our raw materials, medical devices and components, and if shipments from these suppliers are delayed or interrupted, or if the quality of the materials, medical devices, or components supplied do not meet our requirements, we may not be able to launch, manufacture, or ship our products in a timely manner, or at all. In addition, we may not always source raw materials and equipment on commercial reasonable terms.

We require customized, precision-manufactured sub-assemblies, components, and materials that currently are available from a limited number of sources, and, in the case of some sub-assemblies, components, and materials, from only a single source. If deliveries from these vendors are delayed or interrupted for any reason, or if we are otherwise unable to secure a sufficient supply, we may not be able to obtain these sub-assemblies, components, or materials on a timely basis or in sufficient quantities or at satisfactory qualities, or at all, in order to meet demand for our precision oncology services and products. We may need to enter into contractual relationships with manufacturers for commercial-scale production of some of our products and supplies, in whole or in part, or develop these capabilities internally, and there can be no assurance that we will be able to do this on a timely basis, in sufficient quantities, or on commercially reasonable terms, especially the increase in price of equipment and raw materials would directly affect our financial results. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. The time and effort required to qualify a new supplier could result in additional costs, diversion of resources, or reduced manufacturing yields, any of which would negatively impact our operating results. Accordingly, we may not be able to establish or maintain reliable, high-volume manufacturing at commercially reasonable costs or at all. In addition, the manufacture or shipment of our products may be delayed or interrupted if the quality of the products, sub-assemblies, components, or materials supplied by our vendors does not meet our requirements. Current or future social and environmental regulations or critical issues, the need to eliminate environmentally sensitive materials from our products, could restrict the supply of components and materials used in production or increase our costs. Any delay or interruption to our manufacturing or shipping our products could result in lost revenue, which would adversely affect our business, financial condition, and results of operations.

If we encounter difficulties enrolling patients or collecting samples in our clinical trials, our research and development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion or sufficient samples. We may experience difficulties in patient enrolment in our clinical trials for a variety of reasons, including:

- the size and nature of the patient population or samples;
- the qualified patients or samples defined in the protocol;
- the size of the study population or samples required for analysis of the trial's primary endpoints;
- perceived risks and benefits our pipeline products;
- the proximity of patients to trial sites;
- the design of the trial;
- our ability to obtain and maintain required consent to use patients' information and samples; and
- the risk that patients enrolled in clinical trials will not complete a clinical trial.

In addition, our clinical trials may compete with our competitors' clinical trials for cancer genomic testing product candidates that are in the same areas as our cancer genomic testing product candidates. Such competition will reduce the number and types of patients or samples available to us. Even if we are able to enroll a sufficient number of patients or samples in our clinical trials, delays in patient enrolment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our cancer genomic testing product candidates.

Our success depends on our ability to provide reliable, high-quality genomic data and analysis and to rapidly evolve to meet our customers' needs. If our products, or cancer genomic testing services and products available in the market in general, do not meet the expectations of customers, our operating results, reputation and business could suffer.

Errors, including if our tests fail to accurately detect gene variants, or mistakes, including if we fail to or incompletely or incorrectly identify the significance of gene variants, could have a significant adverse impact on our business. We classify variants in accordance with guidelines that are subject to change and subject to our interpretation. There can also be flaws in the databases, third-party tools, algorithms we use, and in the software that handle automated parts of our classification protocol. If we receive poor quality or degraded samples, our tests may be unable to accurately detect gene variants or we may fail to or incompletely or incorrectly identify the significance of gene variants, which could have a significant adverse impact on our business. In addition, patients usually rely on the interpretations of doctors or physicians to read our testing reports and we are not able to ensure the interpretation will be correct and completed. Inaccurate results or misunderstandings of, or inappropriate reliance on, the information we provide to our customers could lead to, or be associated with, side effects or adverse events in patients who use our tests, including treatment-related death, and could lead to termination of our services or claims against us. A product liability or professional liability claim could result in substantial damages and be costly and time-consuming for us to defend.

We do not maintain liability insurance, including for errors and omissions, and professional liability. Any liability claim, including an errors and omissions liability claim, brought against us, with or without merit, could increase our insurance premium rates or prevent us from securing insurance coverage in the future. Additionally, any liability lawsuit could cause injury to our reputation or cause us to suspend sales of our tests or cause a suspension of our license to operate. The occurrence of any of these events could have an adverse effect on our business, reputation and results of operations.

In addition, our success depends on the market's confidence in cancer genomic testing services and products in general. If other genetic based precision oncology products do not perform to expectations, it may result in lower confidence in our industry in general and will then adversely affect our business.

If our current research collaborators terminate their relationships with us or develop relationships with a competitor, our ability to discover genes, proteins, and biomarkers, and to validate and commercialize molecular diagnostic and companion diagnostic tests could be adversely affected.

The responsibility of overseeing research and development of our services and products is concentrated among a number of key research collaborators. There can be no assurance that there will not be a detrimental impact on us if one or more of these key research collaborators were to cease relationship or employment with us, potentially as a result of lateral recruitment by existing or new competitors. As a result, this may adversely affect our ability to discover genes, proteins, and biomarkers, and to validate and commercialize molecular diagnostic and companion diagnostic tests.

Furthermore, our ability to continue to conduct and expand operations depends on our ability to attract and retain a large and growing number of personnel. The ability to meet our expertise needs, including the ability to find qualified personnel to fill positions that become vacant at our research and development department or to collaborate with us in research and development efforts, while controlling our costs, is generally subject to numerous external factors, including the availability of a sufficient number of qualified persons in the cancer genomics markets in which our business operates, the unemployment levels within those markets, prevailing wage rates, changing demographics, health and other insurance costs and adoption of new or revised employment and labor laws and regulations. If we are unable to locate, to attract or to retain qualified personnel, the quality of services and products provided to customers may decrease and our financial performance may be adversely affected. In addition, if costs of labor or related costs to maintain relationships with research collaborators increase for other reasons or if new or revised labor laws, rules or regulations or healthcare laws are adopted or implemented that further increase labor costs, our business, financial condition and results of operations could be materially adversely affected.

We may fail to maintain sufficient marketing and sales capabilities.

We mainly rely on our in-house specialized sales and marketing team to directly market and sell our services and products. Maintaining such in-house teams may require significant expenses, management resources and time. We will have to compete with other life sciences, clinical genomics, and pharmaceutical companies to recruit, hire, train and retain suitable personnel. We also continuously train our in-house sales force to ensure them to implement sales and marketing efficiently and in compliance with laws and regulations as well as our internal policies.

In addition to our direct sales, we also sell our products to hospitals through our distributors. We may have little control over the marketing and sales efforts of such third parties, and our revenue from distributor sales may be lower than commercializing ourselves.

There can be no assurance that we will be able to develop in-house sales and commercial distribution capabilities or establish or maintain relationships with third-party collaborators to successfully commercialize any services or products, and as a result, our financial condition and results of operations may be adversely affected if we are unable to generate sales revenue.

Reimbursement may not be immediately available for our services and products, which could diminish our sales or affect our profitability.

China has a complex medical insurance system that is currently undergoing reform. Governmental insurance coverage or the reimbursement rates in China for treatments using new medical devices and healthcare services are subject to uncertainty and vary from region to region, as local government approvals for such coverage must be obtained in each geographic region. In addition, the PRC government may change, reduce or eliminate the governmental insurance coverage currently available for treatments based on a number of factors, including price and efficacy.

Currently, our services and products are not eligible for reimbursement. Therefore, our customers need to bear the test prices themselves. The limitation on reimbursement of our service and products will adversely affect our sales, profitability and growth.

RISKS RELATING TO OUR OPERATIONS

We may encounter difficulties in managing our growth and expanding our operations successfully.

As we seek to advance our services and products through continued research and development effort, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Future growth will impose significant added responsibilities on members of management. Our future financial performance and our ability to commercialize our services and products and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development and commercialization efforts effectively and hire, train and integrate additional management, administrative and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

In addition, as our business enter into new geographic regions, we will invest substantial resources and face new operational risks and challenges associated with the business, economic and regulatory environment that we are not familiar with. We will be required, among other things, to understand and comply with the local regulations, to partner with local healthcare industry, and to meet the expectations of local customers.

If we are unable to support demand for our existing or future precision oncology services and products, including ensuring that we have adequate capacity to meet increased demand, our business could suffer.

As our volume grows, we will need to continue to increase our workflow capacity for sample intake, customer service, billing, and general process improvements; expand our internal quality assurance program; and extend our services and products to support comprehensive genomic analysis at a larger scale within expected turnaround times. We will need additional certified laboratory scientists and technicians and other scientific and technical personnel to process higher volumes of our services. Portions of our process are not automated and will require additional personnel to scale. We will also need to purchase additional equipment, some of which can take several months or more to procure, set up, and validate, and increase our software and computing capacity to meet increased demand. The expansion of our operations or hiring of additional personnel may lead to significant costs and divert our management attentions and development resources. There is no assurance that any of these increases in scale, expansion of personnel, equipment, software and computing capacities, or process enhancements will be successfully implemented, or that we will have adequate space in our laboratory facilities to accommodate such required expansion.

As we commercialize additional services, we will need to incorporate new equipment, implement new technology systems and laboratory processes, and hire new personnel with different qualifications. Failure to manage this growth or transition could result in turnaround time delays, higher service costs, declining service quality, deteriorating customer service, and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our services, and could damage our reputation and the prospects for our business.

We may not be able to attract and retain key senior management members and research and development personnel.

Our future success depends upon the continuing services of members of our senior management team and key research and development personnel and consultants. In particular, Mr. Sizhen Wang, our Chief Executive Officer, Dr. Hai Yan, our Chief Scientific Officer, Dr. Yuchen Jiao, our Chief Technology Officer, Mr. Evan Ce Xu, our Chief Financial Officer, Mr. Kevin Ying Hong, our Chief Operating Officer, and Dr. Yun-Fu Hu, our Chief Medical Officer are crucial to our research and development and operations. Although we typically require our key personals to enter into non-compete and confidentiality agreement with us, we cannot prevent them from joining our competitors after the non-compete period. The loss of their services could adversely impact our ability to achieve our business objectives. If one or more of our senior management or key clinical and scientific personnel are unable or unwilling to continue in their present positions or joins a competitor or forms a competing company, we may not be able to replace them in a timely manner or at all, which will have a material and adverse effect on our business, financial condition and results of operations. We do not maintain “key person” insurance for any of our executives or other employees.

In addition, the continued growth of our business depends on our ability to hire additional qualified personnel with expertise in molecular biology, chemistry, biological information processing, software, engineering, sales, marketing, and technical support. We compete for qualified management and scientific personnel with other life science and technology companies, universities, and research institutions in the PRC and overseas. Competition for these individuals is intense, and the turnover rate can be high. Failure to attract and retain management and scientific and engineering personnel could prevent us from pursuing collaborations or developing our services and products or technologies.

We have adopted two share incentive plans. We have granted and will continue to grant share-based awards in the future, which may have an adverse effect on our future profit. Exercise of the awards granted will increase the number of our shares in circulation, which may adversely affect the market price of our shares.

We adopted 2019 Plan in July 2019 and 2019 Scheme in November 2019, to enhance our ability to attract and retain exceptionally qualified individuals and to encourage them to acquire a proprietary interest in the growth and performance of us. The maximum aggregate number of ordinary shares we are authorized to issue pursuant to all awards under the 2019 Plan is 33,961,500 ordinary shares. As of March 31, 2021, we have granted 145 awards to purchase up to 20,820,270 ordinary shares under the 2019 Plan, excluding awards that were forfeited, cancelled or exercised after the relevant grant dates. The maximum aggregate number of ordinary shares we are authorized to issue pursuant to all awards under the 2019 Scheme is 20,830,100. As of March 31, 2021, we have granted 5 awards to purchase up to 2,685,000 ordinary shares under the 2019 Scheme. See “Item 6. Directors, Senior Management and Employees—B. Compensation—Share Incentive Plan.”

We believe the granting of share-based awards is of significant importance to our ability to attract and retain key personnel and employees, and we will continue to grant share-based compensation to employees in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

If our laboratory facilities become contaminated, damaged or inoperable, or we are required to vacate the facility, our ability to sell and provide our services and pursue our research and development efforts may be jeopardized.

We currently derive a portion of our revenues from our genomic analysis conducted in our laboratories located in Beijing, Shanghai and Chongqing. Although all of our laboratory facilities have back-up measures, the data and samples stored in our laboratory facilities are still subject to various risks beyond our control. While our multi-location laboratories help us weather operational breakdowns at any one location, our facilities and equipment could be harmed or rendered inoperable by natural or man-made disasters, including fires, earthquakes, flooding, and power outages, which may render it difficult or impossible for us to sell or perform our services for some period of time. The inability to sell or to perform our diagnostic and other services, or the backlog of samples that could develop if our facility is inoperable for even a short period of time, may result in the loss of customers or harm to our reputation or relationships with scientific or clinical collaborators, and we may be unable to regain those customers or repair our reputation or such relationships in the future. Furthermore, our facilities and the equipment used to perform our services and our research and development work could be costly and time-consuming to repair or replace.

Additionally, a key component of our research and development process involves using biological samples as the basis for the development of our services. In some cases, these samples are difficult to obtain. If the parts of our laboratory facility where we store these biological samples were damaged or compromised, our ability to pursue our research and development projects, as well as our reputation, could be jeopardized.

We may pursue collaborations, in-licensing or out-license arrangements, joint ventures, strategic alliances, partnerships or other strategic investment or arrangements, which may fail to produce anticipated benefits and adversely affect our operations.

We may pursue opportunities for collaboration, in-licensing, out-license, joint ventures, acquisitions of products, assets or technology, strategic alliances, or partnerships that we believe would be complementary to or promote our existing business. In particular, we intend to continue to pursue growth through the acquisition of technology, assets or other businesses that may enable us to enhance our technologies and capabilities, expand our geographic market, add experienced management personnel and increase our test offerings. Proposing, negotiating and implementing these opportunities may be a lengthy and complex process. Other companies, including those with substantially greater financial, marketing, sales, technology, or other business resources, may compete with us for these opportunities or arrangements. We may not be able to identify, secure, or complete any such transactions or arrangements in a timely manner, on a cost-effective basis, on acceptable terms, or at all.

We have limited experience with respect to these business development activities. Management and integration of a licensing arrangement, collaboration, joint venture or other strategic arrangement may disrupt our current operations, decrease our profitability, result in significant expenses, or divert management resources that otherwise would be available for our existing business. We may not realize the anticipated benefits of any such transaction or arrangement.

Furthermore, partners, collaborators, or other parties to such transactions or arrangements may fail to fully perform their obligations or meet our expectations or cooperate with us satisfactorily for various reasons and subject us to potential risks, including the followings:

- partners, collaborators, or other parties have significant discretion in determining the efforts and resources that they will apply to a transaction or arrangement;
- partners, collaborators, or other parties could independently develop, or develop with third parties, services and products that compete directly or indirectly with our services and products;
- partners, collaborators, or other parties may stop, delay or discontinue research and development, and commercialization efforts;
- partners, collaborators, or other parties may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and partners, collaborators, or other parties that cause the delay or termination of the research, development or commercialization of our services and products, or that result in costly litigation or arbitration that diverts management attention and resources;
- partners, collaborators, or other parties may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable services and products; and
- partners, collaborators, or other parties may own or co-own intellectual property covering our services and products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property.

Any such transactions or arrangements may also require actions, consents, approval, waiver, participation or involvement of various degrees from third parties, such as regulators, government authorities, creditors, licensors or licensees, related individuals, suppliers, distributors, shareholders or other stakeholders or interested parties. There is no assurance that such third parties will be cooperative as we desire, or at all, in which case we may be unable to carry out the relevant transactions or arrangements.

Any failure to maintain effective quality control over our products and services could materially adversely affect our business.

The quality of our services and products is critical to the success of our business, and such quality to a large extent depends on the effectiveness of our quality control system. We have developed a rigorous quality control system that enables us to monitor each stage of the production process. Our laboratory facilities have received the CAP accreditation and NCCL EQA Certification.

However, despite our quality control management system, we cannot eliminate the risk of errors, defects or failures. We may fail to detect or cure defects as a result of a number of factors, many of which are outside our control, including:

- technical or mechanical malfunctions in the production process;
- human error or malfeasance by our quality control personnel;
- tampering by third parties; and
- defective raw materials or equipment.

Failure to detect quality defects in our products could result in patient injury, customer dissatisfaction, or other problems that could seriously harm our reputation and business, expose us to liability, and adversely affect our revenue and profitability.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our third-party research institution collaborators, suppliers and other contractors, could be subjected to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. In addition, we partially rely on our third-party research institution collaborators for conducting research and development, and they may be affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

Our employees, third-party suppliers, consultants and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk of fraud or other misconduct by our employees, third-party suppliers, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with the regulations of the NMPA and overseas regulators that have jurisdictions over us, comply with healthcare fraud and abuse laws and regulations in China and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical trials or research studies, which could result in regulatory sanctions and cause serious harm to our reputation. We currently have a code of conduct applicable to all of our employees, but it is not always possible to identify and deter employee misconduct, and our code of conduct and the other precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses, or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant civil, criminal and administrative penalties, including, without limitation, damages, monetary fines, individual imprisonment, disgorgement of profits, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with the law and curtailment or restructuring of our operations, which could have a significant impact on our business. Whether or not we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees and divert the attention of management in defending ourselves against any of these claims or investigations.

Our business depends on a strong brand, and failing to maintain and enhance our brand would adversely affect our business, results of operations and financial condition.

We believe that maintaining and enhancing our brand identity and increasing market awareness of our company and products, particularly among clinicians and biopharmaceutical companies, is critical to achieving widespread acceptance of our services and products, to strengthening our relationships with our existing clients and to our ability to attract new clients. The successful promotion of our brand will depend largely on our ability to continue to offer high-quality services and products and our research and development efforts. Our brand promotion activities may not be successful or yield increased revenue.

In addition, if clients deem our testing results not accurate, then our brand and reputation may suffer, clients may lose confidence in us and they may reduce or cease their use of our services and products. Our clients may post and discuss on social media about our services and products. Our reputation depends, in part, on our ability to generate positive feedback and minimize negative feedback on social media channels where existing and potential clients seek and share information. If actions we take or changes we make to our services or products upset these clients, then their online commentary could negatively affect our brand and reputation. Complaints or negative publicity about us, our services or products could materially and adversely impact our ability to attract and retain clients, our business, results of operations and financial condition.

The promotion of our brand also requires us to make expenditures, and we anticipate that these expenditures will increase as our market becomes more competitive. To the extent that these activities increase revenue, this revenue still may not be enough to offset the increased expenses we incur. If we do not successfully maintain and enhance our brand, then our business may not grow, we may see our pricing power reduced relative to competitors and we may lose clients, all of which would adversely affect our business, results of operations and financial condition.

We depend on our information technology and other technology systems for significant elements of our operations, and any failure of the technology could harm our business.

We depend on our information technology for significant elements of our operations, including automation for the analysis of our bioinformation and automatically unpack the analyzed DNA data parameters to an automatically generated data report. We have also installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including, for example, systems handling financial reporting and controls, customer relationship management, laboratory information management system, and other infrastructure operations.

Our information and other technology systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious or inadvertent human acts and natural disasters. Our servers are potentially vulnerable to physical or electronic break-ins, employee errors, computer viruses and similar disruptive problems. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our information technology and telecommunications systems, failures or significant downtime of our information technology or telecommunications systems or those used by our third-party service providers could prevent us from conducting tests, preparing and providing reports to our customers, billing customers, collecting revenue, handling inquiries from our customers, conducting research and development activities, and managing the administrative aspects of our business. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business.

Our business, financial condition and results of operations, as well as our ability to obtain financing, may be adversely affected by a downturn in the global or China's economy.

The global macroeconomic environment is facing challenges, including the economic slowdown in the Eurozone since 2014 and uncertainties over the impact of Brexit. The growth of the China's economy has slowed down since 2012 compared to the previous decade and the trend may continue. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. There have been concerns over unrest and terrorist threats in the Middle East, Europe and Africa. There have also been concerns on the relationship between China and the United States, including those resulting from the ongoing trade dispute between the two countries, which may potentially lead to foreign investors closing down their business or withdrawing their investment in China and thus exiting the China market, and other economic effects. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China.

Any prolonged slowdown in the global or China's economy may have a negative impact on our business, results of operations and financial condition, and continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs. Our clients may reduce or delay spending with us, while we may have difficulty expanding our client base fast enough, or at all, to offset the impact of decreased spending by our existing clients. In addition, to the extent we offer credit to any client and the client experiences financial difficulties due to the economic slowdown, we could have difficulty collecting payment from the clients. Moreover, a slowdown or disruption in the global or China's economy may have a material and adverse impact on the financing available to us. The weakness in the economy could erode investor confidence, which constitutes the basis of the credit market.

Since 2019, there have been heightened tensions in the economic relations between the U.S. and China. The U.S. government has imposed, and proposed to impose additional, new or higher tariffs on products imported from China to penalize China for what it characterizes as unfair trade practices. China has responded by imposing largely commensurate tariffs on products imported from the U.S. Amid these tensions, the U.S. government has imposed and may impose additional measures on entities in China, including sanctions. We currently source some of our reagents and laboratory equipment from vendors based in the U.S. The U.S. government may prohibit these companies from doing business with Chinese companies and the Chinese government may implement countermeasures. If this were to happen, we may be required to seek substitute suppliers, which could adversely affect our operations. Moreover, the potential increase in tariffs may also increase the costs we incur to purchase imported reagents and laboratory equipment.

We are subject to changing law and regulations regarding regulatory matters, corporate governance and public disclosure that have increased both our costs and the risk of non-compliance.

We are subject to rules and regulations by various governing bodies, including, for example, the Securities and Exchange Commission, which is charged with the protection of investors and the oversight of companies whose securities are publicly traded, and the various regulatory authorities in China and the Cayman Islands, and to new and evolving regulatory measures under applicable law. Our efforts to comply with new and changing laws and regulations have resulted in and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices. If we fail to address and comply with these regulations and any subsequent changes, we may be subject to penalty and our business may be harmed.

Allegations or lawsuits against us or our management may harm our reputation and business.

We have been, and may in the future be, subject to allegations or lawsuits brought by our competitors, clients, employees or other individuals or entities, including claims of breach of contract.

In addition, we may be subject to product liability claims alleging that our service and products identified inaccurate or incomplete information regarding the genomic alterations of the tumor or malignancy analyzed, reported inaccurate or incomplete information concerning the available therapies for a certain type of cancer or otherwise failed to perform as designed. We may also be subject to liability for errors in, a misunderstanding of or inappropriate reliance upon, the information we provide in the ordinary course of our business activities.

Any such allegation or lawsuits, with or without merit, or any perceived unfair, unethical, fraudulent or inappropriate business practice by us or perceived malfeasance by our management could incur substantial expenses, delay or suspend our ongoing clinical trial, cause the withdrawal of clinical participants, harm our reputation, distract our management from our daily operations and result in other negative results. Allegations or lawsuits against us may also generate negative publicity that significantly harms our reputation, which may materially and adversely affect our user base and our ability to attract customers. In addition to the related cost, managing and defending litigation and related indemnity obligations can significantly divert management's attention. We may also need to pay damages or settle the litigation with a substantial amount of cash. All of these could have a material adverse impact on our business, results of operation and cash flows.

If we fail to implement and maintain an effective system of internal controls, we may be unable to accurately or timely report our results of operations or prevent fraud, and investor confidence and the market price of our ADSs may be materially and adversely affected.

Prior to our initial public offering of our ADSs on Nasdaq in June 2020, we were a private company with limited accounting personnel and other resources with which to address our internal controls and procedures. Our management has not completed an assessment of the effectiveness of our internal control over financial reporting, and our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting. In the course of auditing our consolidated financial statements as of December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020, we and our independent registered public accounting firm identified two material weaknesses in our internal control over financial reporting and other control deficiencies as of December 31, 2019 and 2020. A “material weakness” is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company’s annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses identified relate to:

- Our lack of sufficient and competent financial reporting and accounting personnel with appropriate knowledge of IFRS and reporting requirements set forth by the SEC to address complex IFRS technical accounting issues, and to prepare and review the consolidated financial statements and related disclosures in accordance with IFRS and SEC reporting requirements; and
- Our lack of formal and effective period-end financial closing policies and procedures.

We have taken measures and plan to continue to take measures to remedy the material weaknesses. For details, please refer to “Item 15. Controls and Procedures—Internal Control over Financial Reporting.” The implementation of these measures may not fully address the material weaknesses in our internal control over financial reporting, and we cannot conclude that they have been fully remedied. Our failure to correct these material weaknesses or our failure to discover and address any other material weaknesses could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis.

We are a public company in the United States and are subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, will require that we include a report from management on our internal control over financial reporting in our annual report on Form 20-F beginning with our annual report in our second annual report on Form 20-F after becoming a public company. In addition, once we cease to be an “emerging growth company” as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Our management may conclude that our internal control over financial reporting is not effective. Moreover, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, as we have become a public company, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation.

During the course of documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404, we may identify weaknesses and deficiencies in our internal control over financial reporting. In addition, if we fail to maintain the adequacy of our internal control over financial reporting, as these standards are modified, supplemented or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404. Generally speaking, if we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could, in turn, limit our access to capital markets, harm our results of operations and lead to a decline in the trading price of our ADSs. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions.

We have limited insurance coverage, and any claims beyond our insurance coverage may result in us incurring substantial costs and a diversion of resources.

The insurance companies in China currently offer limited business-related insurance products. We do not maintain business interruption insurance or general third-party liability insurance, nor do we maintain product liability insurance or key-man insurance. We consider this practice to be reasonable in light of the nature of our business and the insurance products that are available in China and in line with the practices of other companies in the same industry of similar size in China. Any uninsured risks may result in substantial costs and the diversion of resources, which could adversely affect our results of operations and financial condition.

We face risks related to health epidemics, severe weather conditions and other outbreaks.

Our business could be adversely affected by the effects of avian influenza, severe acute respiratory syndrome (SARS), the influenza A virus, Ebola virus, COVID-19, severe weather conditions or other epidemics or outbreaks. For example, the recent outbreak of novel coronavirus has endangered the health of many people residing in China and significantly disrupted travel and local economy. Health or other government regulations adopted in response to an epidemic, severe weather conditions such as snowstorms, floods or hazardous air pollution, or other outbreaks may require temporary closure of our offices. Such closures may disrupt our business operations and adversely affect our results of operations.

RISKS RELATING TO OUR INTELLECTUAL PROPERTY**We may be unsuccessful in obtaining or maintaining adequate intellectual property protection for one or more of our services and products, and our patents could be found invalid or unenforceable if challenged in court or before administrative bodies.**

Our commercial success will depend, in large part, on our ability to obtain, maintain and defend patents and trademarks and the proprietary technologies covering our services and products and maintain some of our proprietary technology as trade secrets. We cannot be certain that patents will be issued or granted with respect to our patent applications that are currently pending, or that issued or granted patents will not later be found to be invalid and/or unenforceable, be interpreted in a manner that does not adequately protect our services and products, or otherwise provide us with any competitive advantage. Additionally, the patent applications in respect of patents licensed under our in-license arrangements may not be issued or granted, and as a result, we may not be able to have adequate protection with respect to such patents. The patent position of life sciences, clinical genomics and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. Patent applications we had applied may not be granted in the end. Moreover, some of our patents and patent applications are, and may in the future be, co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owned interest in such patents or patent applications, such co-owners may be able to license or transfer their rights to other third parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects. As such, we do not know the degree of future protection that we will have on our services and products and technology, if any, and a failure to obtain adequate intellectual property protection with respect to our services and products could have a material adverse impact on our business.

Despite the fact that we can take measures to obtain patent and other intellectual property protections with respect to our services and products, there can be no assurance that the existence, validity, enforceability, or scope of our intellectual property rights will not be challenged by a third party, or that we can obtain sufficient scope of claim in those patents to prevent a third party from competing against our services and products. For example, in an infringement proceeding, a court may decide that patent rights owned by us are invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the ground that our patent rights do not cover the technology in question. An adverse result in any litigation proceedings could put our patent, as well as any patents that may issue in the future from our pending patent applications, at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

In addition, if we were to initiate legal proceedings against a third party to enforce a patent covering one of our services and products, the defendant could counterclaim that our patent is invalid and/or unenforceable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the National Intellectual Property Administration, or the applicable foreign counterpart, or made a misleading statement, during prosecution. Although we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith, the outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our services and products. Even if a defendant does not prevail on a legal assertion of invalidity and/or unenforceability, our patent claims may be construed in a manner that would limit our ability to enforce such claims against the defendant and others.

Third parties may also raise similar claims before administrative bodies in the PRC or abroad, even outside the context of litigation. Such mechanisms include ex parte re-examination, inter partes review, post-grant review, derivation and equivalent proceedings, such as opposition proceedings. Such legal proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our services and products. The outcome following legal assertions of invalidity and unenforceability can be unpredictable. With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we may lose part or all of the patent protection on our services and products. Any loss of patent protection could have a material adverse impact on one or more of our services and products and our business.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patent rights or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us, alleging that we infringed their patents. In addition, in a patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patents do not cover the invention. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects, and financial condition. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

In any infringement litigation, any award of monetary damages we receive may not be commercially valuable. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

Our commercial success depends significantly on our ability to operate without infringing upon the intellectual property rights of third parties.

The life sciences industry is subject to rapid technological change and substantial litigation regarding patent and other intellectual property rights. Our potential competitors in both the PRC and abroad, may have substantially greater resources and are likely to make substantial investments in patent portfolios and competing technologies, and may apply for or obtain patents that could prevent, limit or otherwise interfere with our ability to make, use and sell our products. Numerous third-party patents exist in fields relating to our products and technologies, and it is difficult for industry participants, including us, to identify all third-party patent rights relevant to our products and technologies. Moreover, because some patent applications are maintained as confidential for a certain period of time, we cannot be certain that third parties have not filed patent applications that cover our products and technologies.

Patents could be issued to third parties that we may ultimately be found to infringe. Third parties may have or obtain valid and enforceable patents or proprietary rights that could block us from using our technology. Our failure to obtain or maintain a license to any technology that we require may materially harm our business, financial condition and results of operations. Furthermore, we would be exposed to a threat of litigation.

Third-party intellectual property right holders may also actively bring infringement or other intellectual property-related claims against us, even if we have received patent protection for our technologies, products, and services. Regardless of the merit of third parties claims against us for infringement, misappropriation or violations of their intellectual property rights, such third parties may seek and obtain injunctive or other equitable relief, which could effectively block our ability to perform our tests. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay our development or sales of any tests or other activities that are the subject of such suit. Defense of these claims, even if such claims are resolved in our favor, could cause us to incur substantial expenses and be a substantial diversion of our employee resources even if we are ultimately successful. Any adverse ruling or perception of an adverse ruling in defending ourselves could have a material adverse impact on our cash position and stock price. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation in the United States, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments, which could have a material adverse effect on the price of our ADSs. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock. The occurrence of any of these events may have a material adverse effect on our business, results of operation, financial condition or cash flows.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The National Intellectual Property Administration of China, or the NIPA, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent application and prosecution process. Periodic maintenance fees, renewal fees, annuity fees, and various other governmental fees on patents and/or applications will be due to be paid to the NIPA and various other governmental patent agencies outside of China in several stages over the lifetime of the patents and/or applications. We employ reputable professionals and rely on such third parties to help us comply with these requirements and effect payment of these fees with respect to the patents and patent applications that we own. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official communications within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case, which could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

We seek to protect our intellectual property and proprietary technologies, in part, by entering into agreements, including confidentiality agreements and non-disclosure agreements, with parties that have access to them, such as our employees, consultants, academic institutions, corporate partners and, other third-party service providers. Nevertheless, there can be no guarantee that an employee or a third party will not make an unauthorized disclosure of our proprietary confidential information. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures. In addition, to the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or business partners might intentionally or inadvertently disclose our trade secret information to competitors or our trade secrets may otherwise be misappropriated. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable.

We sometimes engage individuals or research institutions to conduct research relevant to our business. The ability of these individuals or research institutions to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our confidential information. If we do not apply for patent protection prior to such publication, or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized, which could adversely affect our business, financial condition and results of operations.

Intellectual property rights do not necessarily protect us from all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to independently develop similar or alternative technologies or designs that are similar to our services and products but that are not covered by the claims of the patents that we own or have exclusively licensed;
- we might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or may in the future exclusively license, which could result in the patent applications not issuing or being invalidated after issuing;
- we might not have been the first to file patent applications covering certain of our inventions, which could result in the patent applications not issuing or being invalidated after issuing;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive services and products for commercialization in our major markets;
- we may fail to develop additional proprietary technologies that are patentable;
- we may fail to apply for or obtain adequate intellectual property protection in all the jurisdictions in which we operate; and
- the patents of others may have an adverse effect on our business, for example by preventing us from commercializing one or more of our services and products candidates for one or more cancer types.

Any of the aforementioned threats to our competitive advantage could have a material adverse effect on our business.

Patent terms may not be sufficient to effectively protect our services and products and business.

In most countries in which we plan to file applications for patents, the term of an issued patent is generally 10 to 20 years from the earliest claimed filing date if a non-provisional patent application in the applicable country. Although various extensions may be available, the life of a patent and the protection it affords are limited. Even if patents covering our services and products are obtained, we may be open to competition from other companies once our patent rights expire. Furthermore, there is no currently effective law or regulation providing patent term extension in China.

As of December 31, 2020, we had been granted seven invention patents in China. Our invention patents have expiration dates ranging from November 2032 to April 2037. We also have 20 pending patent applications in China and ten international patents applications under the Patent Cooperation Treaty (PCT) as of December 31, 2020. If patents are issued on these pending patent applications, the resulting patents will be expected to expire ranging from November 2035 to January 2040, excluding any potential patent term extension or adjustment. Upon expiration of our issued patent or patents that may issue from our pending patent application, we will not be able to assert such patent rights against potential competitors and our business and results of operation may be adversely affected.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our products in all countries throughout the world would be prohibitively expensive. We may also encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the jurisdictions of the registration of our intellectual properties. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products. Our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents in such countries.

Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may not be able to protect and enforce our trademarks.

We currently hold issued trademark registrations and have trademark applications pending, any of which may be the subject of a governmental or third-party objection, which could prevent the registration or maintenance of the same. If we are unsuccessful in obtaining trademark protection for our primary brands, we may be required to change our brand names, which could materially adversely affect our business. Moreover, as our products mature, our reliance on our trademarks to differentiate us from our competitors will increase, and as a result, if we are unable to prevent third parties from adopting, registering or using trademarks and trade dress that infringe, dilute or otherwise violate our trademark rights, or engaging in conduct that constitutes unfair competition, defamation or other violation of our rights, our business could be materially adversely affected.

RISKS RELATING TO OUR CORPORATE STRUCTURE

If the PRC government finds that the contractual arrangements that establish the structure for operating our business in China do not comply with PRC laws and regulations, or if these regulations or their interpretations change in the future, we could be subjected to severe consequences, including the nullification of such agreements and the relinquishment of our interest in our VIEs.

Current PRC laws and regulations impose certain restrictions or prohibitions on foreign ownership of companies that engage in the development and application of technologies for diagnosis and treatment of human stem cells and genes, which our precision oncology service relates to. Pursuant to the Special Administrative Measures (Negative List) issued by the NDRC and MOFCOM on June 23, 2020, which came into force on July 23, 2020, certain industries are specifically prohibited for foreign investment, including the development and application of technologies for diagnosis and treatment of human stem cells and genes. To comply with PRC laws and regulations, we conduct our cancer genomics business in China through VIE. We, through Genetron (Tianjin) Co., Ltd. and Genetron (Wuxi) Business Management Co., Ltd. (collectively, “PRC Subsidiaries”), our subsidiaries in China, entered into a series of contractual arrangements with our VIEs and their respective ultimate shareholders, in order to (i) exercise effective control over our VIEs, (ii) receive substantially all of the economic benefits of our VIEs, and (iii) have an exclusive option to purchase all or part of the equity interests in our VIEs when and to the extent permitted by PRC law. As a result of these contractual arrangements, we have control over and are the primary beneficiary of each of our VIEs and hence consolidate their financial results under IFRS. Although the structure we have adopted is consistent with long-standing practice in certain industries, such as TMT industry, and is also adopted by some of our peers in China, the PRC government may not agree that these arrangements comply with PRC license, registration or other regulatory requirements, with existing policies, or with requirements or policies that may be adopted in the future. Our VIEs hold the licenses, approvals and key assets that are essential for the operations of our precision oncology service businesses.

In the opinion of our PRC Legal Counsel, Shihui Partners, (i) the ownership structures of our VIEs in China, currently do not, and will not result in any violation of the applicable PRC laws or regulations currently in effect, and (ii) subject to the risks as disclosed in the section headed “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure”, the contractual arrangements among PRC Subsidiaries, our VIEs and their respective equity holders governed by PRC laws are valid, binding and enforceable in accordance with their terms and applicable PRC laws and regulations currently in effect and do not violate any applicable PRC laws, rule or regulation currently in effect. There are, however, substantial uncertainties regarding the interpretation and application of current or future PRC laws and regulations. The relevant PRC regulatory authorities have broad discretion in determining whether a particular contractual structure violates PRC laws and regulations. Thus, we cannot assure you that the PRC government will not ultimately take a view contrary to the opinion of our PRC Legal Counsel. If we are found in violation of any PRC laws or regulations or if the contractual arrangements among PRC Subsidiaries, our VIEs and their respective equity holders are determined as illegal or invalid by any PRC court, arbitral tribunal or regulatory authorities, the relevant governmental authorities would have broad discretion in dealing with such violation, including, without limitation:

- revoking the agreements constituting the contractual arrangements;
- revoking our business and operating licenses;
- requiring us to discontinue or restrict operations;
- restricting our right to collect revenue;
- shutting down all or part of our websites or services;
- levying fines on us and/or confiscating the proceeds that they deem to have been obtained through non-compliant operations;
- requiring us to restructure the operations in such a way as to compel us to establish a new enterprise, re-apply for the necessary licenses or relocate our businesses, staff and assets;
- imposing additional conditions or requirements with which we may not be able to comply;
- restricting or prohibiting our use of proceeds from public offering or other financing activities to finance our business and operations in China; or
- taking other regulatory or enforcement actions that could be harmful to our business.

Furthermore, any of the assets under the name of any record holder of equity interest in VIEs, including such equity interest, may be put under court custody in connection with litigation, arbitration or other judicial or dispute resolution proceedings against that record holder. We cannot be certain that the equity interest will be disposed of in accordance with the contractual arrangements. In addition, new PRC laws, rules and regulations may be introduced to impose additional requirements that may impose additional challenges to our corporate structure and contractual arrangements. The occurrence of any of these events or the imposition of any of these penalties may result in a material and adverse effect on our ability to conduct our precision oncology service business. In addition, if the imposition of any of these penalties causes us to be unable to direct the activities of such VIEs and their subsidiaries or the right to receive their economic benefits, we would no longer be able to consolidate such VIE into our financial statements, thus adversely affecting our results of operation.

We rely on contractual arrangements with our VIEs and their shareholders for our business operations, which may not be as effective as direct ownership in providing operational control.

We have relied and expect to continue to rely on contractual arrangements with our VIEs and their shareholders to operate our business in China. These contractual arrangements may not be as effective as direct ownership in providing us with control over our VIEs. For example, our VIEs and their shareholders could breach their contractual arrangements with us by, among other things, failing to conduct their operations in an acceptable manner or taking other actions that are detrimental to our interests.

If we had direct ownership of our VIEs in China, we would be able to exercise our rights as a shareholder to effect changes in the board of directors of our VIEs, which in turn could implement changes, subject to any applicable fiduciary obligations, at the management and operational level. However, under the current contractual arrangements, we rely on the performance by our VIEs and their shareholders of their obligations under the contracts to exercise control over our VIEs. The shareholders of our VIEs may not act in the best interests of our company or may not perform their obligations under these contracts. Such risks exist throughout the period in which we intend to operate certain portions of our business through the contractual arrangements with our VIEs. If any dispute relating to these contracts remains unresolved, we will have to enforce our rights under these contracts through the operations of PRC law and arbitration, litigation and other legal proceedings and, therefore, will be subject to uncertainties in the PRC legal system. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—Any failure by our VIEs or their shareholders to perform their obligations under our contractual arrangements with them would have a material adverse effect on our business”. Therefore, our contractual arrangements with our VIEs may not be as effective in ensuring our control over the relevant portion of our business operations as direct ownership would be.

Any failure by our VIEs or their shareholders to perform their obligations under our contractual arrangements with them would have a material adverse effect on our business.

If our VIEs or their shareholders fail to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under PRC law, including seeking specific performance or injunctive relief, and claiming damages, which we cannot assure you will be effective under PRC law. For example, if the shareholders of our VIEs were to refuse to transfer their equity interests in our VIEs to us or our designee if we exercise the purchase option pursuant to these contractual arrangements, or if they were otherwise to act in bad faith toward us, then we may have to take legal actions to compel them to perform their contractual obligations.

All the agreements under our contractual arrangements are governed by PRC laws and provide for the resolution of disputes through arbitration in China. Accordingly, these contracts would be interpreted in accordance with PRC laws and any disputes would be resolved in accordance with PRC legal procedures. The legal system in the PRC is not as developed as in some other jurisdictions. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. Meanwhile, there are very few precedents and little formal guidance as to how contractual arrangements in the context of a consolidated affiliated entity should be interpreted or enforced under PRC laws. There remain significant uncertainties regarding the ultimate outcome of such arbitration should legal action become necessary. In addition, under PRC laws, rulings by arbitrators are final, and if the losing parties fail to carry out the arbitration awards within a prescribed time limit, the prevailing parties may only enforce the arbitration awards in PRC courts through arbitration award recognition proceedings, which would require additional expenses and delay. In the event we are unable to enforce these contractual arrangements, or if we suffer significant delay or other obstacles in the process of enforcing these contractual arrangements, we may not be able to exert effective control over our VIEs, and our ability to conduct our business may be negatively affected.

The shareholders of our VIEs may have actual or potential conflicts of interest with us, which may materially and adversely affect our business, results of operations and financial condition.

The shareholders of our VIEs may have actual or potential conflicts of interest with us. These shareholders may refuse to sign or breach, or cause our VIEs to breach, or refuse to renew, the existing contractual arrangements we have with them and our VIEs, which would have a material adverse effect on our ability to effectively control our VIEs and receive economic benefits from them. For example, the shareholders may be able to cause our agreements with our VIEs to be performed in a manner adverse to us by, among other things, failing to remit payments due under the contractual arrangements to us on a timely basis. We cannot assure you that when conflicts of interest arise any or all of these shareholders will act in the best interests of our company or such conflicts will be resolved in our favor. Currently, we do not have any arrangements to address potential conflicts of interest between these shareholders and our company, except that we could exercise our purchase option under the exclusive option agreement with these shareholders to request them to transfer all of their equity interests in our variable interest entities to a PRC entity or individual designated by us, to the extent permitted by PRC laws. If we cannot resolve any conflict of interest or dispute between us and these shareholders, we would have to rely on legal proceedings, which could result in disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

Contractual Arrangement in relation to our VIEs may be subject to scrutiny by the PRC tax authorities and they may determine that we or our VIEs owe additional taxes, which could negatively affect our financial condition and the value of your investment.

Under applicable PRC laws and regulations, arrangements and transactions among related parties may be subject to audit or challenge by the PRC tax authorities within ten years after the taxable year when the transactions are conducted. We could face material and adverse tax consequences if the PRC tax authorities determine that the contractual arrangements were not entered into on an arm's-length basis in such a way as to result in an impermissible reduction in taxes under applicable PRC laws, rules and regulations, and adjust the income of our VIEs in the form of a transfer pricing adjustment. A transfer pricing adjustment could, among other things, result in a reduction of expense deductions recorded by our VIEs for PRC tax purposes, which could in turn increase their tax liabilities without reducing our VIEs' tax expenses. In addition, the PRC tax authorities may impose late payment fees and other penalties on our VIEs for the adjusted but unpaid taxes according to the applicable regulations. Our financial position could be materially and adversely affected if our VIEs' tax liabilities increase or if they are required to pay late payment fees and other penalties.

Our exercise of the option to acquire equity ownership and assets of VIEs may subject us to certain limitation and substantial costs.

Pursuant to the contractual arrangements, PRC Subsidiaries have the exclusive right to purchase all or any part of the equity interests in VIEs from the respective equity holders at a nominal price, unless relevant government authorities or PRC laws require that another amount should be used as the purchase price, in which case the purchase price shall be the lowest amount under such requirement. The equity transfer may be subject to the approvals from and filings with the MOFCOM, the State Administration for Market Regulation (the "SAMR") and/or their local competent branches. In addition, the equity transfer price may be subject to review and tax adjustment by the relevant tax authority. Subject to relevant laws and regulations, the shareholders of our VIEs will pay the equity transfer price they receive to PRC Subsidiaries under the contractual arrangements. The amount to be received by PRC Subsidiaries may also be subject to enterprise income tax, and such tax amounts could be substantial.

We may lose the ability to use and enjoy licenses, approvals and assets held by our VIEs that are material to the operation of certain portions of our business if our VIEs go bankrupt or become subject to a dissolution or liquidation proceeding.

We do not have priority pledges and liens against the assets of our VIEs. If either of our VIEs undergo an involuntary liquidation proceeding, third-party creditors may claim rights to some or all of its assets and we may not have priority against such third-party creditors on the assets of our VIEs. If either of our VIEs liquidates, we may take part in the liquidation procedures as a general creditor under the PRC Enterprise Bankruptcy Law and recover any outstanding liabilities owed by our VIEs to PRC Subsidiaries under the applicable service agreement.

If the shareholders of our VIEs were to attempt to voluntarily liquidate our VIEs without obtaining our prior consent, we could effectively prevent such unauthorized voluntary liquidation by exercising our right to request the shareholders of our VIEs to transfer all of their respective equity ownership interests to a PRC entity or individual designated by us in accordance with the option agreement with the shareholders of our VIEs. In addition, under the VIE agreements signed by our VIEs and their shareholders, the shareholders of our VIEs do not have the right to issue dividends to themselves or otherwise distribute the retained earnings or other assets of our VIEs without our consent. Similarly, the shareholders of our VIEs do not have the right to distribute the retained earnings or other assets of our VIEs without our consent. In the event that the shareholders of our VIEs initiate a voluntary liquidation proceeding without our authorization or attempts to distribute the retained earnings or assets of our VIEs without our prior consent, we may need to resort to legal proceedings to enforce the terms of the contractual arrangements. Any such legal proceeding may be costly and may divert our management's time and attention away from the operation of our business, and the outcome of such legal proceeding will be uncertain.

There may be difficulties in protecting your interests under the laws of the Cayman Islands.

Our corporate affairs are governed by, among other things, our Memorandum of Association, Articles of Association, the Companies Act (as amended) and common law of the Cayman Islands. The rights of Shareholders to take action against our directors, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The laws of the Cayman Islands relating to the protection of the interests of minority shareholders differ in some respects from those in other jurisdictions. Such differences may mean that the remedies available to the minority shareholders may be different from those they would have under the laws of other jurisdictions.

RISKS RELATING TO DOING BUSINESS IN THE PRC

If we fail to comply with environmental, health and safety laws and regulations, we could be subject to fines or penalties or incur costs that could have a material adverse effect on our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals. Our operations also produce hazardous waste products. We may contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials or our third parties' disposal of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We could also incur significant costs associated with civil or criminal fines and penalties.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials. This insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of hazardous or radioactive materials.

We may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

We may be exposed to liabilities under the U.S. Foreign Corrupt Practices Act, or FCPA, and Chinese anti-corruption laws, and any determination that we have violated these laws could have a material adverse effect on our business or our reputation.

We are subject to the FCPA. The FCPA generally prohibits us from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. We are also subject to the anti-bribery laws of other jurisdictions, particularly China. Other U.S. listed companies in the life science industry have faced criminal penalties under the FCPA for allowing their agents to deviate from appropriate practices in doing business. As our business expands, the applicability of the FCPA and other anti-bribery laws to our operations will increase. We cannot assure you that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or interpretation thereof. Our procedures and controls to monitor anti-bribery compliance may fail to protect us from reckless or criminal acts committed by our employees or agents. If we, due to either our own deliberate or inadvertent acts or those of others, fail to comply with applicable anti-bribery laws, our reputation could be harmed and we could incur criminal or civil penalties, other sanctions and/or significant expenses, which could have a material adverse effect on our business, including our financial condition, results of operations, cash flows and prospects.

We may be subject to additional contributions of social insurance premium and housing provident funds and late payments and fines imposed by relevant governmental authorities.

The Standing Committee of the National People's Congress enacted the Labor Contract Law in 2008, and amended on December 28, 2012. The Labor Contract Law introduced specific provisions related to fixed-term employment contracts, part-time employment, probationary periods, consultation with labor unions and employee assemblies, employment without a written contract, dismissal of employees, severance, and collective bargaining to enhance previous PRC labor laws. Under the Labor Contract Law, an employer is obligated to sign an unlimited-term labor contract with any employee who has worked for the employer for ten consecutive years. Further, if an employee requests or agrees to renew a fixed-term labor contract that has already been entered into twice consecutively, the resulting contract, with certain exceptions, must have an unlimited term, subject to certain exceptions. With certain exceptions, an employer must pay severance to an employee where a labor contract is terminated or expires. In addition, the PRC governmental authorities have continued to introduce various new labor-related regulations since the effectiveness of the Labor Contract Law.

Under the PRC Social Insurance Law and the Administrative Measures on Housing Funds and other relevant laws and regulations, employees are required to participate in pension insurance, work-related injury insurance, medical insurance, unemployment insurance, maternity insurance, and housing funds or collectively the Employee Benefits. An employer shall pay the Employee Benefits for its employees in accordance with the rates provided under relevant regulations and shall withhold the social insurance and other Employee Benefits that should be assumed by the employees. For example, PRC subsidiaries shall register with local social insurance agencies and register with applicable housing funds management centers and establish a special housing fund account in an entrusted bank. And an employer that has not made social insurance contributions at a rate and based on an amount prescribed by the law, or at all, may be ordered to rectify the non-compliance and pay the required contributions within a stipulated deadline and be subject to a late fee. If the employer still fails to rectify the failure to make social insurance contributions within the stipulated deadline, it may be subject to a fine ranging from one to three times of the amount overdue.

We have not made adequate contributions to social insurance and other Employee Benefits for our employees until September of 2018. We have recorded accruals for the estimated underpaid amounts of Employee Benefits in our financial statements.

To efficiently administer the contribution to housing funds and social insurance in certain cities in China, some of our subsidiaries engage third-party agents to make such contribution for some of our PRC employees. Any failure to make such contribution by these third-party agents may directly expose us to penalties imposed by the local authorities and/or legal claims raised by our employees.

As of the date of this annual report, we have not received any notice from the relevant government authorities or any claim or request from these employees in this regard. However, we cannot assure you that the relevant government authorities will not require us to pay the outstanding amount and impose late fees or fines on us. If we are otherwise subject to investigations related to non-compliance with labor laws and are imposed severe penalties or incur significant legal fees in connection with labor disputes or investigations, our business, financial condition and results of operations may be adversely affected.

These laws designed to enhance labor protection tend to increase our labor costs. In addition, as the interpretation and implementation of these regulations are still evolving, our employment practices may not be at all times be deemed in compliance with the regulations. As a result, we could be subject to penalties or incur significant liabilities in connection with labor disputes or investigations.

Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect us.

The PRC legal system is based on written statutes and prior court decisions have limited value as precedents. Since these laws and regulations are relatively new and the PRC legal system continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involves uncertainties.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. Furthermore, the PRC legal system is based in part on government policies and internal rules (some of which are not published in a timely manner or at all) that may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. Such uncertainties, including uncertainty over the scope and effect of our contractual, property (including intellectual property) and procedural rights, could materially and adversely affect our business and impede our ability to continue our operations.

You may experience difficulties in effecting service of legal process, enforcing foreign judgments or bringing actions in China against us or our management named in the annual report based on foreign laws.

We are a company incorporated under the laws of the Cayman Islands, we conduct substantially all of our operations in China, and substantially all of our assets are located in China. In addition, all our senior executive officers reside within China for a significant portion of the time and most are PRC nationals. As a result, it may be difficult for our shareholders to effect service of process upon us or those persons inside China. In addition, China does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts with the Cayman Islands and many other countries and regions. Therefore, recognition and enforcement in China of judgments of a court in any of these non-PRC jurisdictions in relation to any matter not subject to a binding arbitration provision may be difficult or impossible.

Shareholder claims that are common in the United States, including securities law class actions and fraud claims, generally are difficult to pursue as a matter of law or practicality in China. For example, in China, there are significant legal and other obstacles to obtaining information needed for shareholder investigations or litigation outside China or otherwise with respect to foreign entities. Although the local authorities in China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, such regulatory cooperation with the securities regulatory authorities in the United States have not been efficient in the absence of mutual and practical cooperation mechanism.

According to Article 177 of the PRC Securities Law which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of the PRC. Accordingly, without the consent of the competent PRC securities regulators and relevant authorities, no organization or individual may provide the documents and materials relating to securities business activities to overseas parties. See also “—Risks Relating to the ADSs—You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law.”

Substantial uncertainties exist with respect to the interpretation and implementation of the newly enacted Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.

On March 15, 2019, the PRC National People’s Congress approved the Foreign Investment Law, which came into effect on January 1, 2020 and replaces the trio of existing laws regulating foreign investment in the PRC, namely, the Sino-Foreign Equity Joint Venture Enterprise Law, the Sino-Foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-Invested Enterprise Law, and become the legal foundation for foreign investment in the PRC. Meanwhile, the Implementation Regulation of the Foreign Investment Law came into effect as of January 1, 2020, which clarified and elaborated the relevant provisions of the Foreign Investment Law.

The Foreign Investment Law sets out the basic regulatory framework for foreign investments and proposes to implement a system of pre-entry national treatment with a negative list for foreign investments, pursuant to which (i) foreign entities and individuals are prohibited from investing in the areas that are not open to foreign investments, (ii) foreign investments in the restricted industries must satisfy certain requirements under the law, and (iii) foreign investments in business sectors outside of the negative list will be treated equally with domestic investments. The Foreign Investment Law also sets forth necessary mechanisms to facilitate, protect and manage foreign investments and proposes to establish a foreign investment information reporting system, through which foreign investors are required to submit information relating to their investments to the Ministry of Commerce, or MOFCOM, or its local branches.

However, since the Foreign Investment Law is relatively new, uncertainties still exist in relation to its interpretation and implementation. For instance, under the Foreign Investment Law, “foreign investment” refers to the investment activities directly or indirectly conducted by foreign individuals, enterprises or other entities in China. Though it does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition in the future. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. In any of these cases, it will be uncertain whether our contractual arrangements will be deemed to be in violation of the market access requirements for foreign investment under the PRC laws and regulations. Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

Any non-compliance with PRC advertising laws and regulations by us may subject us to penalties.

We are obligated to ensure our advertising content to comply with applicable laws. For example, no medical advertisements or medical device advertisements shall be published before relevant approval has been obtained from competent government authority. Please see “Item 4. Information of the Company—B. Business Overview—Regulations—Regulations relating to Advertisement”. Any violation of the relevant laws and regulations may subject us to governmental penalties, impair our brand and adversely impact our financial condition and results of operations.

The lease agreements of our leased properties have not been registered with the relevant PRC government authorities as required by PRC law, which may expose us to potential fines.

Under PRC law, lease agreements of commodity housing tenancy are required to be registered with the local construction (real estate) departments. Although failure to do so does not in itself invalidate the leases, the parties of the lease agreements may be exposed to potential fines if they fail to rectify such non-compliance within the prescribed time frame after receiving notice from the relevant PRC government authorities. The penalty ranges from RMB1,000 to RMB10,000 for each unregistered lease, at the discretion of the relevant authority. As of the date of this annual report, the lease agreements for most of our leased properties in China, including leased properties for our spaces, have not been registered with the relevant PRC government authorities. As of the date of this annual report, we are not aware of any regulatory or governmental actions, claims or investigations being contemplated or any challenges by third parties to our use of our leased properties, or the lease agreements of which have not been registered with the government authorities. However, we cannot assure you that the government authorities will not impose fines on us due to our failure to register any of our lease agreements, which may negatively impact our financial condition.

Our rights to use our leased properties could be challenged by property owners or other third parties, which may disrupt our operations and incur relocation costs.

As of the date of this annual report, we have a number of title defects with respect to some of our leased properties, for example, the lessors of certain of our leased properties in China failed to provide us with valid property ownership certificates or authorizations from the property owners for the lessors to sublease the properties. If such lessors do not have the relevant property ownership certificates or the right to lease or sublease such properties to us, the relevant rightful title holders or other third parties may challenge our use of such leased properties, and we may be forced to vacate these properties and be required to seek alternative properties for lease. In such an event, our business operations will be interrupted, and relocation costs will be incurred. Moreover, if our lease agreements are challenged by third parties, it could result in diversion of management attention and cause us to incur costs associated with defending such actions, even if such challenges are ultimately determined in our favor.

Any failure to comply with PRC regulations regarding the registration requirements for employee stock incentive plans may subject the PRC plan participants or us to fines and other legal or administrative sanctions.

In February 2012, SAFE promulgated the Notices on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Equity Incentive Plans of Overseas Listed Companies, replacing earlier rules promulgated in 2007. Pursuant to these rules, PRC citizens and non-PRC citizens who reside in China for a continuous period of not less than one year who participate in any stock incentive plan of an overseas publicly listed company, subject to a few exceptions, are required to register with SAFE through a domestic qualified agent, which could be the PRC subsidiaries of such overseas-listed company, and complete certain other procedures. In addition, an overseas-entrusted institution must be retained to handle matters in connection with the exercise or sale of stock options and the purchase or sale of shares and interests. We and our executive officers and other employees who are PRC citizens or who reside in the PRC for a continuous period of not less than one year and who have been granted options will be subject to these regulations. Failure to complete the SAFE registrations may subject them to fines and legal sanctions, there may be additional restrictions on the ability of them to exercise their stock options or remit proceeds gained from the sale of their stock into the PRC. We also face regulatory uncertainties that could restrict our ability to adopt incentive plans for our directors, executive officers and employees under PRC law. See “Item 4. Information of the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange—Share Option Rules.”

If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders.

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of the PRC with a “de facto management body” within the PRC is considered a “resident enterprise” and will be subject to the enterprise income tax on its global income at the rate of 25%. The implementation rules define the term “de facto management body” as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In 2009, the State Administration of Taxation, or SAT, issued a circular, known as SAT Circular 82, which provides certain specific criteria for determining whether the “de facto management body” of a PRC-controlled enterprise that is incorporated offshore is located in China. Although this circular only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners, the criteria set forth in the circular may reflect the SAT’s general position on how the “de facto management body” test should be applied in determining the tax resident status of all offshore enterprises. According to SAT Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its “de facto management body” in China and will be subject to PRC enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management and the places where they perform their duties are in the PRC; (ii) decisions relating to the enterprise’s financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise’s primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitually reside in the PRC.

We believe that we are not a PRC resident enterprise for PRC tax purposes. See “Item 10. Additional Information—E. Taxation—PRC Taxation.” However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” If the PRC tax authorities determine that we are a PRC resident enterprise for enterprise income tax purposes, we will be subject to a 25% tax on our worldwide income. In addition, we may be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises, including the holders of the ADSs. In addition, non-resident enterprise shareholders (including ADS holders) may be subject to PRC tax at a rate of 10% on gains realized on the sale or other disposition of ADSs or ordinary shares, if such income is treated as sourced from within the PRC. Furthermore, if we are deemed a PRC resident enterprise, dividends payable to our non-PRC individual shareholders (including ADS holders) and any gain realized on the transfer of ADSs or ordinary shares by such shareholders may be subject to PRC tax at a rate of 20% (which, in the case of dividends, may be withheld at source by us). Any PRC tax liability may be reduced under applicable tax treaties. However, it is unclear whether in practice our non-PRC shareholders would be able to obtain the benefits of any tax treaties between their countries of tax residence and the PRC in the event that we are treated as a PRC resident enterprise. Any such tax may reduce the returns on your investment in the ADSs or our ordinary shares.

We face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies.

Pursuant to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises, or SAT Circular 698, issued by the SAT in 2009 with retroactive effect from January 1, 2008, where a non-resident enterprise transfers the equity interests of a PRC resident enterprise indirectly by disposition of the equity interests of an overseas holding company, or an Indirect Transfer, and such overseas holding company is located in a tax jurisdiction that: (i) has an effective tax rate less than 12.5% or (ii) does not tax foreign income of its residents, the non-resident enterprise, being the transferor, shall report to the competent tax authority of the PRC resident enterprise this Indirect Transfer.

On February 3, 2015, the SAT issued the Public Notice Regarding Certain Enterprise Income Tax Matters on Indirect Transfer of Properties by Non-Resident Enterprises, or SAT Bulletin 7. SAT Bulletin 7 supersedes the rules with respect to the Indirect Transfer under SAT Circular 698. SAT Bulletin 7 has introduced a new tax regime that is significantly different from the previous one under SAT Circular 698. SAT Bulletin 7 extends the PRC's tax jurisdiction to not only Indirect Transfers set forth under SAT Circular 698 but also transactions involving a transfer of other taxable assets through an offshore transfer of a foreign intermediate holding company. In addition, SAT Bulletin 7 provides clearer criteria than SAT Circular 698 for assessment of reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity securities through a public securities market. SAT Bulletin 7 also brings challenges to both foreign transferor and transferee (or another person who is obligated to pay for the transfer) of taxable assets. Where a non-resident enterprise transfers taxable assets indirectly by disposing of the equity interests of an overseas holding company, which is an Indirect Transfer, the non-resident enterprise, being the transferor, or the transferee, or the PRC entity that directly owns the taxable assets, may report such Indirect Transfer to the relevant tax authority. Using a "substance over form" principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such Indirect Transfer may be subject to PRC enterprise income tax, and the transferee or another person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10% for the transfer of equity interests in a PRC resident enterprise. Both the transferor and the transferee may be subject to penalties under PRC tax laws if the transferee fails to withhold the taxes and the transferor fails to pay the taxes.

On October 17, 2017, the SAT issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprises Income Tax at Source, or SAT Bulletin 37, which, among others, repealed the SAT Circular 698 on December 1, 2017. SAT Bulletin 37 further details and clarifies the tax withholding methods in respect of income of non-resident enterprises under SAT Circular 698. And certain rules stipulated in SAT Bulletin 7 are replaced by SAT Bulletin 37. Where the non-resident enterprise fails to declare the tax payable pursuant to Article 39 of the PRC Enterprise Income Tax Law, the tax authority may order it to pay the tax due within required time limits, and the non-resident enterprise shall declare and pay the tax payable within such time limits specified by the tax authority; however, if the non-resident enterprise voluntarily declares and pays the tax payable before the tax authority orders it to do so within required time limits, it shall be deemed that such enterprise has paid the tax in time.

We face uncertainties as to the reporting and other implications of certain past and future transactions where PRC taxable assets are involved, such as offshore restructuring, sale of the shares in our offshore subsidiaries and investments. Our company may be subject to filing obligations or taxed if our company is a transferor in such transactions, and may be subject to withholding obligations if our company is a transferee in such transactions, under SAT Bulletin 7 and SAT Bulletin 37. For transfer of shares in our company by investors who are non-PRC resident enterprises, our PRC Subsidiaries may be requested to assist in the filing under SAT Bulletin 7 and SAT Bulletin 37. As a result, we may be required to expend valuable resources to comply with SAT Bulletin 7 and SAT Bulletin 37 or to request the relevant transferors from whom we purchase taxable assets to comply with these circulars, or to establish that our company should not be taxed under these circulars, which may have a material adverse effect on our financial condition and results of operations.

If our preferential tax treatments are revoked, become unavailable or if the calculation of our tax liability is successfully challenged by the PRC tax authorities, we may be required to pay tax, interest and penalties in excess of our tax provisions, and our results of operations could be materially and adversely affected.

The Chinese government has provided various tax incentives to our subsidiaries in China. These incentives include reduced enterprise income tax rates. For example, under the Enterprise Income Tax Law and its implementation rules, the statutory enterprise income tax rate is 25%. However, the income tax of an enterprise that has been determined to be a high and new technology enterprise can be reduced to a preferential rate of 15%. Any increase in the enterprise income tax rate applicable to our PRC Subsidiaries in China, or any discontinuation or retroactive or future reduction of any of the preferential tax treatments currently enjoyed by our VIEs in China, could adversely affect our business, financial condition and results of operations. In addition, in the ordinary course of our business, we are subject to complex income tax and other tax regulations and significant judgment is required in the determination of a provision for income taxes. Although we believe our tax provisions are reasonable, if the PRC tax authorities successfully challenge our position and we are required to pay tax, interest and penalties in excess of our tax provisions, our financial condition and results of operations would be materially and adversely affected.

Certain PRC regulations may make it more difficult for us to pursue growth through acquisitions.

Among other things, the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, adopted by six PRC regulatory agencies in 2006 and amended in 2009, established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex. Such regulation requires, among other things, that the MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor acquires control of a PRC domestic enterprise or a foreign company with substantial PRC operations, if certain thresholds under the Provisions on Thresholds for Prior Notification of Concentrations of Undertakings, issued by the State Council in 2008 and amended in 2018, were triggered. Moreover, the Anti-Monopoly Law promulgated by the Standing Committee of the PRC National People's Congress, which became effective in 2008 requires that transactions which are deemed concentrations and involve parties with specified turnover thresholds must be cleared by the MOFCOM before they can be completed. In addition, PRC national security review rules which became effective in September 2011 require acquisitions by foreign investors of PRC companies engaged in military-related or certain other industries that are crucial to national security be subject to security review before consummation of any such acquisition. Furthermore, according to the Measures for the Security Review of Foreign Investment, or the New Security Review Measures, promulgated by NDRC and MOFCOM on December 19, 2020, a foreign investment security review working mechanism will be established to be responsible for organizing, coordinating and guiding the security review of foreign investment. If a proposed foreign investment meets the conditions as stipulated in the New Security Review Measures, the foreign investor or the relevant domestic party shall report such case to the review working mechanism authority, in order to obtain the security review clearance before proceeding with the proposed foreign investment. However, as the New Security Review Measures was newly issued, there are still substantial uncertainties as to its interpretation and implementations in practice. We may pursue potential strategic acquisitions that are complementary to our business and operations. Complying with the requirements of these regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval or clearance from the MOFCOM, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

PRC regulations relating to the establishment of offshore special purpose companies by PRC residents may subject our PRC resident beneficial owners or our PRC Subsidiaries to liability or penalties, limit our ability to inject capital into our PRC Subsidiaries, limit our PRC Subsidiaries' ability to increase their registered capital or distribute profits to us, or may otherwise adversely affect us.

In July 2014, SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Administration on Domestic Residents' Overseas Investment, Financing and Roundtrip Investment via Special Purpose Vehicles, or SAFE Circular 37. SAFE Circular 37 requires PRC residents (including PRC individuals and PRC corporate entities as well as foreign individuals that are deemed as PRC residents for foreign exchange administration purpose) to register with SAFE or its local branches in connection with their direct or indirect offshore investment activities. SAFE Circular 37 is applicable to our shareholders who are PRC residents and may be applicable to any offshore acquisitions that we make in the future.

Under SAFE Circular 37, PRC residents who make, or have prior to the implementation of SAFE Circular 37 made, direct or indirect investments in offshore special purpose vehicles, or SPVs, will be required to register such investments with SAFE or its local branches. In addition, any PRC resident who is a direct or indirect shareholder of an SPV, is required to update its filed registration with the local branch of SAFE with respect to that SPV, to reflect any material change. Moreover, any subsidiary of such SPV in China is required to urge the PRC resident shareholders to update their registration with the local branch of SAFE. If any PRC shareholder of such SPV fails to make the required registration or to update the previously filed registration, the subsidiary of such SPV in China may be prohibited from distributing its profits or the proceeds from any capital reduction, share transfer or liquidation to the SPV, and the SPV may also be prohibited from making additional capital contributions into its subsidiary in China. On February 13, 2015, SAFE promulgated the Notice on Further Simplifying and Improving the Direct Investment-related Foreign Exchange Administration Policy, or SAFE Notice 13, which became effective on June 1, 2015. Under SAFE Notice 13, applications for foreign exchange registration of inbound foreign direct investments and outbound overseas direct investments, including those required under SAFE Circular 37, will be filed with qualified banks instead of SAFE. The qualified banks will directly examine the applications and accept registrations under the supervision of SAFE.

We have requested PRC residents who we know hold direct or indirect interest in our company to make the necessary applications, filings and registrations as required under SAFE Circular 37 and those PRC resident shareholders that hold direct interest in our company have completed all necessary registrations with the local SAFE branch or qualified banks as required by SAFE Circular 37. However, we may not be informed of the identities of all the PRC residents holding direct or indirect interest in our company, and we cannot provide any assurance that these PRC residents will comply with our request to make or obtain any applicable registrations or comply with other requirements under SAFE Circular 37 or other related rules. The failure or inability of our PRC resident shareholders to comply with the registration procedures set forth in these regulations may subject us to fines and legal sanctions, restrict our cross-border investment activities, limit the ability of our PRC Subsidiaries to distribute dividends and the proceeds from any reduction in capital, share transfer or liquidation to us, and we may also be prohibited from injecting additional capital into the subsidiary. Moreover, failure to comply with the various foreign exchange registration requirements described above could result in liability under PRC law for circumventing applicable foreign exchange restrictions. As a result, our business operations and our ability to distribute profits to you could be materially and adversely affected.

Furthermore, as these foreign exchange regulations are still relatively new and their interpretation and implementation has been constantly evolving, it is unclear how these regulations, and any future regulation concerning offshore or cross-border transactions, will be interpreted, amended and implemented by the relevant government authorities. For example, we may be subject to a more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our financial condition and results of operations. In addition, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company, as the case may be, will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the foreign exchange regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our initial public offering to make loans or additional capital contributions to our PRC Subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

We are an offshore holding company conducting our operations in China through our PRC Subsidiaries and VIEs. We may make loans to our PRC Subsidiaries and VIEs subject to the approval or registration from governmental authorities and limitation of amount, or we may make additional capital contributions to our PRC Subsidiaries. Any loans to our PRC Subsidiaries, which are treated as foreign-invested enterprises under PRC law, are subject to foreign exchange loan registrations. In addition, a foreign-invested enterprise, or FIE, shall use its capital pursuant to the principle of authenticity and self-use within its business scope. The capital of an FIE shall not be used for the following purposes: (i) directly or indirectly used for payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations; (ii) directly or indirectly used for investment in securities or investments other than banks' principal-secured products unless otherwise provided by relevant laws and regulations; (iii) the granting of loans to non-affiliated enterprises, except where it is expressly permitted in the business license; and (iv) paying the expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises).

In light of the various requirements imposed by PRC regulations on loans to and direct investment in PRC entities by offshore holding companies, we cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals on a timely basis, if at all, with respect to future loans by us to our PRC Subsidiaries or VIEs or with respect to future capital contributions by us to our PRC Subsidiaries. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds from our initial public offering and to capitalize or otherwise fund our PRC operations may be negatively affected, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

We may rely on dividends and other distributions on equity paid by our PRC Subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC Subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business.

We are a Cayman Islands holding company and we rely principally on dividends and other distributions on equity from our PRC Subsidiaries for our cash requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders for services of any debt we may incur. If our PRC Subsidiaries incurs debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Under PRC laws and regulations, our PRC Subsidiaries, which are foreign invested enterprises enterprise, may pay dividends only out of its respective accumulated profits as determined in accordance with PRC accounting standards and regulations. In addition, a foreign invested enterprise is required to set aside at least 10% of its accumulated after-tax profits each year, if any, to fund a certain statutory reserve fund, until the aggregate amount of such fund reaches 50% of its registered capital. Such reserve funds cannot be distributed to us as dividends. At its discretion, a foreign invested enterprise may allocate a portion of its after-tax profits based on PRC accounting standards to an enterprise expansion fund, or a staff welfare and bonus fund.

Our PRC Subsidiaries generate primarily all of their revenue in Renminbi, which is not freely convertible into other currencies. As a result, any restriction on currency exchange may limit the ability of our PRC Subsidiaries to use their Renminbi revenues to pay dividends to us.

The PRC government may continue to strengthen its capital controls, and more restrictions and substantial vetting process may be put forward by SAFE for cross-border transactions falling under both the current account and the capital account. Any limitation on the ability of our PRC Subsidiaries to pay dividends or make other kinds of payments to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

In addition, the Enterprise Income Tax Law and its implementation rules provide that a withholding tax rate of up to 10% will be applicable to dividends payable by Chinese companies to non-PRC-resident enterprises unless otherwise exempted or reduced according to treaties or arrangements between the PRC central government and governments of other countries or regions where the non-PRC-resident enterprises are incorporated.

Fluctuations in exchange rates could have a material adverse effect on our results of operations and the value of your investment.

The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions in China and by China's foreign exchange policies. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. Since October 1, 2016, Renminbi has joined the International Monetary Fund's basket of currencies that make up the Special Drawing Right (SDR) along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2016, the Renminbi has depreciated significantly in the backdrop of a surging U.S. dollar and persistent capital outflows of China. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system, and we cannot assure you that the Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

Significant revaluation of the Renminbi may have a material and adverse effect on your investment. For example, to the extent that we need to convert U.S. dollars we receive from our initial public offering into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or the ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert Renminbi into foreign currency.

Governmental control of currency conversion may limit our ability to utilize our cash balance effectively and affect the value of your investment.

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. We receive substantially all of our revenues in Renminbi. Under our current corporate structure, our Cayman Islands holding company primarily relies on dividend payments from our PRC Subsidiaries to fund any cash and financing requirements we may have. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval of SAFE by complying with certain procedural requirements. Specifically, under the existing exchange restrictions, without prior approval of SAFE, cash generated from the operations of our PRC Subsidiaries in China may be used to pay dividends to our company. However, approval from or registration with appropriate government authorities is required where Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. As a result, we need to obtain SAFE approval to use the cash generated from the operations of our PRC Subsidiaries and VIEs to pay off their respective debt in a currency other than Renminbi owed to entities outside China, or to make other capital expenditure payments outside China in a currency other than Renminbi. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of the ADSs.

The audit report included in this annual report was prepared by an auditor that is not inspected by the Public Company Accounting Oversight Board and, as such, our investors are deprived of the benefits of such inspection. In addition, various legislative and regulatory developments related to U.S.-listed China based companies due to lack of PCAOB inspection and other developments due to political tensions between the United States and China may have a material adverse impact on our listing and trading in the U.S. and the trading prices of our ADSs.

Our auditor, the independent registered public accounting firm that issued the audit reports included in our annual report filed with the U.S. Securities and Exchange Commission, or the SEC, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board (United States), or the PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with applicable professional standards. Our auditor is located in, and organized under the laws of, the PRC, which is a jurisdiction where the PCAOB has been unable to conduct inspections without the approval of the Chinese authorities. Accordingly, our auditor is not currently inspected by the PCAOB.

This lack of PCAOB inspections in China prevents the PCAOB from fully evaluating audits and quality control procedures of our independent registered public accounting firm. As a result, we and investors in our ADSs are deprived of the benefits of such PCAOB inspections. The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections, which could cause investors and potential investors in our ADSs to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

In addition, as part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular China's, former U.S. President Trump signed into law on December 18, 2020 the Holding Foreign Companies Accountable Act (HFCA Act), which requires the SEC to propose rules within 90 days after its enactment to prohibit securities of any registrant from being listed on any of the U.S. securities exchanges or traded "over the counter" if the auditor of the registrant's financial statements is not subject to PCAOB inspection for three consecutive years after the law becomes effective. On March 24, 2021, the SEC has adopted interim final amendments to implement congressionally mandated submission and disclosure requirements of the HFCA Act. The interim final amendments will apply to registrants that the SEC identifies as having filed an annual report on Forms 10-K, 20-F, 40-F or N-CSR with an audit report issued by a registered public accounting firm that is located in a foreign jurisdiction and that the PCAOB has determined it is unable to inspect or investigate completely because of a position taken by an authority in that jurisdiction. Before any registrant will have to comply with the interim final amendments, however, the SEC must implement a process for identifying such a registrant. Thus, the SEC is currently seeking public comment on this identification process.

Consistent with the HFCA Act, the amendments will require any such identified registrant to submit documentation to the SEC establishing that the registrant is not owned or controlled by a governmental entity in that foreign jurisdiction, and will also require disclosure in a foreign issuer's annual report regarding the audit arrangements of, and governmental influence on, such a registrant. As of the date of this annual report, the SEC is currently seeking public comment on these submission and disclosure requirements. The SEC staff is also currently assessing how best to implement other requirements of the HFCA Act, including the identification process and the trading prohibition requirements.

Enactment of this legislation or other efforts to increase U.S. regulatory access to audit information could cause investor uncertainty for affected issuers, including us, and the market price of the ADSs could be adversely affected, and we could be delisted if we are unable to cure the situation to meet the PCAOB inspection requirement in time. It is unclear if and when any of such proposed legislations will be enacted. See "—We could be delisted if our auditor unable to meet the PCAOB inspection requirements in time. The delisting of our ADSs and inability to trade, or the threat thereof, may materially and adversely affect the value of your investment."

We could be delisted if our auditor is unable to meet the PCAOB inspection requirements in time. The delisting of our ADSs and inability to trade, or the threat thereof, may materially and adversely affect the value of your investment.

On December 18, 2020, the Holding Foreign Companies Accountable Act was enacted. In essence, the act requires the SEC to prohibit securities of any foreign companies from being listed on U.S. securities exchanges or traded "over-the-counter" if a company retains a foreign accounting firm that cannot be inspected by the PCAOB for three consecutive years, beginning in 2021. Our independent registered public accounting firm is located in and organized under the laws of the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, and therefore our auditors are not currently inspected by the PCAOB.

The enactment of the Holding Foreign Companies Accountable Act and any additional rulemaking efforts to increase U.S. regulatory access to audit information in China could cause investor uncertainty for affected SEC registrants, including us, and the market price of our ADSs could be materially adversely affected. Additionally, whether the PCAOB will be able to conduct inspections of our auditors in the next three years, or at all, is subject to substantial uncertainty and depends on a number of factors out of our control. If our auditor is unable to meet the PCAOB inspection requirement in time, we could be delisted from the Nasdaq Global Market and our ADSs will not be permitted for trading "over-the-counter" either. Such a delisting would substantially impair your ability to sell or purchase our ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our ADSs. Also, such a delisting would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, financial condition and prospects.

Proceedings instituted by the SEC against four PRC-based accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.

Starting in 2011 the China-based “big four” accounting firms, including our independent registered public accounting firm, were affected by a conflict between U.S. and PRC law. Specifically, for certain U.S.-listed companies operating and audited in mainland China, the SEC and the PCAOB sought to obtain from the Chinese firms access to their audit work papers and related documents. The firms were, however, advised and directed that under PRC law, they could not respond directly to the U.S. regulators on those requests, and that requests by foreign regulators for access to such papers in China had to be channeled through the China Securities Regulatory Commission, or the CSRC.

In late 2012, this impasse led the SEC to commence administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the Chinese accounting firms, including our independent registered public accounting firm. A first instance trial of the proceedings in July 2013 in the SEC’s internal administrative court resulted in an adverse judgment against the firms. The administrative law judge proposed penalties on the firms including a temporary suspension of their right to practice before the SEC, although that proposed penalty did not take effect pending review by the Commissioners of the SEC. On February 6, 2015, before a review by the Commissioners had taken place, the firms reached a settlement with the SEC. Under the settlement, the SEC accepted that future requests by the SEC for the production of documents will normally be made to the CSRC. The firms were to receive matching Section 106 requests, and were required to abide by a detailed set of procedures with respect to such requests, which in substance require them to facilitate production via the CSRC. If they failed to meet specified criteria, the SEC retained authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure. Under the terms of the settlement, the underlying proceeding against the four PRC-based accounting firms was deemed dismissed with prejudice at the end of four years starting from the settlement date, which was February 6, 2019. We cannot predict if the SEC will further challenge the four PRC-based accounting firms’ compliance with U.S. law in connection with U.S. regulatory requests for audit work papers or if the results of such a challenge would result in the SEC imposing penalties such as suspensions. If additional remedial measures are imposed on the China-based “big four” accounting firms, we could be unable to timely file future financial statements in compliance with the requirements of the Exchange Act.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about any such future proceedings against these audit firms may cause investor uncertainty regarding China-based, U.S.-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delisting of our ADSs from the Nasdaq Global Market or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.

RISKS RELATING TO THE ADSS

You may be subject to limitations on transfer of your ADSs.

Your ADSs are transferable on the books of the depository. However, the depository may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depository may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depository are closed, or at any time if we or the depository deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason in accordance with the terms of the deposit agreement.

The trading price of the ADSs is likely to be volatile, which could result in substantial losses to investors.

The trading price of our ADSs ranged from US\$9.03 to US\$31.54 per ADS since the listing of ADSs on Nasdaq. The trading price of the ADSs is likely to be volatile and could fluctuate widely due to factors beyond our control. This may happen because of broad market and industry factors, including the performance and fluctuation of the market prices of other companies with business operations located mainly in China that have listed their securities in the United States. In addition to market and industry factors, the price and trading volume for the ADSs may be highly volatile for factors specific to our own operations, including the following:

- variations in our net revenues, earnings and cash flow;
- announcements of new investments, acquisitions, strategic partnerships, or joint ventures by us or our competitors;
- announcements of new products and services and expansions by us or our competitors;
- changes in financial estimates by securities analysts;
- fluctuations in operating metrics;
- failure on our part to realize monetization opportunities as expected;
- changes in revenues generated from our significant business partners;
- additions or departures of key personnel;
- release of lock-up or other transfer restrictions on our outstanding equity securities or sales or perceived sales of additional equity securities;
- detrimental negative publicity about us, our management, our competitors or our industry;
- a lack of effective internal control over financial reporting;
- inadequate corporate governance policies, or allegations of fraud, among other things, involving China-based issuers;
- regulatory developments affecting us or our industry; and
- potential litigation or regulatory investigations.

Any of these factors may result in large and sudden changes in the trading volume and price of the ADSs.

In the past, shareholders of public companies have often brought securities class action suits against those companies following periods of instability in the market price of their securities. If we were involved in a class action suit, it could divert a significant amount of our management's attention and other resources from our business and operations and require us to incur significant expenses to defend the suit, which could harm our results of operations. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our financial condition and results of operations.

We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements.

We are an "emerging growth company," as defined in the JOBS Act, and we may take advantage of certain exemptions from requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 for so long as we remain an emerging growth company. As a result, if we elect not to comply with such auditor attestation requirements, our investors may not have access to certain information they may deem important.

If securities or industry analysts cease to publish research or reports about our business, or if they adversely change their recommendations regarding the ADSs, the market price for the ADSs and trading volume could decline.

The trading market for the ADSs will be influenced by research or reports that industry or securities analysts publish about our business. If one or more analysts who cover us downgrade the ADSs, the market price for the ADSs would likely decline. If one or more of these analysts cease to cover us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for the ADSs to decline.

The sale or availability for sale, or perceived sale or availability for sale, of substantial amounts of the ADSs could adversely affect their market price.

Sales of substantial amounts of the ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of the ADSs and could materially impair our ability to raise capital through equity offerings in the future. The ADSs sold in our initial public offering are freely tradable by persons other than our “affiliates” without restriction or further registration under the Securities Act, and shares held by our existing shareholders may also be sold in the public market subject to the restrictions in Rule 144 and Rule 701 under the Securities Act and the applicable lock-up agreements. Certain major holders of our ordinary shares have the right to cause us to register under the Securities Act the sale of their shares, subject to the applicable Lock-up Period in connection with our initial public offering. Registration of these shares under the Securities Act would result in ADSs representing these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. Sales of these registered shares in the form of ADSs in the public market could cause the price of our ADSs to decline significantly.

The voting rights of holders of ADSs are limited by the terms of the deposit agreement, and you may not be able to exercise your right to vote the underlying ordinary shares represented by your ADSs.

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of ADSs, you will not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You will only be able to exercise the voting rights which are carried by the underlying ordinary shares represented by your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. If we instruct the depositary to solicit voting instructions, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying ordinary shares represented by your ADSs in accordance with your instructions. If we do not instruct the depositary to ask for your instructions, the depositary may still vote in accordance with the instructions you give, but it is not required to do so. You will not be able to directly exercise your right to vote with respect to the underlying ordinary shares unless you cancel your ADSs and withdraw the shares, and become the registered holder of such shares prior to the record date for the general meeting. When a general meeting is convened, you may not receive sufficient advance notice of the meeting to withdraw the ordinary shares represented by your ADSs and become the registered holder of such shares to allow you to attend the general meeting and to vote directly with respect to any specific matter or resolution to be considered and voted upon at the general meeting. In addition, under our post-offering memorandum and articles of association, for the purposes of determining those shareholders who are entitled to attend and vote at any general meeting, our directors may close our register of members and/or fix in advance a record date for such meeting, and such closure of our register of members or the setting of such a record date may prevent you from withdrawing the underlying ordinary shares represented by your ADSs and becoming the registered holder of such shares prior to the record date, so that you would not be able to attend the general meeting or to vote directly. If we ask for your instructions, the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. If we will instruct the depositary to solicit voting instructions, we will give the depositary at least 30 days’ prior notice of shareholder meetings. Nevertheless, we cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote the underlying ordinary shares represented by your ADSs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to direct how the underlying ordinary shares represented by your ADSs are voted and you may have no legal remedy if the underlying ordinary shares represented by your ADSs are not voted as you requested. In addition, in your capacity as an ADS holder, you will not be able to call a shareholders’ meeting.

We are entitled to amend the deposit agreement and to change the rights of ADS holders under the terms of such agreement, or to terminate the deposit agreement, without the prior consent of the ADS holders.

We are entitled to amend the deposit agreement and to change the rights of the ADS holders under the terms of such agreement, without the prior consent of the ADS holders. We and the depositary may agree to amend the deposit agreement in any way we decide is necessary or advantageous to us. Amendments may reflect, among other things, operational changes in the ADS program, legal developments affecting ADSs or changes in the terms of our business relationship with the depositary. In the event that the terms of an amendment are disadvantageous to ADS holders, ADS holders will only receive 30 days' advance notice of the amendment, and no prior consent of the ADS holders is required under the deposit agreement. Furthermore, we may decide to terminate the ADS facility at any time for any reason. For example, terminations may occur when we decide to list our shares on a non-U.S. securities exchange and determine not to continue to sponsor an ADS facility or when we become the subject of a takeover or a going-private transaction. If the ADS facility will terminate, ADS holders will receive at least 90 days' prior notice, but no prior consent is required from them. Under the circumstances that we decide to make an amendment to the deposit agreement that is disadvantageous to ADS holders or terminate the deposit agreement, the ADS holders may choose to sell their ADSs or surrender their ADSs and become direct holders of the underlying ordinary shares, but will have no right to any compensation whatsoever.

ADSs holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by a federal or state court in the City of New York, which has non-exclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us or the depositary. If a lawsuit is brought against us or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial.

No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

Your rights to pursue claims against us and the depositary as a holder of ADSs are limited by the terms of the deposit agreement.

The deposit agreement governing the ADSs representing our ordinary shares provides that ADS holders and the depositary have the right to elect to have any claim they may have against us arising out of or relating to our ordinary shares or ADSs or the deposit agreement settled by arbitration in New York, New York rather than in a court of law, and to have any judgment rendered by the arbitrators entered in any court having jurisdiction. An arbitral tribunal in any such arbitration would not have the authority to award any consequential, special, or punitive damages and its award would have to conform to the provisions of the deposit agreement. The deposit agreement does not give us the right to require that any claim, whether brought by us or against us, be arbitrated.

The deposit agreement also provides that, subject to the claimant's right to require a claim to be submitted to arbitration, the federal or state courts in the State of New York have jurisdiction to hear and determine claims arising under the deposit agreement, our ordinary shares and the ADSs and the transactions contemplated thereby, including any claim under the U.S. federal securities laws. No condition or provision of the deposit agreement or ADSs serves as a waiver by any owner or holder of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder. Therefore, to the extent there are specific federal securities law violation aspects to any claims against us or the depositary brought by any holder or owner of ADSs, the federal securities law violation aspects of such claims may, at the option of such holders or owners, remain in state or federal court in the State of New York. We believe that an optional contractual arbitration provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement.

By agreeing to such optional arbitration provision, you will not be deemed to have waived our or the depositary's compliance with U.S. federal securities laws and the rules and regulations promulgated thereunder.

Because we do not expect to pay dividends in the foreseeable future, you must rely on price appreciation of the ADSs for return on your investment.

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in the ADSs as a source for any future dividend income.

Our board of directors has complete discretion as to whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may, subject to the provisions of our articles of association, by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on our future results of operations and cash flow, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiary, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in the ADSs will likely depend entirely upon any future price appreciation of the ADSs. There is no guarantee that the ADSs will appreciate in value or even maintain the price at which you purchased the ADSs. You may not realize a return on your investment in the ADSs and you may even lose your entire investment in the ADSs.

You may not receive dividends or other distributions on our ordinary shares and you may not receive any value for them, if it is illegal or impractical to make them available to you.

The depositary has agreed to distribute to you the cash dividends or other distributions it or the custodian receives on ordinary shares or other deposited securities underlying the ADSs, after deducting its fees and expenses. You will receive these distributions in proportion to the number of ordinary shares your ADSs represent. However, the depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any holders of ADSs. For example, it would be unlawful to make a distribution to a holder of ADSs if it consists of securities that require registration under the Securities Act of 1933 but that are not properly registered or distributed under an applicable exemption from registration. The depositary may also determine that it is not feasible to distribute certain property. Additionally, the value of certain distributions may be less than the cost of distributing them. In these cases, the depositary may determine not to distribute such property. We have no obligation to register under U.S. securities laws any ADSs, ordinary shares, rights or other securities received through such distributions. We also have no obligation to take any other action to permit the distribution of ADSs, ordinary shares, rights or anything else to holders of ADSs. This means that you may not receive distributions we make on our ordinary shares or any value for them if it is illegal or impractical for us to make them available to you. These restrictions may cause a material decline in the value of the ADSs.

You may experience dilution of your holdings due to the inability to participate in rights offerings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depositary will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act with respect to all holders of ADSs, or are registered under the provisions of the Securities Act. The depositary may, but is not required to, attempt to sell these undistributed rights to third parties, and may allow the rights to lapse. We may be unable to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to endeavor to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

We expect to incur increased costs as a result of being a public company, particularly after we cease to qualify as an “emerging growth company.”

We are a public company and expect to incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the Securities and Exchange Commission, or the SEC, and Nasdaq Global Market, impose various requirements on the corporate governance practices of public companies. As a company with less than US\$1.07 billion in revenues for our last fiscal year, we qualify as an “emerging growth company” pursuant to the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include exemption from the auditor attestation requirement under Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, in the assessment of the emerging growth company’s internal control over financial reporting and permission to delay adopting new or revised accounting standards until such time as those standards apply to private companies.

We expect these rules and regulations to increase our legal and financial compliance costs and to make some corporate activities more time-consuming and costly. After we are no longer an “emerging growth company,” we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and the other rules and regulations of the SEC. For example, as a result of becoming a public company, we will need to increase the number of independent directors and adopt policies regarding internal controls and disclosure controls and procedures. We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. In addition, we will incur additional costs associated with our public company reporting requirements. It may also be more difficult for us to find qualified persons to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate with any degree of certainty the number of additional costs we may incur or the timing of such costs.

You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law.

We are an exempted company incorporated under the laws of the Cayman Islands with limited liability. Our corporate affairs are governed by our memorandum and articles of association, the Companies Act (as amended) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by our minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States. Some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, Cayman Islands companies may not have the standing to initiate a shareholder derivative action in a federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records or to obtain copies of lists of shareholders of these companies. Our directors have discretion under our articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by management, members of our board of directors or controlling shareholders than they would as public shareholders of a company incorporated in the United States.

Certain judgments obtained against us by our shareholders may not be enforceable.

We are an exempted Cayman Islands company and substantially all of our assets are located outside of the United States. Our current operations are conducted in China. In addition, some of our current directors and officers are nationals and residents of countries other than the United States. Substantially all of the assets of these persons are located outside the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the United States in the event that you believe that your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq Stock Market corporate governance listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the Nasdaq Stock Market corporate governance listing standards.

As an exempted Cayman Islands company listed on the Nasdaq Global Market, we are subject to the Nasdaq Stock Market corporate governance listing standards. However, the Nasdaq Stock Market rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the Nasdaq Stock Market corporate governance listing standards. We may elect to rely on home country practice to be exempted from the corporate governance requirements. As a result, our shareholders may be afforded less protection than they would otherwise enjoy under the Nasdaq Stock Market corporate governance listing standards applicable to U.S. domestic issuers.

We are currently a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies.

Because we currently qualify as a foreign private issuer under the Exchange Act for the year of 2021, we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers, including:

- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K;
- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

As long as we qualify as a foreign private issuer under the Exchange Act, we will be required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to publish our results on a quarterly basis as press releases, distributed pursuant to the rules and regulations of the Nasdaq Global Market. Press releases relating to financial results and material events will also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC will be less extensive and less timely compared to that required to be filed with the SEC by U.S. domestic issuers. As a result, you may not be afforded the same protections or information that would be made available to you were you investing in a U.S. domestic issuer.

There can be no assurance that we will not be a passive foreign investment company, or PFIC, for any taxable year, which could result in adverse U.S. federal income tax consequences to U.S. investors in the ADSs or our ordinary shares.

In general, a non-U.S. corporation is a PFIC for any taxable year in which (i) 75% or more of its gross income consists of passive income or (ii) 50% or more of the average value of its assets consists of assets (generally determined on a quarterly basis) that produce, or are held for the production of, passive income. For purposes of the above calculations, a non-U.S. corporation that owns at least 25% by value of the shares of another corporation is treated as if it held its proportionate share of the assets of the other corporation and received directly its proportionate share of the income of the other corporation. Passive income generally includes dividends, interest, rents, royalties and certain gains. Cash is generally a passive asset for these purposes. Goodwill is an active asset under the PFIC rules to the extent attributable to activities that produce active income.

Based on the composition of our income and assets and the value of our assets, including goodwill, we believe that we were not a PFIC for our 2020 taxable year. However, our PFIC status for any taxable year depends on the composition of our income and assets and the value of our assets from time to time (including the value of our goodwill, which may be determined, in large part, by reference to the market price of the ADSs, which could be volatile). Because we will hold a substantial amount of cash, our risk of being a PFIC for any taxable year will increase if our market capitalization declines. Moreover, it is not entirely clear how the contractual arrangements between us and our VIEs will be treated for purposes of the PFIC rules, and we may be or become a PFIC if our VIEs are not treated as owned by us for these purposes. Accordingly, there can be no assurance that we will not be a PFIC for our current or any future taxable year.

If we were a PFIC for any taxable year during which a U.S. investor owned the ADSs or our ordinary shares, the U.S. investor generally would be subject to adverse U.S. federal income tax consequences, including increased tax liability on disposition gains and “excess distributions” and additional reporting requirements. See “Item 10. Additional Information—E. Taxation—Material U.S. Federal Income Tax Considerations—Passive Foreign Investment Company Rules.”

ITEM 4. INFORMATION ON THE COMPANY

4.A. History and Development of the Company

We launched our clinical diagnosis and monitoring services in 2015 with the establishment of Genetron Health (Beijing) Co., Ltd., or Genetron Health.

We underwent a series of restructuring transactions, which primarily included:

- In April 2018, Genetron Holdings Limited was incorporated under the laws of the Cayman Islands as our proposed listing entity. In connection with its incorporation, it issued ordinary and preferred shares to certain of the then existing shareholders of Genetron Health based on their equity interests held in Genetron Health.
- In June 2018, Genetron Health (Hong Kong) Company Limited, or Genetron HK, was incorporated in Hong Kong, which is acting as the offshore intermediary holding company.
- In March 2019, Genetron (Tianjin) Co., Ltd., was established in China as a wholly owned PRC subsidiary of Genetron HK. Genetron (Tianjin) Co., Ltd. is not engaged in substantive business operations in the PRC. In July 2019, Genetron (Tianjin) Co., Ltd. entered into a series of contractual arrangements with Genetron Health, as well as its shareholders. As a result of these contractual arrangements, we obtained effective control, and became the primary beneficiary of Genetron Health.
- In December 2020, Genetron HK formed a joint venture with Wuxi municipal government and established Genetron (Wuxi) Business Management Co., Ltd. in China as a subsidiary of Genetron HK. Genetron HK owns 90% equity interest in Genetron (Wuxi) Business Management Co., Ltd.. Genetron (Wuxi) Business Management Co., Ltd. is not engaged in substantive business operations in the PRC. In December 2020, Genetron (Wuxi) Business Management Co., Ltd. entered into a series of contractual arrangements with Genetron (Wuxi) Biotech Co., Ltd., as well as its shareholders. As a result of these contractual arrangements, we obtained effective control, and became the primary beneficiary of Genetron (Wuxi) Biotech Co., Ltd..

We are a holding company and do not directly own any substantive business operations in the PRC. We currently focus our business operations within the PRC through Genetron Health and its subsidiaries. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure.” Genetron Health and its subsidiaries hold our Medical Institution Practicing Licenses, production permits of medical devices and operation permits of medical devices that are necessary for our business operations in the PRC.

In June 2020, we completed an initial public offering in which we offered and sold an aggregate of 80,000,000 ordinary shares in the form of ADSs. Upon the initial public offering, all of our then issued and outstanding preferred shares were automatically converted into ordinary shares on a one-for-one basis. On June 19, 2020, the ADSs began trading on the Nasdaq under the symbol “GTH.”

Our corporate headquarters is located at 1-2/F, Building 11, Zone 1, No.8 Life Science Parkway Changping District, Beijing, People’s Republic of China. Our registered office is located at the offices of Walkers Corporate Limited, Cayman Corporate Centre, 190 Elgin Avenue, George Town, Grand Cayman KY1-9008, Cayman Islands. Our telephone number is +86 10 5090-7500. Our corporate website is www.genetronhealth.com. The information contained on or that can be accessed through our website is not incorporated by reference into this annual report, and you should not consider information on our website to be part of this annual report.

The SEC maintains an internet site at www.sec.gov that contains reports, information statements, and other information regarding issuers that file electronically with the SEC.

4.B. Business Overview

OVERVIEW

We are a leading precision oncology platform company in China that specializes in cancer molecular profiling and harnesses advanced technologies in molecular biology and data science to transform cancer treatment. We have developed a comprehensive product and service portfolio that cover the full-cycle of cancer care from early screening, to diagnosis and treatment recommendations, to continuous monitoring and continuous care.

Precision oncology is an evolving approach to cancer care that leverages new knowledge regarding the pathogenesis of cancer. It focuses on a patient's molecular profile to guide personalized clinical decisions, aiming for the right treatment for the right patient at the right time. Advancement in molecular biology globally has propelled significant advances in precision oncology. There is a critical need to offer a comprehensive profiling solution and expand the scope of precision oncology to enable early screening, diagnosis, continuous monitoring and continuous care. According to Frost & Sullivan, China had approximately 4.4 million cancer incidents in 2019, the largest in the world. The unmet medical needs of the large cancer population in China present significant market opportunities for precision oncology, especially cancer molecular profiling.

We are China's market leader in all three of our business units: diagnosis and monitoring, early screening and development services. We believe advancing our services and products can expand the scope of precision oncology medicine to diagnosis, early screening, monitoring and continuous care, improve clinical outcomes and reduce overall cancer treatment costs.

Diagnosis and Monitoring

Market leader in LDT services in multiple major cancer types—We are a leading next generation sequencing (“NGS”)–based cancer molecular diagnosis player. While precision oncology is still in the development stage in China, precision oncology applications in central nervous system (“CNS”), lung, and digestive system cancers are the most advanced. Our unique mix of industry-leading cancer research capabilities, comprehensive products and services, and focused commercialization strategies have led to our success in building competitive advantages. Among the NGS-based cancer diagnosis and monitoring companies in China, we retain our leadership position in the field of CNS cancer, digestive system cancer and lung cancer in terms of market share by NGS-based laboratory developed test (“LDT”) revenue. In the field of lung cancer, the largest cancer molecular and diagnosis market in China by cancer type, we have been quickly closing the gap with our peers in terms of NGS-based LDT revenue. We are also a pioneer in the diagnosis and monitoring of thyroid, upper tract urothelial and bladder cancers.

Market leader in China by NMPA approved IVD products—We are the market leader among NGS-based cancer diagnosis and monitoring companies in China, in terms of the number of National Medical Products Administration (“NMPA”) approved in vitro diagnostic (“IVD”), products. We have developed seven National Medical Products Association (“NMPA”) approved IVD products, including four clinical molecular testing instruments and three diagnostics assays, which illustrates our clear leadership in the precision oncology market in China. These include Genetron 3D biochip reading instrument, a digital polymerase chain reaction (“PCR”) system, IDH1 and TERT gene assays for glioma, Genetron S5, a medium-throughput NGS system, Genetron S5 Chef, a template preparation system, Genetron S2000, a high-throughput NGS platform, and 8-gene Lung Cancer Assay (Tissue), an IVD assay product based on semiconductor sequencing. In June 2020, our independently developed detection kit for the novel coronavirus (Genetron SARS-CoV-2 RNA Test) received an Emergency Use Authorization (“EUA”) from the U.S. Food and Drug Administration (the “FDA”). The kit also received approval for export from the relevant authorities in China. Our deep and robust IVD product pipeline of seven assays, covering diagnostics, monitoring and early screening, and our NMPA approved IVD portfolio delivers a full spectrum of solutions to address our customers' needs.

Early Screening

First mover of liver cancer early screening—According to Frost & Sullivan, market potential for liver cancer early screening in China in 2023 is estimated to be US\$7.2 billion. We are at the forefront of the development of liver cancer early screening products, of which our initial prospective study in China was published in *Proceedings of National Academy of Sciences* in 2019. HCCscreen™, our proprietary assay for the early screening of hepatocellular carcinoma (“HCC”), the most common type of primary liver cancer, detects a combination of tumor-specific mutations and methylation alterations in circulating tumor DNA (“ctDNA”) and protein markers. We started a multi-center prospective study, HCCscreen™ Investigational Study, (“HIT Study”) and had performed our assay on 2,000 HBsAg+ individuals since 2019. We successfully completed the follow-up phase of the HIT Study in February 2021 with a total of 1,615 HBsAg+ subjects. The primary outcome of the follow-up phase showed that HCCscreen™ achieved 88% sensitivity and 93% specificity, compared with 71% sensitivity and 95% specificity, respectively, by ultrasound plus alpha-fetoprotein (“AFP”) combined. HCCscreen™ also achieved 40.9% positive predictive value (“PPV”) and 99.3% negative predictive value (“NPV”). We plan to initiate an NMPA registrational study in the second quarter of 2021. In addition, we have joined the “AIDS, Hepatitis and Other Major Infectious Disease Control and Prevention” project, one of the 2020 Major National Science and Technology Projects led by the Ministry of Science and Technology of the PRC (the “MOST”). Specifically, we are responsible for the identification and development of biomarkers for early liver cancer detection and the validation of liver cancer early screening assay products. One of the key benefits of joining such project is that our liver cancer early screening assay products validated in this project will be eligible for fast-track review process of the NMPA.

In September 2020, we received the FDA's Breakthrough Device designation for HCCscreen™, and we started commercializing the product as an LDT in China in 2020. Since November 2020, we have been working with Wuxi municipal government ("Wuxi") on the "Liver Cancer Early Screening Comprehensive Prevention and Control Project" (the "Wuxi Project"), a public health initiative administered by the National Cancer Center ("NCC") in China. The goal of the Wuxi Project is to increase the awareness of liver cancer early screening, and to become a pilot city model in China. For the Wuxi Project, Wuxi has selected HCCscreen™ for use by local residents who are high-risk individuals for HCC, and is committed to administering 150,000 tests over a period of three years. Separately, we have formed a new operating center through a joint venture agreement with Wuxi, in which the parties are closely collaborating on advancing the liver cancer early screening market in China, through the adoption of HCCscreen™. Under this joint venture agreement, both parties will contribute capital, and we will own 90% of the joint venture. In addition to the commitment of using HCCscreen™ for its residents, Wuxi will also provide us with other supportive measures including rental, R&D subsidies and tax benefits.

In January 2021, together with Chia Tai Tianqing Pharmaceutical Group Co., Ltd. ("CTTQ"), a subsidiary of Sino Biopharmaceutical Limited ("Sino Biopharm"), we announced an exclusive strategic partnership agreement for HCCscreen™ in China. Under the agreement, we will work together exclusively to co-market and co-promote HCCscreen™ in the hospital market, covering designated territories in China. The parties intend to target high-risk individuals for HCC, which include hepatitis B virus ("HBV")-positive carriers, as well as other liver disease patients. CTTQ brings an experienced sales force and valuable hospital relationships to the partnership, while we provide manufacturing and laboratory operations, along with our direct-to-consumer marketing expertise. We will pay CTTQ a promotional fee based on a percentage of revenues generated from the collaboration. Contingent on certain sales and other requirements, the exclusivity period is expected to last three years.

Expansion into early screening of additional major cancer types—We leverage our leading technologies such as Mutation Capsule™ to detect tumor-specific mutations and methylation in circulating free DNA ("cfDNA"), and establish models for cancer early screening. In August 2020, we started participating in the launch of a major national research project for early screening of lung and digestive system cancers led by the MOST. The project is designed to include a multi-center, prospective cohort study in lung cancer of 120,000 high-risk individuals in 20 provinces, as well as a cohort study in digestive system cancer of more than 100,000 patients in urban areas in China. We are the only company in China involved in national key research and development projects for liver, lung and digestive cancer early screening.

Development Services

Market leader by the number of collaborating biopharmaceutical companies—The market potential for development services with biopharmaceutical companies in China is expected to be approximately US\$0.5 billion in 2023, according to Frost & Sullivan. As of December 31, 2020, we had collaborated with 35 biopharmaceutical companies. Our products and services are appealing to biopharmaceutical companies since we are able to provide customized services and products to suit their different needs, including biomarker evaluation for molecularly targeted therapy and immuno-therapy, clinical trial enrollment, companion diagnostics development and joint marketing post-drug approval. For example, we developed FusionScan, a customized technology based on a biopharmaceutical company's request for comprehensive and efficient detection of actionable translocation mutations. With a reverse transcription and two PCR reactions, the FusionScan technology can efficiently detect translocations with high sensitivity and low cost. It can detect *de novo* translocation mutations without having to know the other segment fused to the target gene like NTRK or FGFR. Our well-developed regulatory approval capability is readily available to serve our biopharmaceutical company clients to facilitate NMPA registration process for their new drugs and companion diagnostics tests assays. Further, our robust commercial adoption capability is able to contribute significantly on joint marketing and promotion efforts post-drug approval. Our biopharmaceutical company partners include global pharmaceutical companies as well as innovative biopharma companies in China, such as AstraZeneca China, Bayer, Roche China, CStone, InnoCare, Alphamab Oncology, Fosun Pharma, Henlius and EdiGene. We believe our collaboration with biopharmaceutical companies will also build evidence of clinical utility for our platform as an effective diagnostic for advanced cancer therapies.

Our Platform

We have built a one-stop precision oncology platform with a suite of services and products that focus on every stage of a patient's cancer care, from early screening and risk assessment, to diagnosis and treatment recommendations, to continuous monitoring. Our platform integrates a patient's cancer care needs both when he or she is at high risk of cancer development and when he or she undergoes cancer treatment. At the same time, it collects the patient's behavioral, genomics and medical data and leverages our AI and big data analytics to depict the patient's health profile, to enable superior cancer management. Our platform cultivates a network nationwide that connects a patient with third-party healthcare service providers, including hospitals, medical examination centers, and insurance companies. We have also stayed at the forefront of targeted drug development by partnering with global biopharmaceutical companies and research institutions to evaluate biomarkers and facilitate clinical trials.

We strongly believe that a fully-integrated and best-in-class precision oncology platform is key to our business and will be the engine that drives our future success and solidifies our market leading position in the highly competitive precision oncology industry in China. Over the years, our platform has developed strengths across technology, regulatory approval and commercial adoption, which collectively differentiate us from our peers.

Industry Leading Technology

Led by top-notch scientists, our research and development team combines capabilities from multiple disciplines including biochemistry/molecular biology, next-generation sequencing and bioinformatics to enable our strong transformability from research to application. We have developed industry leading and differentiated technologies, including Genetron One-Step SeqTM Method and Mutation CapsuleTM technology:

- *Genetron One-Step SeqTM Method*—Specifically designed for small to medium size panels, our proprietary One-Step SeqTM Method simplifies the traditional labor intensive library construction and enrichment experiments to a single mixture of DNA sample to our reagent and one PCR reaction, minimizing hands-on time and risk of contamination. With our proprietary One-Step SeqTM Method, total time for library construction could be reduced to as little as 1.5 hours compared to 24 hours using hybridization capture method and eight hours using amplicon based sequencing. It is particularly suitable to develop IVD products for hospitals to carry out their own clinical tests on site due to its operational simplicity, high library quality, low risk of contamination, low cost, and low sample DNA input.

We enhanced Genetron One-Step SeqTM Method to be suitable for liquid biopsy, which is able to detect rare molecule in liquid biopsy with high sensitivity (up to 0.05% mutation frequency) and specificity. Our One-Step SeqTM Method minimizes loss of original ctDNA molecule in the steps before the ctDNA sample is amplified. This is a critical benefit for ctDNA-based liquid biopsy because the limited ctDNA yield of the testing sample is one of the primary impediments of ctDNA-based liquid biopsy, and any loss of original ctDNA would decrease the sensitivity.
- *Mutation CapsuleTM Technology*—In contrast to technologies that only detect a subset of alterations, our Mutation CapsuleTM technology detects a broad spectrum of ctDNA alterations, including simple mutations, such as SNVs or InDels, and complicated mutations, such as translocations, HBV integrations, and copy number variations, and methylation changes. The parallel profiling of genetic and epigenetic alterations in a single reaction enable screening for multiple tumor types while minimizing the requirement for blood samples to acquire ctDNA. In addition, our Mutation CapsuleTM technology supports multiple tests of one ctDNA sample without sacrificing sensitivity. With Mutation CapsuleTM technology, a sample collected in one study could be used to test new biomarkers in multiple different studies retrospectively, facilitating efficient product iteration.

Regulatory Approval

As it is practiced today in China, cancer diagnosis and treatments are primarily performed in public hospitals. Therefore, accessibility to public hospitals is critical for companies specializing in precision oncology. Adoption by public hospitals and insurance coverage often requires registration with the NMPA or approval from other competent regulatory authorities. Our regulatory capabilities are highlighted by our strong regulatory team, robust pipeline of IVD products and high-quality clinical laboratory services.

- *Top-tier regulatory capacity*—Led by Dr. Yun-Fu Hu, our Chief Medical Officer, we have built a dedicated and experienced regulatory team and clinical development team. Dr. Hu brings over two decades of experience in regulatory and managerial capacities related to medical devices and pharmaceutical industries to our team. During his tenure of over ten years at the FDA, he led a team of staff in pre-market reviews and post-market compliance of one of the first kind of IVD products and LDT services for genetic testing, molecular cancer diagnostics, companion diagnostics, radio dosimetry, digital pathology and AI devices.
- *Setting industry standards*—As a leading precision oncology company in China, we actively participated in the drafting of the “Beijing Expert Consensus Statement on the Standardized Application of Next-Generation Sequencing Technology in Clinical Tests—Tumor (First Edition)” (“Beijing Consensus on NGS Technology”), which was published in *National Medical Journal of China* in March 2020. Beijing Consensus on NGS Technology represents the first authoritative consensus on the standardized application of NGS technology in oncological clinical practice within China. It is expected to serve as a base for standardized operation and management of NGS-based LDT services in China. In addition, in February 2021, our early liver cancer screening research results were cited by the “Chinese Anti-Cancer Association Guidelines for Patients with Primary Liver Cancer” (the “Guidelines”). The Guidelines, issued by the Chinese Anti-Cancer Association, are the first national-level patient-oriented full-process guidelines for liver cancer prevention and treatment in China.
- *Top-notch quality management*—Our clinical laboratory in Beijing has obtained comprehensive panel certification under the U.S. Clinical Laboratory Improvement Amendments (the “CLIA”) from the U.S Centers for Medicare & Medicaid Services (the “CMS”) and accreditation from the College of American Pathologists (the “CAP”); whereas our clinical laboratory in the United States has obtained a CLIA certificate. In particular, our clinical laboratories have passed over 190 national and provincial clinical laboratory external quality assessment (“EQA”) tests since our inception, covering germline, comprehensive panel, and liquid biopsy testings and bioinformatics, demonstrating our dedication to the highest service quality. In December 2019, our Onco PanScan™ (TS), a comprehensive gene panel testing service, was approved for pilot run by the Guangdong Bureau of the National Center for Clinical Laboratories (the “NCCL”), being the first large panel NGS-based precision oncology LDT service approved for pilot run by the NCCL, according to Frost & Sullivan.

Commercial Adoption

Advancement in each of the elements above lays the foundation for commercial adoption of each of our business units with patients, hospitals and biopharmaceutical companies. Additionally, we have developed the following strengths to further facilitate commercial adoption of our services and products.

Diagnosis and monitoring services

- *Collaboration with hospitals*—There is significant demand from hospitals in China for high quality genome analysis with a short turnaround time and relatively low cost. Therefore, hospitals in China usually collaborate with partners that are capable of offering comprehensive services and products of high quality. We offer comprehensive diagnosis and monitoring services to hospitals with a full spectrum of LDT services and IVD products. As of December 31, 2020, we had entered into in-hospital contracts with 40 hospitals, including in-hospital assay purchase agreements with 22 hospitals. Our NMPA approved NGS platforms, Genetron S5, together with our cutting edge technology Genetron One-Step Seq™ enabled 8-gene Lung Cancer Assay (Tissue), offering fast and easy-to-use testing procedures, are particularly suitable for hospitals to conduct in-hospital NGS testing. We have assembled a dedicated team to work side-by-side with hospitals throughout the process of developing their own in-hospital molecular diagnostics centers, from laboratory redesign, equipment procurement and system installation to ongoing training, support and on-demand consultation. Our well-trained sales team, consisting of approximately 260 members, also meets with hospitals’ representatives and doctors regularly, providing latest updates on the clinical utility of precision oncology in China, introducing our services and products and providing solutions to their technical questions. From January 1, 2017 to December 31, 2020, we had provided an aggregate of over 67,000 diagnostic tests to patients with LDT services. We believe that our comprehensive LDT/IVD portfolio, deep IVD products pipeline and cutting-edge technologies allow us to meet hospitals’ diversified needs.

- *National reimbursement coverage*—Our TERT and IDH1 IVD assays have been approved for sunshine medical centralized procurement in nine provinces including Xizang, Guangdong, Sichuan, and Shandong provinces, with approval pending in five other provinces. Following its NMPA approval, our 8-gene Lung Cancer Assay (Tissue) is also approved for sunshine medical centralized procurement in Shandong, Anhui, Xizang and Sichuan province, with approval pending in six additional provinces. We are collaborating with hospitals to have our diagnostic testing services approved by provincial healthcare security bureaus so that our diagnostic testing services could be included in the charge master and ordered by the collaborating hospitals. Several of our LDT services have been approved by Guangzhou Municipal Health Commission and Shandong Provincial Healthcare Security Bureau in January 2019 and October 2019. We regard the sunshine medical centralized procurement approval for IVD assays and charge master inclusion approval for LDT services as a significant step towards basic medical insurance coverage for our products and services.
- *Collaboration with KOLs*—Despite the huge market potential, penetration rate of precision oncology in China is lower than that in the U.S., partly due to relatively low awareness of and lack of understanding of precision oncology among physicians and patients. We collaborate with national and regional KOLs to promote and raise awareness of the clinical application of precision oncology among physicians and patients through sponsoring medical summits, conferences and seminars. To further solidify our partnership with KOLs, we closely collaborate with them in research projects and pilot studies and have co-authored many research papers in peer reviewed journals such as *Nature Genetics*, *Cell Research*, *Nature Communications*, *Acta Neuropathologica*, and *PNAS*, reflecting our strong R&D capability with a focus on innovation. In addition, we cooperate with KOLs to establish and promote diagnosis and treatment guidelines in China. Further, we work closely with specialists in local hospitals by providing our proprietary know-how technologies and database to help doctors with the process of cancer therapy selection, management and monitoring.

Early Screening

- *Medical examination centers*—We entered into a collaboration agreement with iKang Healthcare Group, Inc. (“iKang”) to promote and provide liver cancer early screening testing services through medical examination centers owned by iKang across the country. Under the agreement, iKang will include liver cancer early screening testing services in their applicable medical examination services menu. Pursuant to this agreement, we will provide liver cancer early screening testing services to iKang medical examination centers upon selection of such testing item by their customers. We believe such collaboration model will not only benefit us to transfer our industry-leading technology to commercialization efforts and further penetrate early screening market, but also benefit iKang to enrich its services provided to the end customers. In addition, inclusion of liver cancer early screening in the testing items provided by industry-leading medical examination centers, such as iKang, on a national scale will further promote market acceptance of cancer early screening technology and educate the market; meanwhile, such inclusion would increase the liver cancer screening participation rate, which would contribute to early stage diagnosis of liver cancer and improved patient outcomes.
- *Government procurement*—We leverage our technology and cost-efficiency proposition to partner with local governments in China to promote the awareness and use of our early screening services among key stakeholders across the oncology community. For example, under the Wuxi Project, Wuxi has selected HCCscreen™ for use by local residents who are high-risk individuals for HCC, and is committed to administering 150,000 tests over a period of three years. We believe similar projects bring value to all participants and ourselves: local governments are able to improve public health and reduce healthcare expenditures; participating individuals are able to manage cancer risks by early detection and intervention; and we are able to promote awareness of our products and services, and collect valuable real world study data to improve our early screening algorithm.

- *Hospital market*—In early 2021, we entered an exclusive strategic partnership agreement with CTTQ, a subsidiary of Sino Biopharm, to co-market and co-promote HCCscreen™ in the hospital market, covering designated territories in China. The companies intend to target high-risk individuals for HCC, which include HBV-positive carriers, as well as other liver disease patients. CTTQ brings an experienced sales force and valuable hospital relationships to the partnership, while we provide manufacturing and laboratory operations, along with our direct-to-consumer marketing expertise. We will pay CTTQ a promotional fee based on a percentage of revenues generated from the collaboration. Contingent on certain sales and other requirements, the exclusivity period is expected to last three years.

DIAGNOSIS AND MONITORING SERVICES

We offer diagnosis and monitoring services and products through both LDT services and IVD products. To adapt to the complex and evolving understanding of cancer, we have strategically developed our LDT services to provide whole exome sequencing (“WES”), comprehensive gene panel sequencing (over 300 genes) and focused gene panel sequencing (less than 300 genes) to address different needs. Our comprehensive diagnostic products and services cover eight out of the top ten major cancer types in China, including CNS, lung, liver, colon, breast, urinary system and thyroid and other types of cancers. We completed over 67,000 LDT diagnostic tests from January 1, 2017 to December 31, 2020. We have a team of top notch scientists who are at the forefront of cancer genomics research and are active in the research and discovery of new biomarkers associated with various cancers.



































In addition, we are the number one NGS-based cancer diagnosis and monitoring companies in China in terms of the number of NMPA approved IVD assays and platforms as of June 2020, according to Frost & Sullivan. With our NMPA registered IVD products and a deep and robust IVD registration pipeline, we aim to provide hospitals and research institutions in China with one-stop diagnostic and monitoring solutions, which we believe is the key to commercialization success in China. In comparison to our LDT services, our IVD products offer a more standardized, targeted and cost-effective way of detecting genomic mutations relating to cancer.

Comprehensive LDT Service Portfolio

We are pioneering full-cycle cancer management with a focus on diagnosis, monitoring and early screening. Targeting patients with basic to comprehensive testing needs, we have developed a suite of LDT services that provide swift and reliable assistance to physicians in matching the genomic alterations identified in their patients’ tumors with appropriate clinical drug therapies.

The increasing diversity of targeted therapies and associated molecular biomarkers has given rise to comprehensive genomic profiling, particularly in tumor types where multiple genomic targets can be found and treated effectively. We offer comprehensive genomic testing across all common cancer types using both comprehensive and focused assays. Our comprehensive LDT service portfolio is designed to test and analyze patients of various cancer types for clinically-relevant genomic mutations to support treatment selection. We believe that our suite of multi-tiered LDT services with proven reliability, sensitivity and specificity for clinical practice are able to provide doctors with actionable insights into each patient’s cancers. With in-depth knowledge of advantages and limitations of both tissue and liquid biopsies, we have developed our LDT services to be flexible in sample requirements. Depending on the nature of the cancers, most of our LDT services could be performed by testing either tumor samples or different kinds of liquid samples, such as blood, saliva, urine, or cerebrospinal fluid (“CSF”).

The following table presents our comprehensive LDT services portfolio for diagnosis and monitoring services:

Cancer Types		Diagnosis		Monitoring			
	Pan-cancer (Onco PanScan)						
	CNS						
	Lung						
	Gastric						
	Colorectal						
	Thyroid						
	Breast						
	Bladder						
	Hematologic						
	Tissue		Blood		Urine		CSF

Comprehensive Gene Panel Testing Services—Onco PanScan™

Our comprehensive gene panel testing service, Onco PanScan™, is applicable for all solid tumor patients, including newly diagnosed patients, patients with drug resistance and patients with disease relapse. Onco PanScan™ is evolving in nature, as increasing numbers of driver mutations are identified and increasing numbers of novel cancer drugs are approved by the FDA or NMPA. We started offering comprehensive gene panel testing with a 509-gene panel in September 2016, which was updated to an 831-gene panel in December 2018.

Onco PanScan™ features the following strengths:

- it detects SNVs, InDels, fusion, copy number variants (“CNVs” and the key immunotherapy biomarkers: tumor mutation burden and microsatellite instability;
- it covers approximately 125 genes with CDx biomarkers as listed in WHO, National Comprehensive Cancer Network (the “NCCN”), European Society for Medical Oncology (the “ESMO”) and other treatment guidelines, more than 90 genes related to immuno-oncology, more than 150 proto-oncogenes and tumor-suppressor genes, approximately 145 genetic susceptibility genes and 12 cancer signaling pathways;
- it has been comprehensively validated across the entire panel, especially on those clinically actionable mutations;
- it provides comprehensive genomic profiles in an easy-to-read report for physicians and patients;
- it is compatible with both Illumina and MGI sequencing platforms; and
- it could be marketed as LDT and IVD, if approved by NMPA or similar governmental agencies.

Given the practical challenges in obtaining high-quality tumor samples via biopsy, such as acquiring sufficient cancer cells for diagnosis and genomic analysis, we have developed Onco PanScan™ (TS) to work with a limited sample volume.

Onco PanScan™ (LB), may also be used to analyze ctDNA obtained from a liquid biopsy. Through non-invasive liquid biopsy, ctDNA fragments in a cancer patient's blood could be enriched to conduct molecular testing, which helps interpret the tumor molecular state of patients at any time. For example, we recommend using liquid biopsy for post-operative monitoring of surgical patients or for cancer patients for whom tumor tissue sample extraction is not feasible due to physical conditions.

The comprehensive and evolving coverage of genes, high level of precision and lower sample volume requirements make Onco PanScan™ suitable for targeted therapy guidance, immunotherapy guidance, cancer genetic risk assessment, evaluation of chemotherapy efficacy, molecular classification and disease monitoring across a wide variety of cancer types, as well as key information for new scientific discoveries.

Focused Gene Panel Testing Services

Other than comprehensive genomic testing across all cancer types, we also offer focused gene panel testing services. Focused gene panel testing services are useful tools for analyzing specific mutations in a given sample. Focused gene testing services contain a selected set of genes or gene regions that has known or suspected associations with the cancer under study. Focused gene panel testing services also produce a smaller, more manageable data set compared to broader approaches such as WES. Our focused gene panel testing services currently cover a variety of cancer types, including CNS, lung, colorectal, thyroid, breast and bladder cancers.

Glioma

Glioma is the most common type of primary brain tumor. It has high recurrence and mortality rates. Accurate molecular classification plays a guiding role in subsequent treatments and prognosis. In 2016, the World Health Organization Classification of Tumors of the Central Nervous System, of which Dr. Hai Yan is a co-author, for the first time, introduced classification of CNS tumors integrated with both histological phenotypes and genotyping, setting up new guidelines for molecular classification in clinical diagnosis and treatment. In particular, IDH1 and IDH2 mutations were included as the most critical biomarkers for adult malignant glioma. Of note, Dr. Yan is one of the pioneers who discovered IDH1 and IDH2 mutations. As it is practiced today, clinical treatment of glioma involves surgery in combination with radiotherapy and chemotherapy. Because sensitivity to temozolomide, a chemotherapy drug for gliomas, is correlated with the methylation level of the MGMT gene, accurate measurement of the methylation level of the MGMT gene therefore better guides the chemotherapy with temozolomide.

Developed based on our proprietary One-Step Seq™ platform, our Glioma 8 biomarker panel testing services provide cost effective solutions to patients, which test eight genomic alterations commonly recommended by the NCCN, WHO and ESMO treatment guidelines, including TERT, IDH1, IDH2, 1p19q, BRAF, MGMT, H3F3A and HIST1H3B. We have optimized our One-Step Seq™ Method to detect other types of alterations such as chromosome loss/gain or methylation changes, so that we can detect 1p19q and MGMT in addition to point mutations with this platform. Applicable to patients with glioma, our Glioma 8 biomarker testing assay is suitable for molecular classification, targeted therapy guidance, evaluation of chemotherapy efficacy and disease monitoring, as well as key information for scientific discoveries and research.

The superiority of Glioma 8 biomarker panel is that all the eight biomarkers for glioma can be processed with the same sequencing platform and analysis pipeline.

Thyroid cancer

China had 356,500 new cases of thyroid cancer in 2020. Fine-needle aspiration ("FNA") is the standard preoperative tool for the diagnosis of thyroid nodules. However, some thyroid nodules are classified as indeterminate cytology, leading to unnecessary surgery. To help diagnose the indeterminate nodules precisely, we developed NGS-based test Onco Thyroid. We collaborated with leading hospitals and enrolled 360 patients with thyroid nodules who underwent FNA. The FNA samples with indeterminate cytology were evaluated using both Onco Thyroid and BRAF V600E. Our Onco Thyroid test showed 73.2% sensitivity and 96.8% specificity for cancer diagnosis from thyroid nodules with indeterminate cytology, and the performance was significantly better than the BRAF V600E test. The results were accepted as a poster for 2020 Annual Meeting of American Society of Clinical Oncology (ASCO).

Hematologic cancers

In late 2020, we entered an exclusive licensing agreement with Hangzhou ImmuQuad Biotechnologies Co., Ltd (“ImmuQuad”) to develop and commercialize Seq-MRD, a diagnostic assay for the detection and monitoring of minimal residual disease (“MRD”) in select hematologic cancers.

Under the agreement, we have exclusive rights to research, develop, commercialize, and manufacture MRD detection products or testing methods in select hematologic cancers using ImmuQuad’s Seq-MRD globally. ImmuQuad is eligible to receive high single-digit royalties on product sales for ten years following commercialization. Separately, we made a minority equity investment in ImmuQuad.

ImmuQuad is a leading biotechnology company in China focused on developing an immune profiling platform for clinical diagnostics and life sciences research. ImmuQuad’s proprietary immunomics platform employs NGS technology to read and decode the diverse genetic code of a patient’s adaptive immune system and applies it in key areas, encompassing MRD monitoring for hematologic cancers (i.e. Seq-MRD), early disease detection and cellular therapies discovery and development.

MRD refers to the small number of cancer cells that can remain in a patient’s body after treatment and may eventually cause recurrence of the disease. Over the past few years, ImmuQuad has developed Seq-MRD as a clinical diagnostic tool to assess treatment effectiveness, provide ultra-sensitive monitoring and guide therapy maintenance intensity in hematologic cancer patients. ImmuQuad has validated Seq-MRD data with thousands of clinical samples covering primarily acute lymphoblastic leukemia and multiple myeloma (MM). We intend to conduct further validation of Seq-MRD in MM, chronic lymphoid leukemia and non-Hodgkin’s lymphoma to expand the clinical utility to cover more patients.

Urine-based liquid biopsy for urinary cancers

There are limitations in the traditional diagnostic methods of urinary cancers, such as the invasiveness of cystoscopy and ureteroscopy. With our One-Step Seq™ technology, we developed a NGS-based urine-based assay, Onco Urine, to perform liquid biopsy diagnosis of urinary cancers. We collaborated with several leading hospitals in urology to perform a multi-center validation study, which enrolled 75 upper tract urinary carcinoma (UTUC) cases, 75 with benign urinary diseases and 100 healthy individuals. Onco Urine test showed 94% sensitivity and 96% specificity. Onco Urine’s excellent performance and the non-invasive feature make it a potential clinical alternative to ureteroscopy in the diagnosis and monitoring of UTUC. The results were accepted as a poster for 2020 Annual Meeting of American Association for Cancer Research (AACR).

CSF-based liquid biopsy for brain tumor

Many brain tumors are difficult to surgically resect or biopsy due to their location in the brain. Blood-based liquid biopsy does not work well as the blood-brain barrier largely limits the release of ctDNA into circulation. We developed an NGS-based test, Onco CSF, by sequencing ctDNA from CSF for the molecular profiling of brain tumors. In 2018, we performed a liquid biopsy study of brain tumors with Onco CSF and published the results in a high impact journal—*Acta Neuropathologica*. Onco CSF achieved positive detection from the CSF ctDNA in 97.3% of cases whose primary tumors harbored at least one mutation, compared with the 38% sensitivity based on blood ctDNA detection.

LDT Service Process

We perform our LDT services primarily in our laboratory located in Beijing. Our clinical laboratories in Beijing and the United States have obtained comprehensive panel certification under CLIA from the CMS and accreditation from the CAP. In addition, each of our clinical laboratories has obtained NCCL EQA Certifications in various aspects, including our high-throughput sequencing and our bioinformatics platforms. In particular, our clinical laboratories have passed over 190 national and provincial clinical laboratory EQA tests since our inception, covering germline, comprehensive panel and liquid biopsy testing and bioinformatics, demonstrating our dedication to the highest service quality.

Enjoying the benefits of our industry leading and differentiated technologies, including Genetron One-Step Seq™ Method, liquid biopsy low-frequency mutation detection technology, Mutation Capsule™ technology and bioinformatics, we are able to shorten total time for library construction and reduce the time required to analyze DNA samples, with an average turnaround time of eight days from the collection of testing samples.

Our LDT services starts with a patient's selection of relevant clinical services tests. Once the selection is made, we will collect a sample (either tumor tissue or body fluids) from the patient. We will then perform genomic sequencing of DNA extracted from the sample. Once the genomic sequencing is completed, we will conduct data analysis and prepare a final test report.

The test report, structurally designed in collaboration with leading oncologists and KOLs, delivers actionable information in a manner designed to seamlessly integrate into their practices. It is divided into multiple sections, presenting crucial genomic information relating to the cancer patient in a concise and practice-friendly manner that facilitates physicians to make treatment decisions. The test results and their clinical significance are summarized at the beginning of the report to give a concise overview. In addition to the most reliable clinical guidelines from WHO and NCCN, we also provide physicians with comprehensive information of the detected biomarkers at sub-guideline levels. Our database includes the information of new drugs and biomarkers at clinical trial stage (including enrollment information) and at pre-clinical stage. The report provides a note to each piece of information to clarify its reliability (i.e. whether the information is from any guideline that the physicians are recommended to follow, or such information is from a pre-clinical experiment for reference only). The comprehensive information in the reports helps the physician provide precise treatment to those who have a therapeutic target and approved drug available, and provides off-label and other treatment choices for those who have not.

Rapidly Evolving IVD Product Portfolio

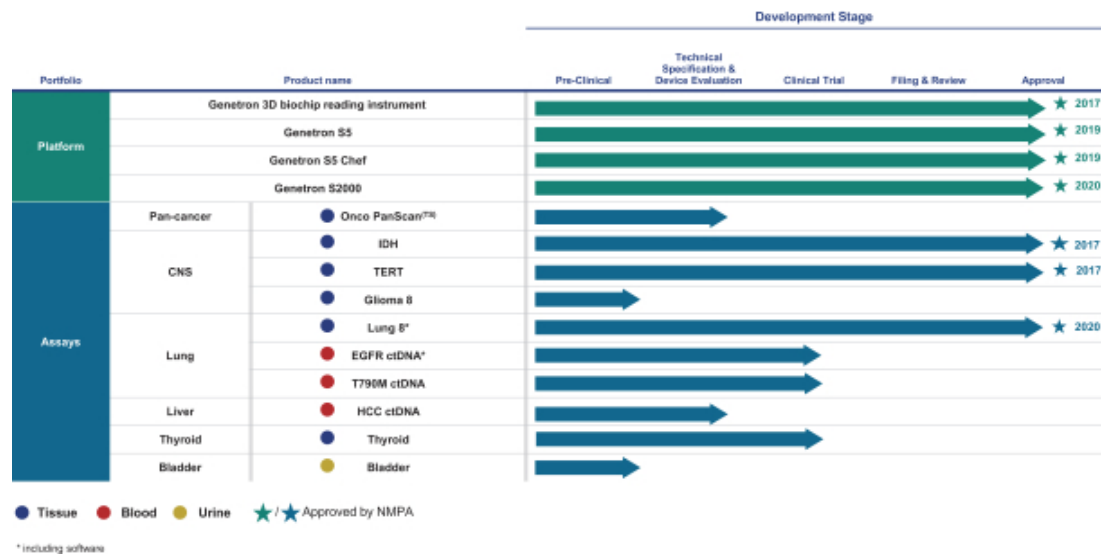
Gene sequencing IVD products generally focus on specific sets of genomic alterations relating to a certain cancer type, and are more standardized than LDT services. As such, IVD products are more suitable for hospitals to operate independently.

As hospitals rapidly develop their pathology departments and establish their own IVD genomic testing capabilities with increasing number of testing items, demand for IVD products has continued to grow.

Leveraging our strong research and development capabilities, we are constantly developing innovative IVD products that enable faster, more accessible and affordable detection of cancer specific genetic alterations. We are one of the few precision oncology players in China with approved IVD registration for both instrument and assays.

The IDH1/TERT gene assays approved by NMPA for glioma diagnosis are not only important results of the clinical transformation of our research, but also embodiments of our in-depth promotion of the "LDT services and IVD products" model.

We believe with an in-depth registration pipeline of both platforms and assays, we are able to provide one-stop diagnostic and monitoring solutions for hospitals and research institutions. Our deep IVD product registration pipeline is illustrated as follows:



Platforms and Assays Approved for Clinical Use

Genetron 3D Biochip Reading Instrument

In late 2017, our digital PCR system, Genetron 3D biochip reading instrument, and first-in-class IDH1/TERT gene assays were approved by the NMPA for clinical use.

Based on digital PCR technology, our Genetron 3D biochip reading instrument presents a simple solution for testing multiple types of DNA alterations. Paired with different assays, Genetron 3D biochip reading instrument can test low frequency mutations in lung, colorectal and breast cancers and melanoma. Our Genetron 3D biochip reading instrument can also be used for other medical purposes such as viral load analysis, pathogen tests, prenatal screening tests and gene expression tests. Our Genetron 3D biochip reading instrument uses a sealed chip technology, providing a streamlined, reliable, and robust method for performing digital PCR. In addition, the risk of contamination is significantly reduced because of the fully enclosed system. With our proprietary analysis software, the testing results can be automatically generated with simple clicks.

IDH1 and TERT Gene Assays

Approved by both NMPA and having received a CE mark in the European Union, our IDH1 and TERT gene assays are detection assays for IDH1 R132H, TERT C228T and C250T gene mutations in brain tumors and could be a crucial tool for purposes of molecular classification and prognosis of a patient’s glioma. IDH1/TERT gene assays are capable of detecting low-frequency (1%) gene mutations in 10ng of DNA sample. In a clinical trial of IDH1 assay with 1,192 valid samples, in which Sanger sequencing was used as a control group, our IDH1 gene assay received 100% sensitivity and specificity, respectively, with Kappa value at 1.000 (p < 0.001). According to Frost & Sullivan, our IDH1/TERT gene assays are the first specific IVD products approved by NMPA for brain cancer, illustrating our clear leadership in cancer genomics in China.

Genetron S5 Platform

Genetron S5, approved by the NMPA on November 1, 2019, is a semiconductor-based NGS system manufactured under an original equipment manufacturer (“OEM”) model, which detects the nucleotide through detecting the change in pH. Compared with other sequencing systems, Genetron S5 does not require fluorescence or camera scanning, resulting in higher speed, better simplicity, lower cost and smaller instrument size.

Genetron S5 leverages the speed of semiconductor sequencing to enable the production of high quality sequencing data in a few hours and enables a laboratory technician to go from DNA library to data in as little as 24 hours with only 45 minutes of total hands-on time when paired with the Genetron Chef System. Our NMPA approved Genetron Chef System is a workflow simplification product that incorporates all steps of library preparation and all steps of template preparation and chip loading. In addition, we developed a simple One-Step library preparation method that offers a fast and efficient procedure for the preparation of high-quality libraries in as little as 1.5 hours from as little as 10ng input samples. Genetron S5 provides a faster and easier way to promote genomic research.

Genetron S2000 Platform

Genetron S2000, approved by the NMPA on February 5, 2020, is a comprehensive and flexible production-scale sequencer manufactured under OEM model. Genetron S2000 adopts an innovative “flow cell” system that can support various sequencing modes, and an optimized optical and biochemical system which enables the whole sequencing process to be completed within a short period of time, offering the user a simplified and streamlined sequencing experience. It provides two types of Flow Cell and several read length options (including but not limited to SE50, SE100, SE400, PE100, PE150, PE200). The data output could range from 55G to 1440G. Genetron S2000 could support different sequencing application such as whole genome sequencing, WES and focused gene sequencing.

Leveraging Genetron S5 Platform, Genetron Chef System and Genetron S2000 Platform, which target different sequencing capabilities, we are expecting to further develop a wide range of IVD assays.

8-gene Lung Cancer Assay (Tissue)

8-gene Lung Cancer Assay (Tissue) is an assay developed based on our One-Step Seq™ technology platform for the qualitative detection of biomarkers of non-small cell lung cancer (“NSCLC”) biomarkers, the most common type of lung cancer. It was approved by the NMPA on February 6, 2020. NSCLC biomarkers include mutations of the Epidermal Growth Factor Receptor (EGFR), KRAS, BRAF, Human Epidermal Growth Factor Receptor 2 (HER2) and PIK3CA genes in the DNA, combination of the ALK and ROS1 translocation mutations and MET exon 14 skipping (METex14) mutation in the RNA. Several targeted therapy drugs have been approved and recognized by the NCCN as an effective clinical treatment of NSCLC. Through the identification of the presence or absence of any such NSCLC biomarkers, the 8-gene Lung Cancer Assay (Tissue) provides insights to physicians to select targeted clinical drug therapy and monitor its potential efficacy.

8-gene Lung Cancer Assay (Tissue) is compatible with both DA8600 (Ion Proton) and Genetron S5 sequencing platforms. The sequencing library is prepared using the multiplex PCR technique, specifically targeting the corresponding mutation hotspots related to these NSCLC biomarkers. The DNA or RNA library preparation process only requires one single PCR amplification and a purification. We have also developed a proprietary software for 8-gene Lung Cancer Assay (Tissue) to be used together with our Genetron S5 platform. The software analyzes data generated from the assay and generates test reports with simple clicks.

We believe that our 8-gene Lung Cancer Assay (Tissue) has the following advantages:

- *Comprehensive genomic testing pool.* The 8-gene Lung Cancer Assay (Tissue) is able to detect seven genes that the 2018 NCCN guidelines suggest to test for lung cancer patients in a single assay.
- *Simplified sequencing process and less contamination risk.* The library preparation process only involves a single PCR amplification and its corresponding purification, which simplifies the sequencing process as well as prevents possibilities of contamination. This significantly reduces cost and time involved for the sequencing. Patients could receive test results in as little as two days.

IVD Assays Under Development

ctDNA Lung Cancer Assay

We have also developed our ctDNA Lung Cancer assay based on our One-Step Seq™ ctDNA technology platform, testing patients' peripheral blood samples for mutations in the EGFR gene. This IVD product is currently at the clinical trial stage. The EGFR gene is located at the short arm of chromosome 7. Mutations in the EGFR gene are widely regarded as one of the most common cancer biomarkers in NSCLC patients, with most of EGFR mutations located in exons 18, 19, 20 and 21. Our ctDNA Lung Cancer Assay is for the qualitative detection of ten EGFR mutations that occur in exons 18, 19, 20 and 21.

We have also developed a proprietary software for ctDNA lung cancer assays to be used together with our Genetron S5 platform. The software analyzes data from the assay, detects SNVs and InDels and other variants and generates test reports with simple clicks.

EARLY SCREENING SERVICES

We believe that there is a significant market demand for early screening services and products that allow the development of precision oncology to cover early stage cancers, which would allow physicians to precisely detect and select appropriate interventions at the appropriate stages in the disease's evolution.

HCCscreen™: Milestone of Our Liver Cancer Early Screening Products and Services Development

Our Proprietary Assay

Through Mutation Capsule™, our proprietary early screening technology platform, we have developed HCCscreen™ to enable early detection of liver cancer. HCCscreen™ is a liquid biopsy assay developed to identify HCCs from the surface antigen of the HBV (HBsAg) positive asymptomatic individuals. Our HCCscreen™ assay detects ctDNA mutations and methylations, as well as protein biomarkers. The combination of these markers enabled outstanding performance of the assay in a cohort of asymptomatic HBV carriers in a large clinical study. We have been collaborating with the National Cancer Center in China on a multi-center prospective study, named the "HCCscreen™ Investigational Study" ("HIT Study"), since 2019. Among a total of 1,615 HBsAg+ individuals that completed the follow-up phase by February 2021, the primary outcome showed that HCCscreen™ achieved 88% sensitivity and 93% specificity, compared with 71% sensitivity and 95% specificity, respectively, by ultrasound plus alpha-fetoprotein ("AFP") combined. HCCscreen™ also achieved 40.9% positive predictive value ("PPV") and 99.3% negative predictive value ("NPV"). The study results are summarized in the following tables:

Table 1. HIT Results: Genetron HCCscreen™ Final Analysis (N=1,615)

<u>HCCscreen™ Test</u>	<u>HCC</u>	<u>Non-HCC</u>	<u>Total</u>
Test - Positive	76	110	186
Test - Negative	10	1,419	1,429
Total	86	1,529	1,615
Sensitivity (95% CI)	88% (80%, 94%)		
Specificity (95% CI)	93% (91%, 94%)		

Table 2. HIT Results: Ultrasound + AFP Final Analysis (N=1615)

<u>Ultrasound + AFP</u>	<u>HCC</u>	<u>Non-HCC</u>	<u>Total</u>
Test - Positive	61	83	144
Test - Negative	25	1,446	1471
Total	86	1,529	1615
Sensitivity (95% CI)	71% (60%, 80%)		
Specificity (95% CI)	95% (93%, 96%)		

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Furthermore, stratified by tumor size, 49% (28/57) of the cases identified by HCCscreen™ were in early stage, i.e. <3cm. These patients are expected to have much better prognosis than patients with advanced cancer. Additionally, HCCscreen™ achieved sensitivities of 85% for tumor sizes of <3cm, 96% for 3-5cm, and 88% for >5cm. The results are summarized in the following table:

Table 3. HIT Results: Genetron HCCscreen™ Sensitivities by Tumor Size

HCCscreen™ Test	Tumor Size (N=64)			Total
	<3cm	3-5cm	>5cm	
Test Positive	28	22	7	57
Test Negative	5	1	1	7
Total	33	23	8	64
Sensitivity	85%	96%	88%	

Previously, we reported preliminary analysis results from the first 297 patients enrolled in the study. Compared with the preliminary results, the confidence interval of sensitivity had improved from 62%-100% to 80%-94%, and the confidence interval of specificity had improved from 89%-96% to 91%-94%. The preliminary study results are summarized in the following table:

Table 4. HIT Results: Genetron HCCscreen™ Preliminary Data (N=297)

HCCscreen™ Test	HCC	Non-HCC	Total
Test - Positive	11	20	31
Test - Negative	1	265	266
Total	12	285	297
Sensitivity (95% CI)	92% (62%, 100%)		
Specificity (95% CI)	93% (89%, 96%)		

We believe that HCCscreen™ has the following advantages:

- *Potential first-in-class liver cancer screening assay globally.* At present, there is no readily available liver cancer screening assay in the market. We believe that our HCCscreen™ technology has the potential to become the first-in-class liver cancer screening assay globally. We plan to move forward to initiate an NMPA registrational study in the second quarter of 2021.
- *Non-invasive.* Utilizing our ctDNA technology, our liquid biopsy technology can provide important diagnostic indicators for asymptomatic HBV carriers with a non-invasive blood test.
- *Affordable.* We aim to price our HCCscreen™ early liver cancer screening assay competitively so that it would be accessible and affordable to the general public.

Our Development Efforts

We have joined the “AIDS, Hepatitis and Other Major Infectious Disease Control and Prevention” project, one of the 2020 Major National Science and Technology Projects led by the MOST. Specifically, we are responsible for identification and development of biomarkers for early liver cancer detection and the validation of liver cancer early screening assay products. Any products developed through this project will earn green channel fast-track review status with NMPA.

In August 2020, we started participating in the launch of a major national research project for early screening of lung and digestive system cancers led by the MOST. The project is designed to include a multi-center, prospective cohort study in lung cancer of 120,000 high-risk individuals in 20 provinces, as well as a cohort study in digestive system cancer of more than 100,000 patients in urban areas in China. We are the only company in China involved in national key research and development projects for liver, lung and digestive cancer early screening.

In September 2020, we received the U.S. Food and Drug Administration (“FDA”)’s Breakthrough Device designation for HCCscreen™, and we have started commercializing the product as an LDT in China in 2020. Since November 2020, we have been working with Wuxi municipal government (“Wuxi”) on the “Liver Cancer Early Screening Comprehensive Prevention and Control Project” (the “Wuxi Project”), a public health initiative administered by the National Cancer Center (“NCC”) in China. The goal of the Wuxi Project is to increase the awareness of liver cancer early screening, and to become a pilot city model in China. For the Wuxi Project, Wuxi has selected HCCscreen™ for use by local residents who are high-risk individuals for HCC, and is committed to administering 150,000 tests over a period of three years. Separately, we have formed a new operating center through a joint venture agreement with Wuxi, in which the parties are closely collaborating on advancing the liver cancer early screening market in China, through the adoption of HCCscreen™. Under this joint venture agreement, both parties will contribute capital, and we will own 90% of the joint venture. In addition to the commitment of using HCCscreen™ for its residents, Wuxi will also provide us with other supportive measures including rental, R&D subsidies and tax benefits.

As we continue to accumulate high quality data with clinical relevance through our comprehensive diagnostic and early screening products and services, we believe we will be better positioned to develop early screening assays covering additional cancer types such as lung and digestive cancers. We believe early screening will not only benefit clinical outcomes but also benefit biopharmaceutical companies by identifying a much larger at-risk patient population who may benefit from early therapeutic intervention or from preventative medicines.

DEVELOPMENT SERVICES

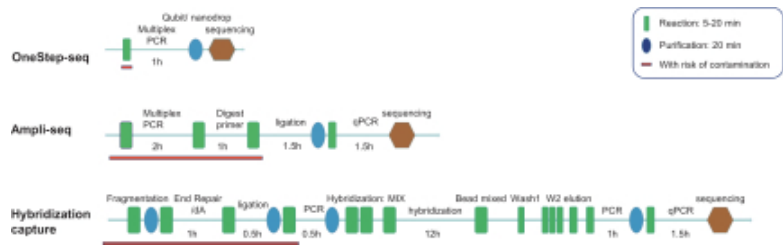
Our leading position in precision oncology has attracted biopharmaceutical companies, hospitals, and research institutions to establish collaborations with us. We partner with hospitals, research institutions and biopharmaceutical companies in China and globally to serve their needs in genomics research and clinical development. As of December 31, 2020, we had collaborated with 35 biopharmaceutical companies. We are able to provide support to pharmaceutical companies across many applications, including discovery of new targets and mechanisms of acquired resistance, retrospective sample analysis to rapidly identify biomarkers associated with response and lack of response, prospective screening and patient referral to accelerate clinical trial enrollment, and companion diagnostic development to support the approval and commercialization of therapeutics. By doing so, we have stayed at the forefront of the development of targeted drugs, providing us with insights in the latest developments in the industry, which will assist us in exploring future commercialization opportunities. Our products and services may be used by biopharmaceutical companies for a range of applications, including biomarker evaluation for molecularly targeted therapy and immuno-therapy, clinical trial enrollment, companion diagnostics development and joint marketing post-drug approval. Our strong technology infrastructure is particularly suitable for collaboration with biopharmaceutical companies. For instance, we developed FusionScan, a customized technology based on a biopharmaceutical company’s request for comprehensive and efficient detection of actionable translocation mutations. With a reverse transcription and two PCR reactions, the FusionScan technology can efficiently detect translocations with high sensitivity and low cost. It can detect *de novo* translocation mutations without having to know the other segment fused to the target gene like NTRK or FGFR. Our experienced IVD registration capacity and robust commercial capabilities are appealing to biopharmaceutical companies as well. We believe our collaboration with biopharmaceutical companies will also build evidence of clinical utility for our platform as an effective diagnostic tool for advanced cancer therapies. Our biopharmaceutical company partners include global pharmaceutical companies as well as innovative biopharmaceutical companies in China, such as AstraZeneca China, Bayer, Roche China, CStone, InnoCare, Alphamab Oncology, Fosun Pharma, Henlius and EdiGene. We also provide sequencing services to other similar genomic testing institutions as part of our development services.

OUR PROPRIETARY TECHNOLOGIES

We believe our technologies, supported by our owned and licensed patents, together with our trade secrets and industrial know-hows, have set us apart from our competitors and made us a leader in cancer genomics, and more broadly, precision oncology medicine. Our core technologies, especially our proprietary Genetron One-Step Seq™ Method, liquid biopsy low-frequency mutation detection technology and Mutation Capsule™ have enabled us to continuously deliver high-quality results while minimizing cost, operational complexity and operational turnaround time.

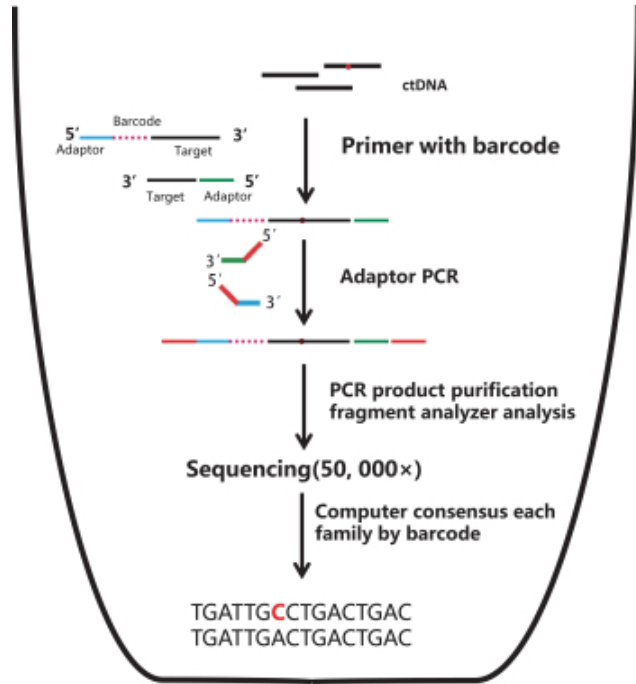
Genetron One-Step Seq™ Method

Applicable to small to medium gene panels, our One-Step Seq™ library construction is based on one-step multiplex PCR technology, which simplifies traditional technologies to a fast and convenient process. The traditional library construction technology involves a multiple-step process: construction of genomic library followed by hybridization-based enrichment of the target region, or multiplex PCR to amplify the target region and then adding adaptors to the PCR product. These strategies need complicated experiments with more than ten steps. Contamination could happen in the steps before the DNA is amplified. The One-Step Seq™ Method allows a DNA library to be prepared directly through a one-step multiplex PCR reaction, minimizing the labor and the risk of contamination. The One-Step Seq™ Method uses the Qubit method for library quantitation instead of qPCR, which requires much less cost and time than the qPCR quantitation required for the library constructed by amplicon based sequencing and other traditional methods. A brief comparison of Genetron One-Step Seq™ Method against hybridization based capture and amplicon based sequencing is shown below:



Genetron One-Step Seq™ Method achieves automatic chemical reaction. The primers and adaptors are mixed with DNA sample in one tube for the multiplex PCR reaction. The primers are specially modified with a special molecule linked to the DNA. Taking into consideration the balance among primer pairs, we have built a program to design up to 10,000 pairs of primers in parallel, which is key to its superior performance. We have optimized the program through numerous rounds of experiments and are able to design the primers with a higher success rate. In addition, the reaction buffer, enzyme, and the PCR program have all been optimized with our extensive know-how.

A brief explanation of our One-Step Seq™ Method is shown below:



- We believe that our One-Step Seq™ Method has the following advantages compared to traditional DNA sequencing process when applied to small to medium gene panels and can therefore contribute significant value at the clinical application stage:
- *Less time for library construction:* Through the reduction of the required number of intermediate steps, One-Step Seq™ Method substantially reduces the time of library construction to as little as 1.5 hours compared to 24 hours using hybridization based capture and eight hours using amplicon based sequencing method.
 - *Higher quality of the library:* Our One-Step Seq™ Method minimizes the difference among primer pairs, leading to higher quality (balanced coverage among amplicons) of the library and higher success rate of primer design.
 - *Lower risk of cross-contamination:* The entire library construction process is completed in sealed centrifuge tubes with minimal hands-on time, which significantly reduced the risk of cross-contamination.
 - *Lower production costs:* We produce assays developed based on this method with simple raw materials such as water, primer and enzyme, instead of purchasing commercial assays from third parties. Our lower production costs provide us with flexibility in pricing strategies. We believe this flexibility will enable us to achieve greater hospital acceptance and potential national drug reimbursement list inclusion in the future, as compared to our competitors, which are factors especially important for commercializing IVD products.
 - *Greater operational simplicity:* Our One-Step Seq™ Method has less demand on operational space, making it particularly suitable for space-constrained hospitals to conduct genomic testings.
 - *Lower sample amount DNA input:* Our One-Step Seq™ Method starts from a sample amount as low as 1ng DNA and has lower sample requirements in order to achieve successful library construction.

The following comparison chart illustrates the advantages and limitations using different methods:

	<u>Genetron One-Step Seq™</u>	<u>Amplicon Based Sequencing</u>	<u>Hybridization Capture</u>
DNA input requirement	Low (as low as 1 ng)	Low	High
Hands-on steps and time	Very simple (10 min)	Complicated (40 min)	Very complicated
Total time (from DNA to library)	1.5h	8h	24h
Contamination risk	Low	High	High
Laboratory section requirement	Low	Medium	High

We have successfully applied Genetron One-Step Seq™ Method into certain of our pipeline IVD products, such as 8-gene Lung Cancer Assay and ctDNA Lung Cancer Assay. In March 2020, we entered into a strategic collaboration agreement with MGI, under which MGI will integrate our One-Step Seq™ technology-enabled assays with its DNBSEQ-G400 and DNBSEQ-G50 platforms. Such strategic collaboration will enable both parties to jointly explore the overseas market. As of December 31, 2020, our One-Step Seq™ technology has enabled commercial assays on two out of three mainstream sequencing platforms, including Thermo Fisher Scientific and MGI. Leveraging the advantages of Genetron One-Step Seq™ Method, our IVD products are particularly suitable for hospitals to carry out their own tests.

Liquid Biopsy Low-Frequency Mutation Detection Technology

Biomarkers like EGFR mutation are critical for the diagnosis and treatment selection of cancer patients. In the absence of tumor tissue samples, detection of the mutations from the ctDNA in the blood, urine and CSF of the cancer patient is still possible. However, the mutation frequency could be much lower in these sources of samples. As such, a more sensitive technology is required for the detection of mutations in ctDNA. We are well experienced in ctDNA detection technology, and have developed multiple products to detect low frequency mutations.

We have integrated the DNA-barcode based technology into the One-Step Seq™ platform. By adding a special DNA barcode between the amplified DNA molecule and the adaptor, the false positive errors from PCR amplification and next generation sequencing would be efficiently filtered so that we can detect low-frequency mutations with high fidelity. Meanwhile, the Genetron One-Step Seq™ process minimizes loss of original ctDNA molecule during library construction. The limited ctDNA yield of the testing sample is one of the primary impediments of ctDNA based liquid biopsy, and higher transfer rate from ctDNA sample to detectable library means higher sensitivity to detect mutations. In this case, the combination of DNA-barcode technology and One-Step Seq™ process provide high sensitivity and specificity to detect low fraction mutations in ctDNA. The integration of the two technologies is particularly challenging to organize a series of molecular biology reactions, including amplification of target region, addition of barcode, and addition of adaptor, to take place in order, with all the reagents and primers mixed in the same tube.

We currently apply liquid biopsy low-frequency mutation detection technology in the following areas, all of which have achieved a high sensitivity and specificity yield and our assays are able to detect 0.05% mutation:

- *Blood samples:* we extract the ctDNA sample from the patient's blood. Relative to a tissue biopsy, collecting a blood sample is minimally invasive. It is particularly suitable for minimal residual disease ("MRD") testing, which is used to examine whether a cancer treatment is working and to guide further treatment plans.
- *CSF samples:* surgical extraction of brain biopsy is risky, whereas detection of ctDNA from blood for the purpose of detecting CNS cancer is infeasible due to the brain-blood barrier.
- *Urine samples:* we extract DNA from patient's urine sediments. Urine samples could be used to diagnose bladder cancer and other urinary system cancer types, which offers patients a painless sample collection experience. The non-invasive nature of urine samples is also suitable for cancer monitoring services.

Mutation Capsule™ Technology

We have developed Mutation Capsule™, an early screening technology, that combines the detection of genomic mutations and methylation alterations in one reaction of one sample. Compared to technologies that only detect a subset of alterations, Mutation Capsule™ technology can detect a broad spectrum of ctDNA alterations, including simple mutations, such as SNVs and InDels, complicated mutations, such as translocations, HBV integrations and CNVs and methylation changes. The parallel profiling of genomic and epigenetic alterations in a single reaction enables comprehensive profiling of ctDNA biomarkers with minimal sample requirement. In addition, Mutation Capsule™ technology supports multiple tests of one ctDNA sample without having to split samples and sacrificing sensitivity. To achieve this, we add DNA barcode and amplify ctDNA to generate a “mutation capsule library” (“MC Library”), which supports up to ten tests on different panels of biomarkers. After a test, the remaining MC Library could be used to detect new biomarkers in future test plans. The sensitivity of each test on the MC Library is generally equivalent to the initial test directly on the original ctDNA sample, which could directly reflect mutation of the original DNA. In this case, a ctDNA sample collected in one study could be used to test new biomarkers in multiple different studies. One major hurdle of performing liquid biopsy study is not only to acquire blood samples, but also to track the individual to know the clinical outcome. With Mutation Capsule™ technology, clinical outcome of one study could benefit multiple studies. Moreover, certain new studies could be completed even without collecting and tracking new samples or cohorts. We believe our proprietary Mutation Capsule™ technology significantly saves our time and costs associated with future clinical trials and research studies and will increase the efficiency of our R&D efforts.

Furthermore, the MC Library supports both amplification and hybridization-based capture to enrich target region, which allows us to study a wide range of panel sizes. Even at panel size as small as 10Kb, this technology keeps high (>80%) on-target rate, significantly increasing the efficiency of sequencing and lowering the cost. The DNA barcode added to the ctDNA molecule, in combination with our bioinformatic program, will filter false positive mutations from amplification and sequencing.

The following table reflects comparisons of different sequencing technologies:

	Mutation Capsule™	Hybridization based ctDNA sequencing	Amplification based ctDNA sequencing
Mutation types to detect	SNV, indel, complicated mutations (CNV, HBV integration, translocation, etc.)	SNV, indel, complicated mutations	SNV, indel
Methylation change	detect in parallel with mutations	in separate reaction to mutations	in separate reaction to mutations
Range of panel size	Small to large	Large	Small
On-target rate for small panel	High	Low	High
High GC region (TERT promoter region for example)	Comparable to normal GC regions and can amplify in parallel	Much lower coverage	Much lower coverage, need to amplify in separate reaction
Reagent cost	Low for amplification-based	High	Low
Sequencing throughput	Flexible	High	Low
Support multiple tests and available for future study	Yes, support multiple amplification- and/or hybridization-based tests	Yes, support multiple hybridization-based tests	No, one sample only supports one test

The combination of these characteristics makes Mutation Capsule™ well suited for cancer early detection studies—low cost yet high sensitivity. In addition, multiple types of ctDNA alterations can be detected in one reaction, and one sample can be used in multiple studies with different panels of biomarkers tested.

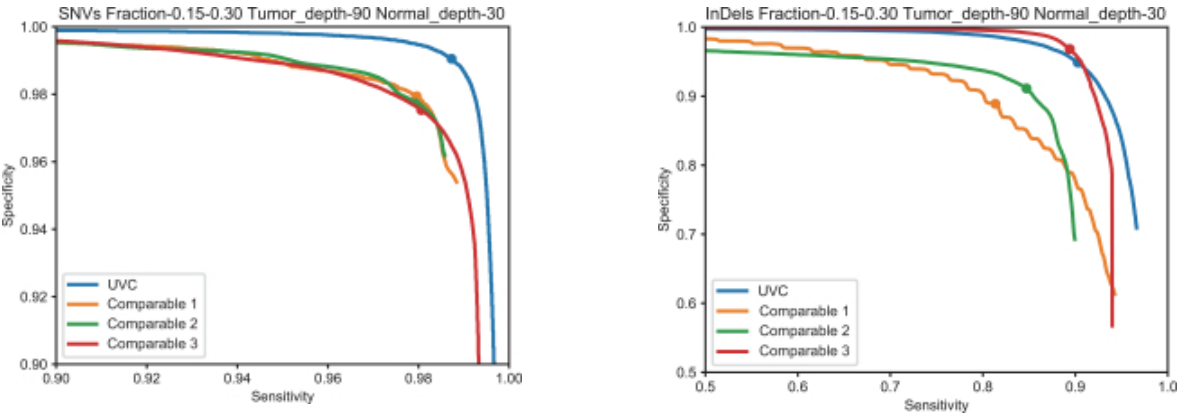
Bioinformatics

Integration of AI and big data analytics approaches such as machine learning, deep learning, and natural language processing to tackle the challenges of scalability and high dimensionality of data and to transform big data into clinically actionable knowledge is expanding and becoming the foundation of precision oncology. Our AI technology is able to automatically analyze DNA sequencing data to generate a ready-to-read data report.

As part of our AI technology capabilities and building on years of experience working with our patients, we have generated high quality genomic data, which contains approximately 157,000 accumulated tissue and blood genomic test results. We believe we also have one of the world’s largest brain tumor genomic databases containing data of approximately 23,000 cases, which comprises quality samples that have been compared and cross-referenced with the patient’s personal medical history to ensure their clinical significance and accuracy. Our database will continue to grow along with the increasing number of tests we conducted, enabling us to continuously refine our database and enhance its predictive capability.

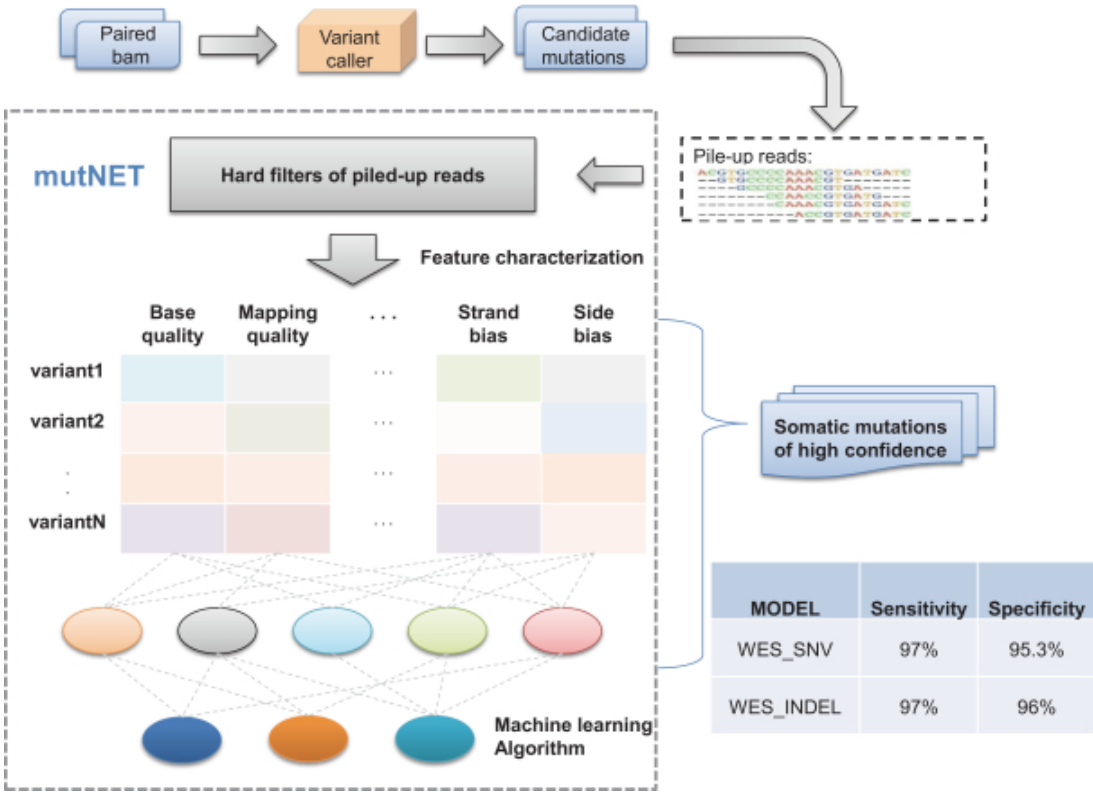
As an important part of our bioinformatics platform, we have developed our own algorithms to optimize the process for variant calling in most of our NGS products. Compared to other popular and published variant callers, our algorithm increased sensitivity from 95.6% to 97.9% and precision from 97.4% to 98.6% on the benchmark data. It can also reduce about half the false negative calls and false positive calls generated from other variant callers. Our variant calling platform is at least 50% faster than other commercial software.

The figures below show the precision-recall curves for calling SNVs and InDels on benchmark data for our variant caller – UVC, in comparison to three other commercially available variant callers. For each variant caller, the pair of sensitivity and precision that achieved the best F-score is marked with a dot.



We also developed an automated variant reviewer, mutNET, to replace the manual variant review process based on a machine learning framework. mutNET reduced the variability due to human judgment during the manual review process and cut down 95% of the review time.

The below graph illustrates the workflow and performance of mutNET in our somatic mutation calling pipeline for whole exome sequencing data.



Further, we have applied AI technologies in the development of diagnostic tests for detecting early stage cancers. We applied advanced machine learning technologies to integrate different types of biomarkers for an algorithm, to select key biomarkers for a simple assay for large-scale application, and to optimize our model and product of cancer early detection with enlarged cohort studies. We also trained our bioinformatics pipeline with our evaluation of mutations from clinical outcome to call low-frequency mutations with higher fidelity. These approaches led to increased accuracy of our early screening services. Our diagnostic classifier, a method to detect early stage cancers currently based on our algorithm for liver cancer, was published in *PNAS*.

OUR RESEARCH AND DEVELOPMENT CAPACITIES

We believe our continued research and development is the key driving force behind our long-term competitiveness, as well as our future growth and development. Our overall objective is to continuously broaden the spectrum of our services and products in order to detect a wider range of cancers and to optimize the treatment of cancer.

Our industry leading research team and achievements

Our R&D capacities are supported by our research and development team led by scientists at the forefront of cancer genomics research. Dr. Hai Yan, our Chief Scientific Officer, and Dr. Yuchen Jiao, our Chief Technology Officer, lead our in-house research and development team consisting of 184 researchers and scientists, including 27 Ph.D. degree holders and 104 Master’s degree holders across medical, pharmaceutical, molecular biology, biotechnology and other related areas. Dr. Hai Yan obtained his M.D. from Peking University Health Center and his Ph.D. in molecular and cellular biology from Columbia University and received his postdoctoral training in Dr. Bert Vogelstein Laboratory at the Howard Hughes Medical Institute and Johns Hopkins University School of Medicine. Dr. Yan has published over 100 articles in peer reviewed journals, including *New England Journal of Medicine*, *Nature*, and *Science*, as the first or corresponding authors. Dr. Yuchen Jiao obtained his M.D. from Peking Union Medical College and his Ph.D. in biological chemistry at the Johns Hopkins University. Dr. Jiao also had his postdocoral training at Dr. Bert Vogelstein Laboratory at the Howard Hughes Medical Institute and Johns Hopkins University School of Medicine. His research has been published in multiple renowned academic journals such as *Science* and *Nature Genetics*. In addition, we have established R&D centers in Maryland and Beijing.

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Our research and development capabilities are well-recognized in the industry. We have obtained an approval from the National Development and Reform Commission of the PRC to establish a national demonstration center for cancer genomic testing technologies. As of June 2020, we were the number one NGS-based cancer diagnosis and monitoring companies in the PRC in terms of the number of articles published in peer-reviewed scientific journals with impact factor over 12, according to Frost & Sullivan.

The table below summarizes some of our research collaborations and the related journal publications:

Publication Date	Research Institutions/Hospital	Article Title	Journal Title	Journal Impact Factor
June 2014	Beijing Tiantan Hospital Capital Medical University	<i>Exome sequencing identifies somatic gain of function PPM1D mutations in brainstem gliomas</i>	Nature Genetics	25.455
September 2014	Cancer Hospital Chinese Academy of Medical Sciences	<i>Genetic landscape of esophageal squamous cell carcinoma</i>	Nature Genetics	25.455
March 2015	Huashan Hospital	<i>Recurrent gain-of-function USP8 mutations in Cushing's disease</i>	Cell Research	17.874
May 2015	Zhejiang Provincial People's Hospital	<i>Recurrent TERT promoter mutations identified in a largescale study of multiple tumor types are associated with increased TERT expression and telomerase activation</i>	European Journal of Cancer	6.680
April 2016	Beijing Cancer Hospital	<i>Clonality analysis of multifocal papillary thyroid carcinoma by using genetic profiles</i>	Journal of Pathology	5.942
September 2016	Huashan Hospital Affiliated to Fudan University	<i>The genome wide mutational landscape of pituitary adenomas</i>	Cell Research	17.874
May 2017	Huashan Hospital Affiliated to Fudan University	<i>Germline mutations in CDH23, encoding Cadherin-Related 23, are associated with both familial and sporadic pituitary adenomas</i>	American Journal of Human Genetics	9.924
May 2018	Zhejiang Provincial People's Hospital	<i>The genomic landscape of TERT promoter wildtype-IDH wildtype glioblastoma</i>	Nature Communications	11.878
August 2018	Huashan Hospital Affiliated to Fudan University	<i>Identification of recurrent USP48 and BRAF mutations in Cushing's disease</i>	Nature Communications	11.878
October 2018	Cancer Hospital Chinese Academy of Medical Sciences	<i>Sensitive and rapid detection of TERT promoter and IDH mutations in diffuse gliomas</i>	Neuro-Oncology	10.091
November 2018	Beijing Tiantan Hospital Capital Medical University	<i>Molecular profiling of tumors of the brainstem by sequencing of CSF-derived circulating tumor DNA</i>	Acta Neuropathologica	18.174
March 2019	Cancer Hospital Chinese Academy of Medical Sciences	<i>Detection of early-stage hepatocellular carcinoma in asymptomatic HBsAg-seropositive individuals by liquid biopsy</i>	Proceedings of the National Academy of Sciences of the United States of America	9.580
June 2019	China-Japan Union Hospital of Jilin University	<i>MTAP Loss Promotes Stemness in Glioblastoma and Confers Unique Susceptibility to Purine Starvation</i>	Cancer Research	8.378
January 2020	West China Hospital, Sichuan University	<i>Mutation Profile of Tibetan Lung Cancer Revealed by Whole Exome Sequencing</i>	Journal of Thoracic Oncology	12.460
June 2020	Beijing Tiantan Hospital Capital Medical University	<i>The integrated genomic and epigenomic landscape of brainstem glioma</i>	Nature Communications	12.298
August 2020	Peking Union Medical College Hospital	<i>Positive tumour CD47 expression is an independent prognostic factor for recurrence in resected non-small cell lung cancer</i>	ESMO Open	5.329
September 2020	Cancer Hospital Chinese Academy of Medical Sciences	<i>Integrated molecular characterization reveals potential therapeutic strategies for pulmonary sarcomatoid carcinoma</i>	Nature Communications	12.298

Our research and development capabilities are also acknowledged by the government. As a leading precision oncology company, we are accredited as a National High-Tech Enterprise, after being evaluated at all factors, including core independent intellectual property rights and the ability to apply the scientific and technological achievements.

R&D Plan

We have developed innovative technology platforms since our inception, including Genetron One-Step Seq™ Method, ctDNA low frequency mutations detection technology and Mutation Capsule™. We are fully committed to investing in R&D to develop new clinical services and IVD products. In the next three to five years, we expect to focus our near-term R&D efforts on early screening and seek NMPA registration of IVD products covering early screening of liver cancer, lung cancer, digestive cancer and multi-cancer, as well as diagnosis monitoring products such as large-panels, and other blood-based MRD and NGS assays.

R&D Expenses

We have invested RMB71.4 million, RMB91.7 million and RMB149.0 million (US\$22.8 million) in research and development for the years ended December 31, 2018, 2019 and 2020, respectively, accounting for 53.9%, 51.4% and 90.7% of cost of revenue, demonstrating our strong commitment in R&D.

INTELLECTUAL PROPERTY

Protection of our intellectual property is fundamental to the long-term success of our business. Specifically, our success is dependent on our ability to obtain and maintain protection for our technology and the know-how related to our business, defend and enforce our intellectual property rights, and operate our business without infringing, misappropriating, or otherwise violating valid and enforceable intellectual property rights of others.

Our patent strategy is focused on seeking coverage for our core technology, such as one-step library construction method, our sequencing platform, our assay, and specific follow-on applications and implementations for detecting, monitoring and early screening cancer or other diseases by determining genetic variations in patient samples. In addition, we file for patent protection on our ongoing research and development which may be applicable in cancer cases and other diseases.

As of December 31, 2020, we have seven issued patents and 22 pending patent applications in China, and have ten international patent applications under the PCT. Our patents cover our key technologies, including Genetron One-Step Seq™ Method (patent number 201710218529.4) and liquid biopsy library construction sequencing analysis. We also own 90 registered trademarks, copyrights to 49 software programs developed by us relating to various aspects of our operations, and nine registered domain names as of December 31, 2020.

Our key patents and patent applications include:

- Method for rapidly constructing amplicon library through one-step process
- Construction method of amplicon library for detecting low-frequency mutation of target gene
- Mutation Capsule™ technology

We obtained an exclusive worldwide license from a leading research institution under certain patent rights make, use and sell products related to TERT mutation analysis.

We seek to ensure that investments made into the development of our technology are protected by relying on a combination of patents, trademarks, copyrights, trade secrets, including know-how, license agreements, confidentiality agreements and procedures, non-disclosure agreements with third parties, employee disclosure and invention assignment agreements and other contractual rights. We have also employed internal policies, confidentiality agreements, encryptions and data security measures to protect our proprietary rights. However, there can be no assurance that our efforts will be successful. Even if our efforts are successful, we may incur significant costs in defending our rights. From time to time, third parties may initiate litigation against us alleging our infringement of their proprietary rights or declaring their non-infringement of our intellectual property rights. See “Risk Factors—Risks Related to Our Intellectual Property”.

OUR MANUFACTURING AND TESTING CAPACITY

Our Manufacturing Facilities

We use OEM model to manufacture our sequencing instruments, and all our assays are manufactured in-house. We carry out our manufacturing activities at two facilities located in Beijing and Chongqing. Our Beijing manufacturing facility has a total gross floor area of 402 square meters and is responsible for the production of our assays. Beijing manufacturing facility has designed annual production capacity of 100,000 assays with utilization rate being approximately 16%, 36% and 77% in 2018, 2019 and 2020, respectively. Our Chongqing manufacturing facility mainly assembles and manufactures medical devices and has a designed annual production capacity of 500 sequencing platforms. Utilization rate of Chongqing manufacturing facility was approximately 6.00%, 9.78% and 19.11% in 2018, 2019 and 2020, respectively. The manufacturing process of our medical devices takes approximately ten days while the manufacturing of our assays typically takes one month.

Our Testing Facilities

We have four clinical laboratories located at Beijing, Shanghai, Chongqing and Guangzhou, China, and one in Maryland, USA. Our clinical laboratories are equipped with sequencing platforms to support our cancer molecular profiling services. Our sequencing instruments include such as Illumina Novaseq 6000 and HiSeq XTen, as well as Thermo Fisher S5 Plus and BGI SEQ2000. As we progress with the construction of our new operating center in Wuxi, another clinical laboratory will also be included as part of the building plan.

All our clinical laboratories in Beijing, Shanghai, Chongqing and Guangzhou have conducted registrations and obtained the Medical Institution Practicing License. In addition, all these clinical laboratories other than the Guangzhou laboratory, which was recently established, are authorized to perform PCR amplification for clinical use. Our clinical laboratory in Beijing has obtained comprehensive panel accreditation under the CLIA from the CMS and certification from the CAP. In addition, each of our above mentioned clinical laboratories has obtained NCCL EQA Certifications in various aspects, including our high-throughput sequencing and our bioinformatics platforms. In particular, our above mentioned clinical laboratories have passed over 190 national and provincial clinical laboratory EQA tests since our inception, covering germline, comprehensive panel and liquid biopsy testing and bioinformatics, demonstrating our dedication to the highest service quality. Furthermore, our Beijing manufacturing facility has achieved ISO 15189:2012 certification, ISO 13485: 2016 certification and ISO 9001 2015 certification. Both Beijing manufacturing facility and Chongqing platform manufacturing facility have passed verification of quality management system for medical device registration. In late December 2019, an expert panel authorized by National Center for Clinical Laboratories, Guangdong Bureau reviewed Onco PanScan™ (TS), a comprehensive gene panel testing service proposed to be conducted through our Guangzhou lab, and recommended Onco PanScan™ (TS) for pilot run. Our Maryland lab in the US is also CLIA-certified.

Quality Control

We believe that an effective quality management system is critical to ensuring the quality of our products and services. We have established an in-house quality management system and devoted significant attention to quality control of our raw materials, equipment, products and services. We have established detailed quality control and assurance procedures guiding our internal production and external purchase of raw materials and equipment. We purchase our raw materials and equipment only from selected reputable suppliers. In addition, to ensure high product quality, we have implemented a “quality-by-design” approach pursuant to which manufacturing processes are designed during the research and development stage and quality control processes are continuously monitored. Furthermore, our Beijing manufacturing facility has achieved ISO 15189:2012 certification, ISO 13485: 2016 certification and ISO 9001 2015 certification. Both Beijing assays manufacturing facility and Chongqing platform manufacturing facility have met the requirements under GMP of medical devices. In addition, each of our medical devices, including platforms such as Genetron 3D biochip reading instrument, Genetron S5, Genetron Chef, and Genetron S2000 and assays such as IDH1 assay, TERT assay, and 8-gene Lung Cancer Assay (Tissue), has also satisfied such requirements. We are one of the first precision oncology companies in China that obtained both CAP accreditation and CLIA certification for NGS platform, according to Frost & Sullivan.

Supply of Raw Materials and Components

We have a dedicated team to procure required components to meet specific requirements of our hardware products. The primary raw materials and components used in our laboratories for our LDT services and IVD products include medical device sub-components and reagents such as enzymes, plasmid and buffer solution. We procure our raw materials from suppliers in China, the United States, Japan, Germany, South Africa, Netherlands and Singapore, which we believe have sufficient capacity to meet our commercial needs. We maintain a list of raw material suppliers and review their qualifications on an annual basis by taking into consideration the results of our on-site evaluation of their production facilities, to the extent applicable, as well as factors such as their product quality, business scale, market share and reputation. To monitor the quality of supplies, we implement a standardized operating system by setting out the procedures and guidelines on the procurement of raw materials, quality control inspection, warehousing, testing and storage. In addition, from time to time, we procure genomics sequencing machines. During the past three years, we have not experienced any material shortages or delays in the supply of raw materials. The experience with our suppliers during past four years has provided us confidence in their ability to produce consistent and quality instrumentation, reagents and materials.

We have taken active measures to control the increases in procurement costs. For example, we enter into long-term framework supply agreements with our major suppliers to secure sufficient raw materials and lock the prices of raw materials for the upcoming financial year. We also purchase manufacturing equipment and tools from multiple suppliers to ensure we maintain stable supply at reasonable prices. Furthermore, we are conducting research on certain key raw materials, and upon completion of our research, we seek to manufacture these raw materials in-house to control cost and quality. During the past three years, we had not experienced any material fluctuations in raw material costs that had a material impact on our results of operations.

License and Supply Agreement

In January 2018, we entered into a license and supply agreement with an international NGS instrument manufacturer (the “International Licensor”), pursuant to which the International Licensor granted a license for us to manufacture a localized version of the International Licensor’s next generation sequencing instruments and diagnostic assays and the International Licensor provides certain sequencers, equipment and other materials that we use in our laboratory operations. During the term of the license and supply agreement, the International Licensor will supply us with sequencing instruments, software, reagents and other consumables for use with the International Licensor instruments.

During the term of the license and supply agreement, we are required to make a rolling quarterly forecast of our expected needs for sequencing instruments, reagents and other consumables for the following four quarters, and place purchase orders for sequencing instruments, reagents and other consumables. Subject to discounts that vary depending on the volume ordered and an annual price adjustment, the price for instruments, reagents and other consumables is based on contract prices that are fixed for a set period of time and may increase in proportion to increases in the International Licensor’s published US list price for equivalent products. The license and supply agreement includes a minimum purchase requirement and requires us to source substantially similar products from the International Licensor.

The agreement contains negotiated use limitations, representations and warranties, indemnification, limitations of liability, and other provisions. The initial term of the license and supply agreement is five years and may be renewed by written mutual agreement. Either we or the International Licensor may terminate the license and supply agreement for the other’s uncured material breach, bankruptcy or insolvency-related events.

OEM Collaboration Agreement

In December 2018, we entered into an OEM cooperation agreement with a domestic NGS instrument manufacturer (the “Domestic Licensor”), for it to provide certain sequencers, equipment and other materials that we use in our laboratory operations and grant a license allowing us to assemble and manufacture instruments and consumables. During the term of the OEM cooperation agreement, the Domestic Licensor will supply us with sequencing instruments, reagents and other consumables for use with the Domestic Licensor instruments.

During the term of the OEM cooperation agreement, we are required to make a rolling monthly forecast of our expected needs for reagents and other consumables for the following three months, and place purchase orders for instruments, reagents and other consumables. The Domestic Licensor may not unreasonably reject conforming purchase orders. Subject to discounts that vary depending on the volume of instruments and consumables ordered, the price for instruments, reagents and other consumables is based on contract prices that are fixed for a set period of time. The OEM cooperation agreement includes a minimum purchase requirement.

The agreement contains negotiated use limitations, representations and warranties, indemnification, limitations of liability, and other provisions. The initial term of the OEM cooperation agreement is six years (or five years starting from the date when we obtain the regulatory approval for the instruments) and may be renewed by written mutual agreement. Either we or the Domestic Licensor may terminate the OEM cooperation agreement for the other’s uncured material breach, bankruptcy or insolvency-related events, acquisition by competitors or unpermitted assignment.

SALES AND MARKETING

As of December 31, 2020, we have established a robust sales and marketing team of approximately 260 members, consisting of both sales team and marketing team, to provide doctors, patients and other clients with the customized support. Since 2017 and as of December 31, 2020, we had provided products and services to patients in over 500 hospitals in China. We have also established an external sales network of distributors, covering tier-three and tier-four cities in China. In addition, our commercialization efforts are facilitated by our dedicated marketing team, responsible for promoting our services and products, ideas and mission of our company, through both online platforms and offline channels, to our existing customers and potential new customers. Our marketing team will also co-sponsor or organize medical summits, conferences and seminars to promote and raise awareness of the clinical application of precision oncology among physicians and patients.

Direct Sales

As of December 31, 2020, our direct sales team covers over 37 cities, including four tier-one cities, located in more than 27 provinces in China.

The majority of our business is derived from direct sales to patients, which is divided into three business units, focusing on diagnosis and monitoring services, early screening services and development services, respectively.

We believe that the precision oncology market requires further education and guidance on the benefits of genomic screening of cancer. In this regard, our sales and marketing team is well-positioned to guide and educate the market, driving market penetration in the markets we selected. In anticipation of our business expansion and as more of our pipeline products obtain approval for commercialization, we plan to further expand our sales and marketing force in the next few years.

Sales through Distributors

In addition to our direct sales, we also sell our products, primarily IVD products, to hospitals through our distributors. We monitor the sales activities of our independent third-party distributors from time to time, including the levels of inventory of IVD assays and sequencing platforms at our distributors. We believe that our distribution model is consistent with customary industry practice and serves to complement our direct sales. In particular, to provide a wider and more comprehensive sales network, we engage our distributors mainly to penetrate into tier-three or tier-four cities in China. Combining both our sales and marketing team and our distributors network, we believe we are able to provide a more comprehensive sales network within China compared to our peers.

COMPETITION

Growing understanding of the importance and effectiveness of precision oncology medicine is leading to more companies offering services and products in the industry. In the China market, due to various regulations, we are mainly competing with domestic players. Our competitors may include companies providing cancer molecular profiling, third-party service providers specializing in diagnosis and monitoring services, and upstream suppliers. We primarily compete on a number of factors, including efficiency and turnaround time for report preparation, support by KOLs, our product pipelines, technology platforms, ability to commercialize products, strong R&D and IVD registration capabilities.

We expect the competition in the precision oncology market to persist and intensify. Our competitors may announce or develop new clinical services, products or enhancements that allow for a more precise detection and/ or quicker turnaround. They may also establish clinical trial sites or conduct preclinical testing and clinical trials with new scientific approaches that better cater for the medical needs of patients. We believe our comprehensive LDT services, deep IVD registration pipeline and R&D capability form a barrier to entry and provide us with competitive advantages. However, we cannot assure that we will continue to compete effectively. For more information, see “Item 3. Key Information—D. Risk Factors—Risks relating to Our Business and Industry—We may face intense competition and our competitors may develop similar, but more advanced services and products than ours, which may adversely affect our business and financial conditions.”

PROPERTIES AND FACILITIES

We are headquartered in Beijing, China and have material offices and clinical laboratories in Shanghai, Chongqing, Guangzhou, Tianjin, China and Maryland, USA. As of December 31, 2020, we had leased office space, plants and clinical laboratories for our material facilities as summarized below. We lease our premises under operating lease agreements from independent third parties. We believe that our existing facilities are generally adequate to meet our current needs, but we expect to seek additional space as needed to accommodate future growth.

Location	Space (in square meters)	Use	Lease Term (months)
Beijing, China	7,586	Office, manufacturing, clinical laboratory, and storage	12 – 60
Changping, Beijing, China	7,192	Office, manufacturing, clinical laboratory, and storage	12 – 60*
Huamiao, Beijing, China	394	Office	36
Shanghai, China	1,201	Office and clinical laboratory	72
Chongqing, China	4,488	Office, manufacturing, clinical laboratory, and storage	63
Guangzhou, China	3,421	Office and clinical laboratory	60
Tianjin, China	2,617	Office	36
Tianjin, China	492	Office and outpatient department	60**
Gaithersburg, MD, USA	544	Office and research and development laboratory	84

* Our Changping facilities occupy multiple floors in different buildings at Beijing Life Science Park, therefore, we entered into multiple lease agreements, the terms of which varying from 12 months to 60 months.

** The lease of our Tianjin outpatient department started in February 2021.

INSURANCE

We provide social security insurance including pension insurance, unemployment insurance, work-related injury insurance and medical insurance for our employees. We do not maintain property insurance to protect our equipment and other properties essential to our business operation against risks and unexpected events. We do not maintain business interruption insurance or general third-party liability insurance, nor do we maintain product liability insurance or “key person” insurance. We consider our insurance coverage sufficient and in line with market practice for our business operations in China.

LEGAL PROCEEDINGS

We are currently not a party to material legal or administrative proceedings. We may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial cost and diversion of our resources, including our management's time and attention. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Operations—Allegations or lawsuits against us or our management may harm our reputation and business."

PRC REGULATION

This section sets forth a summary of the principal PRC laws, rules and regulations relevant to our business and operation in China.

Major Regulatory Authorities relating to Our Business in the PRC

The National Health Commission of the PRC (the "NHC"), formerly known as National Health and Family Planning Commission (the "NHFPC"), is responsible for, among others, formulating and implementing regulations relating to medical institutions, medical services and medical technologies. In particular, the medical test laboratories and clinical gene amplification test laboratories established for genomic testing services, and the medical technologies used in genomic testing services are under supervision of NHC.

The National Medical Products Administration (the "NMPA"), under and supervised by the State Administration for Market Regulation, was established to undertake part of duties of the former China Food and Drug Administration (the "CFDA"). NMPA is responsible for, among others, formulating and implementing regulations relating to research, manufacturing, operation, distribution, quality control, usage and registration of medical devices. In-vitro diagnostic reagents, gene sequencers or software relating to genomic testing services shall be deemed as medical devices and supervised by NMPA and its local counterparts.

The Ministry of Science and Technology of the PRC (the "MOST") is responsible for regulating the collection, preservation, utilization and outbound provision of human genetic resources.

Regulations relating to Laboratories

Medical Test Laboratories

According to the *Administrative Regulations on Medical Institutions*, promulgated by the State Council, effective on September 1, 1994, and amended on February 6, 2016, and the *Implementation Measures of the Administrative Regulations on Medical Institutions*, effective on September 1, 1994, latest amended by NHFPC and effective from April 1, 2017, any entity or individual which intends to establish and operate a medical institution shall apply for an approval from NHC or its local counterparts to obtain a Medical Institution Practicing License.

According to the *Basic Standards and Practice of Medical Test Laboratory*, promulgated by NHFPC and effective from July 20, 2016, a medical test laboratory, which conducts clinical tests, including clinical hematology tests and body fluid tests, clinical chemistry tests, clinical immunology tests, clinical microbiology tests, clinical molecular cytogenetic tests and clinical pathology tests, for the purpose of diagnosis, management, prevention or treatment of diseases and health assessment, shall be regulated as a medical institution. The establishment and operation of a medical test laboratory shall apply for an approval from NHC or its local counterparts to obtain a Medical Institution Practicing License. We had established four medical test laboratories in PRC with Medical Institution Practicing License as of the date of this annual report.

Clinical Gene Amplification Test Laboratories

Pursuant to the *Administrative Measures for Clinical Gene Amplification Test Laboratories of Medical Institutions*, promulgated by the Ministry of Health, the former of NHFPC, and effective from December 6, 2010, and the *Catalogue of Clinical Laboratory Items for Medical Institutions (2013)* promulgated by NHFPC on August 5, 2013, or Testing Items Catalogue, the NHC at the provincial level is responsible for the supervision and administration of clinical gene amplification test laboratories of medical institutions. A clinical gene amplification test laboratory shall register its clinical testing items with the NHC at the provincial level after technical verification passed by the center for clinical laboratories at the provincial level. In the event that any clinical testing items conducted by any clinical gene amplification test laboratory exceed the scope of clinical test items registered with the NHC, or clinical testing reagents used by any clinical gene amplification test laboratory for clinical gene amplification test are not registered with the NMPA, such laboratory may potentially be required to suspend its business of clinical gene amplification testing. In addition, pursuant to the Notice on Issues Related to the Management of Clinical Laboratory Items, or Circular 167, promulgated by the NHFPC on February 25, 2016, the clinical testing items which are not included in the Testing Items Catalogue, but with clear clinical significance, relatively high specificity and sensitivity, and reasonable price, shall be validated in time to meet clinical needs.

Pathogenic Microorganism Laboratories

Pursuant to the *Regulations on Administration of Bio-safety in Pathogenic Microorganism Laboratories*, promulgated by the State Council, effective on November 12, 2004, and latest amended on March 19, 2018, pathogenic microorganism laboratories are classified into four levels, namely bio-safety levels 1, 2, 3 and 4 in terms of bio-safety protection levels in accordance with national standards on biosafety of laboratories. Laboratories at bio-safety levels 1 and 2 shall not engage in laboratory activities related to highly pathogenic microorganisms. The construction, alternation or expansion of a laboratory at bio-safety level 1 or 2 shall be filed for record with the local counterparts of NHC. The entity launched a pathogenic microorganism laboratory shall develop a scientific and strict management system, regularly inspect the implementation of the regulations on bio-safety, and regularly inspect, maintain and update the facilities, equipment and materials in the laboratory, to ensure its compliance with the national standards.

Regulations relating to Medical Technologies

Pursuant to the *Administration Measures for the Clinical Application of Medical Technologies* promulgated by NHC on August 13, 2018 and effective from November 1, 2018, a negative list will be set up regarding the clinical application of medical technologies, which are classified into two categories: “restricted” and “prohibited”. Any medical institution shall refrain from conduct any clinical application of medical technologies that fall within the “prohibited” category, while a medical institution which engages in clinical application of medical technologies falling within the “restricted” category shall file with the NHC or its local counterpart within fifteen working days after the first clinical application of such technologies. In addition, pursuant to the *Notice of Strengthening the Administration of Products and Technologies Relating to Clinical Gene Sequencing*, jointly promulgated by General Office of NHFPC and CFDA on February 9, 2014, no medical institutions may apply gene sequencing technologies or products for clinical use before the issuance of relevant access standards and management regulations.

Regulations relating to Medical Devices

The manufacturing, using and operation of medical devices in China are subject to extensive regulations.

Pursuant to the *Regulations on the Supervision and Administration of Medical Devices* (the “Medical Devices Regulation”), promulgated by the State Council and effective from April 1, 2000, and latest amended on May 4, 2017, and the *Administrative Measures for In-vitro Diagnostic Reagents*, promulgated by CFDA and effective from October 1, 2014 and amended on January 25, 2017, medical devices, including in-vitro diagnostic reagents, are classified into three different categories, Class I, II and III on the basis of their respective degrees of risk. Medical devices of Class I refer to such devices with low level of risk, the safety and effectiveness of which can be ensured through routine administration. Medical devices of Class II refer to such devices with medium level of risk, the safety and effectiveness of which shall be strictly controlled. Medical devices of Class III refer to such devices with high level of risk, the safety and effectiveness of which shall be guaranteed and be subject to strict control through special administrative measures.

In March, 2021, the State Council published the newly revised Regulations on the Supervision and Administration of Medical Device (the “Revised Regulations”), which will become effective from June 1, 2021. Pursuant to the Revised Regulations, for in-vitro reagents, if no product of the same kind has been allowed to be marketed in PRC, qualified medical institutions may, according to their clinical needs, self develop these in-vitro reagents and put into use of these reagents under the guidance of practicing physicians. The NMPA and the NHC are authorized to jointly promulgate more detailed regulations relating to such provision.

Pursuant to the *Notice of Strengthening the Administration of Products and Technologies Relating to Clinical Gene Sequencing*, jointly promulgated by General Office of NHFPC and CFDA on February 9, 2014, gene sequencing diagnostic products, including gene sequencers and relevant diagnostic reagents and software, shall be regulated as medical devices.

Registration and Filing of Medical Devices

Pursuant to the *Administrative Measures for Registration of Medical Devices*, promulgated by CFDA and effective from October 1, 2014, among domestic manufactured medical devices, medical devices of Class I shall be filed with the NMPA at the city level; medical devices of Class II shall be subject to the inspection, approval and the granting of product registration certificates by the NMPA at the provincial level; medical devices of Class III are subject to the inspection, approval and the granting of product registration certificates by the NMPA. The product registration certificate is valid for five years, and the holder of such certificate shall apply for renewal within six months prior to its expiration. We have obtained NMPA registrations (including NMPA registrations at provincial level) for three assays and four platforms as of the date of this annual report.

Production Permit and GMP for Medical Devices

Pursuant to the Medical Devices Regulation and the *Administrative Measures for Production of Medical Devices*, promulgated by the CFDA, amended and effective from November 17, 2017, an entity engaging in the production of medical devices of Class I shall complete record-filing with the NMPA at city level where such entity is located; and an entity engaging in the production of medical devices of Class II or III shall obtain a production permit of medical devices from the NMPA at provincial level. The production permit of medical devices is valid for five years and the holder of such permit shall apply for extension within six months prior to its expiration.

According to the *Good Manufacturing Practice of Medical Devices* promulgated by CFDA and effective from March 1, 2015, an entity engaging in the design, developing, production, sales after-sales of medical devices shall establish and effectively maintain quality control standards.

Operation Permit and GSP for Medical Devices

Pursuant to the Medical Devices Regulation and the *Administrative Measures for Operation of Medical Devices*, promulgated by the CFDA, and amended and effective from November 17, 2017, an entity engaging in the operation of medical devices of Class I is not required to obtain approval or filing for record with the NMPA or its local counterparts; an entity engaging in the operation of medical devices of Class II shall file for record with the NMPA at city level where such entity is located; an entity engaging in the operation of medical devices of Class III shall apply for an operation permit from the NMPA at city level. The operation permit of medical devices is valid for five years and the holder of such permit shall apply for extension within six months prior to its expiration. According to Medical Devices Regulation, any entity shall not sell or use medical devices which are not properly registered or filed with the NMPA or its local counterparts.

Pursuant to the *Good Sales Practice of Medical Devices* promulgated by CFDA and effective from December 12, 2014, an entity engaging in the procurement, acceptance, preservation, sales, transportation and after-sales of medical devices shall take effectively quality control measures.

Regulations relating to Export of Medical Devices or Medical Supplies

Pursuant to the *Administrative Measures for Production of Medical Devices*, an entity engaging in the production of medical devices for export shall complete record-filing of such medical devices with NMPA at city-level and shall ensure such medical devices for export must meet the relevant requirements of import country (region).

In accordance with the *Notice of Strengthening the Export Quality Supervision of Medical Supplies for Anti-Epidemic* which was jointly promulgated by MOFCOM, General Administration of Customs and SAMR on April 25, 2020 and became effective on April 26, 2020, entities engaging in the export of medical supplies for anti-epidemic (including but not limited to reagents and materials used to perform Coronavirus COVID-19 testing), which has obtained certification or registration of foreign standard, shall submit written declaration that such medical supplies for export have met the quality standard and safety requirements of import country (region). In addition, customs shall check and release such medical supplies based on the list provided by MOFCOM of manufacturing enterprises that have obtained certification or registration of foreign standards. We have been approved to join such list.

Regulations relating to Encouragement of Innovation in Medical Devices

There are certain laws, regulations and policies for encouraging innovation in medical devices in China. Pursuant to the *Opinions of the General Office of the CPC Central Committee and the General Office of the State Council on Deepening the Reform on the System for Review and Approval to Encourage Innovation of Drugs and Medical Devices* which was issued on October 8, 2017, in order to encourage the research and development of innovative medical devices, priority processing shall be given to the review and approval of those innovative medical devices that are supported by the National Science and Technology Major Projects, the National Key Research and Development, and the clinical trials carried out and recognized by the National Clinical Medical Research Center.

Regulations relating to Human Genetic Resources

The *Regulation for the Administration of Human Genetic Resources* (the “HGR Regulation”) promulgated by the State Council on May 28, 2019, and effective from July 1, 2019, regulates entities engaging in collection, preservation, utilization and outbound provision of human genetic resources. Human genetic resources include (i) human genetic resources materials, such as organs, tissues and cells that contain hereditary substances such as human genomes genes, and (ii) human genetic resources information, such as data generated from human genetic resources.

According to the HGR Regulation, collection and preservation of human substances such as organs, tissues and cells and carrying out related activities for the purposes of clinical diagnosis and treatment, blood collection and supply services, crime investigation, doping detection and funeral and interment shall be subject to other applicable laws and regulations.

Pursuant to the HGR Regulation, foreign entities, individuals and such entities established or actually controlled thereby (each, a “Restricted Entity”) shall not, within the territory of China, collect or preserve human genetic resources of China, nor provide human genetic resources of China outward across the border; while a Foreign Entity is allowed to conduct scientific research activities by utilizing human genetic resources of China through cooperation with scientific research institutions, higher education institutions, medical institutions or enterprises of China (each, a “Domestic Entity”). The utilization of human genetic resources of China in any international cooperative scientific research is subject to approval by the MOST. However, the aforesaid approval is not required, but instead a filing for record with the MOST is required, if human genetic resources of China are utilized for international cooperative clinical trials without any outbound provision of human genetic resources, for the purpose of obtaining product registration of relevant medicine and medical device in China.

Regulations relating to Product Quality and Consumer Protection

Product Quality

Pursuant to the *Product Quality Law of the PRC* which was promulgated by the Standing Committee of the National People’s Congress (the “SCNPC”) on February 22, 1993 and became effective as of September 1, 1993, and latest amended and came into force on December 29, 2018, and the *Regulations on Quality Responsibility for Industrial Products* which was promulgated by the State Council on April 5, 1986 and effective from July 1, 1986, a manufacturer is liable for the quality of products that it produces. The quality of a product shall be inspected and proved to be conformed to the standards. Industrial products which may be hazardous to health or safety of human life and property shall be in compliance with national and industrial standards safeguarding the health and safety of human life and property; in the absence of such national or industrial standards, such products shall meet the requirements for procuring the protection of health and safety of human life and property.

According to the *Product Quality Law of the PRC*, consumers or other victims who suffer personal injury or property losses due to product defects may demand compensation from the manufacturer as well as the seller. Where the responsibility for product defects lies with the manufacturer, the seller shall, after settling compensation, have the right to recover such compensation from the manufacturer, and vice versa.

Pursuant to the *Civil Code of the PRC* which was promulgated by the National People’s Congress on May 28, 2020 and effective from January 1, 2021, manufacturers shall assume tort liability where the defects in relevant products cause damage to others. Sellers shall assume tort liability where the defects in relevant products causing damage to others are attributable to the sellers. The aggrieved party may claim for compensation from the manufacturer or the seller of the relevant product in which the defects have caused damage.

Consumer Protection

Pursuant to the *Consumer Protection Law of the PRC* which was promulgated by the SCNPC on October 31, 1993, and latest amended and came into force on March 15, 2014, the rights and interests of the consumers who buy or use commodities or receive services for the purposes of daily consumption are protected, and all manufacturers and sellers involved shall ensure that the products and services provided will not cause damage to the customers. Violations of the *Consumer Protection Law of the PRC* may result in the imposition of fines. In addition, the manufacturers and sellers may be ordered to suspend operations and its business license may be revoked, while criminal liability may be imposed in serious cases.

Regulations relating to Intellectual Property

China is a signatory to several major international conventions on intellectual property rights, including the *Agreement on Trade-Related Aspects of Intellectual Property Rights*, *Paris Convention for the Protection of Industrial Property*, *Berne Convention for the Protection of Literary and Artistic Works*, *World Intellectual Property Organization Copyright Treaty*, *Madrid Agreement Concerning the International Registration of Marks* and *Patent Cooperation Treaty*.

Patent Law

According to the *Patent Law of the PRC* (the “Patent Law”), promulgated by the SCNPC on March 12, 1984, latest amended and effective from October 1, 2009, and the *Implementation Rules of the Patent Law of the PRC*, promulgated by the State Council on June 15, 2001 and latest amended on January 9, 2010, the National Intellectual Property Administration is responsible for administering patents in the PRC. The Patent Law and its implementation rules provide for three types of patent: “invention”, “utility model” and “design”. The protection period is 20 years for invention patents and 10 years for utility model patents and design patents, commencing from their respective application dates. The Chinese patent system adopts a “first come, first file” principle, which means that where more than one person files a patent application for the same invention, a patent will be granted to the person who files the application first. To be patentable, invention or utility models must meet three criteria: novelty, inventiveness and practicability. Except under certain specific circumstances provided by law, any third-party user must obtain consent or a proper license from the patent owner to use the patent. Otherwise, the use of constitutes an infringement of the patent rights, and shall pay compensation to the patentee and is subject to a fine imposed by relevant administrative authorities and, if constituting a crime, shall be held criminally liable in accordance with the law. On October 17, 2020, the SCNPC adopted the amendment to the Patent Law, or the 2020 Patent Law, which will take effect on June 1, 2021. The 2020 Patent Law further strengthens patent protection. For example, (i) the design patent term extends from 10 years to 15 years, and rights holders can claim part of an entire product design; (ii) an invention will not lose its novelty in the event that it is firstly published for public interest under a national “state of emergency” or under “extraordinary circumstances” within 6 months after application date of such invention; and (iii) the maximum statutory damages increase from RMB1,000,000 to RMB5,000,000.

In addition to the above, under the HGR Regulation, patent right derived from the cross-border cooperation concerning genetic resources of China shall be shared by the parties jointly.

Trademark Law

Trademarks are protected by the *Trademark Law of the PRC* (the “Trademark Law”), promulgated by the SCNPC on August 23, 1982 and latest amended and effective from November 1, 2019, as well as the *Implementation Regulation of the PRC Trademark Law* adopted by the State Council on August 3, 2002 and further amended on April 29, 2014. In China, registered trademarks include commodity trademarks, service trademarks, collective trademarks and certification trademarks.

The Trademark Office under the National Intellectual Property Administration is responsible for registrations and administration of trademarks. The period of validity for a registered trademark is 10 years, commencing from the date of registration. Upon expiry of the period of validity, the registrant shall go through the formalities for renewal within twelve months prior to the date of expiry as required if the registrant needs to continue to use the trademark. As with patents, a “first come, first file” principle has been adopted with respect to trademark registration pursuant to the Trademark Law. Industrial and commercial administrative authorities have the authority to investigate any behavior in infringement of the exclusive right under a registered trademark in accordance with the law. In case of a suspected criminal offense, the case shall be timely referred to a judicial authority and decided according to law.

Copyright Law

Pursuant to the *Copyright Law of the PRC* (the “Copyright Law”) which was promulgated on September 7, 1990 and latest amended on February 26, 2010, and the *Implementation Regulation of the Copyright Law of the PRC* promulgated by the State Council on August 2, 2002 and latest amended January 30, 2013, Chinese citizens, legal persons, or other organizations shall, whether published or not, enjoy copyright in their works, which include, among others, works of literature, art, natural science, engineering technology and computer software. The purpose of the Copyright aims to encourage the creation and dissemination of works which is beneficial for the construction of socialist spiritual civilization and material civilization and promote the development and prosperity of Chinese culture. On November 11, 2020, the SCNPC adopted the amendment to the Copyright Law of the PRC, or the 2020 Copyright Law, which will take effect on June 1, 2021. The 2020 Copyright Law further strengthens copyright protection. For example, by: (i) raising maximum statutory compensation from RMB500,000 to RMB5,000,000; (ii) labeling “audiovisual works” as a new type of work to substitute “cinematographic works and works created by a process analogous to cinematography”; and (iii) refining evidential rules on the amount of compensation for copyright infringement.

Domain Names

The *Detailed Rules for the Implementation of the Registration of State Top-Level Domain Names*, promulgated by the China Internet Network Information Center on June 18, 2019, stipulates detailed rules for registration of domain names. Pursuant to the *Administrative Measures on Internet Domain Name* promulgated Ministry of Industry and Information Technology (the “MIIT”) on August 24, 2017, and became effective from November 1, 2017, domain name owners are required to register their domain names and the MIIT is in charge of the administration of PRC Internet domain names. The domain name registrations follow a “first come, first file” principle.

Regulations relating to Information Security and Confidentiality

Pursuant to the *Regulations for Medical Institutions on Medical Records Management*, jointly promulgated by NHFPC and National Administration of Traditional Chinese Medicine on November 20, 2013, and effective from January 1, 2014, medical institutions and medical practitioners shall strictly protect the privacy information of patients, and any leakage of patients’ medical records for non-medical, non-teaching or non-research purposes is prohibited. The *Administrative Measures for Population Health Information* promulgated by NHFPC on May 5, 2014, stipulates that medical service providers collecting or using population healthcare information shall guarantee the information security and protect individual privacy.

In addition, on May 28, 2020, the National People’s Congress of the PRC issued the PRC Civil Code, which became effective on January 1, 2021. The PRC Civil Code stipulates that the personal information of a natural person shall be protected by the law. Any organization or individual shall legally obtain the personal information of others when necessary and ensure the safety of such personal information, and shall not illegally collect, use, process or transmit the personal information of others, or illegally buy or sell, provide or make public the personal information of others.

Regulations relating to Advertisement

Pursuant to the *Advertisement Law of the PRC*, which was promulgated by SCNPC on October 27, 1994 and effective from February 1, 1995 and latest amended and effective from October 26, 2018, advertisements shall not contain false statements or be deceitful or misleading to consumers. Advertisements which are subject to censorship, including advertisements relating to pharmaceuticals and medical devices, shall be reviewed by relevant authorities in accordance with applicable rules before being distributed by broadcasting, movies, television, newspapers, journals or otherwise. The *Advertisement Law of the PRC* further stipulates that advertisements for medical treatment, pharmaceutical products or medical devices shall not contain: (i) any assertion or guarantee for efficacy and safety; (ii) any statement on cure rate or effectiveness rate; (iii) any comparison with the efficacy and safety of other pharmaceutical products or medical devices or with other healthcare institutions; (iv) any use of endorsements or testimonials; or (v) other items as prohibited by laws and regulations.

Pursuant to the *Interim Measures for the Administration of Internet Advertisement* which was promulgated by the State Administration of Industry and Commerce on July 4, 2016 and became effective as of September 1, 2016, the Internet advertisement shall be identifiable and clearly identified as an “advertisement”. Advertisement of any medical treatment, medicines, foods for special medical purpose, medical apparatuses, pesticides, veterinary medicines, dietary supplement or other special commodities or services shall not be released unless it has passed the required review by advertisement regulating authorities.

Pursuant to the *Measures for Administration of Medical Advertisement* which were jointly promulgated by the State Administration of Industry and Commerce and the Ministry of Health on November 10, 2006 and effective on January 1, 2007, medical advertisements shall be reviewed by relevant health authorities and obtain a Medical Advertisement Examination Certificate before being released. Medical Advertisement Examination Certificate is valid for one year and may be renewed upon application.

Pursuant to the *Interim Administrative Measures for Censorship of Advertisements for Drugs, Medical Devices, Dietary Supplements and Foods for Special Medical Purpose* promulgated by the SAMR on December 24, 2019 and effective from March 1, 2020, no advertisement for any drug, medical device, dietary supplement or food for special medical purpose may be published without censorship. The SAMR shall be responsible for organizing and guiding the censorship of advertisements for drugs, medical devices, dietary supplements and foods for special medical purpose. Departments for market regulation and drug administration of provinces, autonomous regions and municipalities directly under the central government shall be responsible for the censorship of advertisements for drugs, medical devices, dietary supplements and foods for special medical purpose and may legally entrust other administrative authorities with specifically carrying out advertisement censorship. Advertisements for drugs, medical devices, dietary supplements and foods for special medical purpose shall be authentic and legal, and shall not contain any false or misleading content.

Regulations relating to Environment Protection

Pursuant to the *Environmental Protection Law of the PRC* which was promulgated by the SCNPC on December 26, 1989, and amended on April 24, 2014 and came into force on January 1, 2015, all enterprises and institutions which discharge pollutants shall adopt measures to prevent and control pollution and damage to the environment from waste gas, waste water, waste residues, medical waste, dust, malodorous gases, radioactive substances, noise, vibration, ray radiation and electromagnetic radiation generated in the course of production, construction or other activities. Pollution prevention and control facilities of a construction project shall be simultaneously designed, constructed and put into operation with the principal part of the construction project. Enterprises that manufacture, store, transport, sell, use or dispose of chemicals and materials containing radioactive substances shall comply with the relevant State regulations to prevent environmental pollution. The relevant authorities are authorized to impose various types of penalties on the persons or entities in violation of the environmental regulations, including fines, restriction or suspension of operation, shut-down, detention of office-in-charge, etc.

Regulations relating to Anti-bribery

According to the *Anti-Unfair Competition Law of the PRC* promulgated by SCNPC on September 2, 1993 and latest amended on April 23, 2019, and the *Interim Provisions on the Prohibition of Commercial Bribery* promulgated by the State Administration for Industry and Commerce on November 15, 1996, any business operator shall not provide or promise to provide economic benefits (including cash, other property or by other means) to a counter-party in a transaction or a third party that may be able to influence the transaction, in order to entice such party to secure a transactional opportunity or a competitive advantages for the business operator. Any business operator breaching the relevant anti-bribery rules above-mentioned may be subject to administrative punishment or criminal liability depending on the seriousness of the cases.

Regulations relating to Labor

Labor Protection

The main PRC employment laws and regulations include the *Labor Law of the PRC* (the “Labor Law”) promulgated by SCNPC and latest amended on December 29, 2018, the *Labor Contract Law of the PRC* (the “Labor Contract Law”) promulgated by SCNPC and latest amended and became effective from July 1, 2013, and the *Implementing Regulations of the Labor Contract Law of the PRC* promulgated by the State Council on September 18, 2008. The Labor Law and the Labor Contract Law govern the establishment of employment relationships between employers and employees, and the execution, performance, termination of, and the amendment to, labor contracts. The Labor Contract Law is primarily aimed at regulating rights and obligations of employee or employer, including matters with respect to the establishment, performance and termination of labor contracts. Moreover, according to the Labor Contract Law: (i) employees must comply with regulations in the labor contracts concerning commercial confidentiality and non-competition; (ii) employees may terminate their labor contracts with their employers if their employers fail to make social insurance contributions in accordance with the law; and (iii) enterprises and institutions shall establish and improve their system of workplace safety and sanitation, strictly abide by state rules and standards on workplace safety, educate laborers in labor safety and sanitation in the PRC.

Social Insurance and Housing Fund

As required under the *Regulation of Insurance for Labor Injury*, effective on January 1, 2004 and amended and came into force from January 1, 2011, the *Provisional Measures for Maternity Insurance of Employees of Corporations*, effective on January 1, 1995, the *Decisions on the Establishment of a Unified Program for Basic Old-Aged Pension Insurance of the State Council* promulgated on July 16, 1997, the *Decisions on the Establishment of the Medical Insurance Program for Urban Workers of the State Council* promulgated on December 14, 1998, the *Unemployment Insurance Measures* promulgated on January 22, 1999 and the *Social Insurance Law of the PRC* effective on July 1, 2011 and amended on December 29, 2018, enterprises are obliged to provide their employees in the PRC with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, labor injury insurance and medical insurance. These payments are made to local administrative authorities and any employer that fails to contribute may be fined and ordered to make up within a prescribed time limit.

In accordance with the *Regulations on the Management of Housing Funds* which was promulgated by the State Council in 1999 and amended on March 24, 2019, enterprises must register at the competent managing center for housing funds and upon the examination by such managing center of housing funds, these enterprises shall complete procedures for opening an account at the relevant bank for the deposit of employees’ housing funds. Enterprises are also required to pay and deposit housing funds on behalf of their employees in full and in a timely manner.

Regulations relating to Foreign Investment

On March 15, 2019, the National People’s Congress promulgated the *Foreign Investment Law*, which came into effect on January 1, 2020 and replaces the trio of existing laws regulating foreign investment in China, namely, the *Sino-foreign Equity Joint Venture Enterprise Law*, the *Sino-foreign Cooperative Joint Venture Enterprise Law* and the *Wholly Foreign-invested Enterprise Law*. The existing foreign-invested enterprises established prior to the effective of the *Foreign Investment Law* may keep their corporate forms within five years.

Pursuant to the *Foreign Investment Law*, “foreign investors” means natural person, enterprise, or other organization of a foreign country, “foreign-invested enterprises” (the “FIEs”) means any enterprise established under PRC law that is wholly or partially invested by foreign investors and “foreign investment” means any foreign investor’s direct or indirect investment in mainland China, including: (i) establishing FIEs in mainland China either individually or jointly with other investors; (ii) obtaining stock shares, stock equity, property shares, other similar interests in Chinese domestic enterprises; (iii) investing in new projects in mainland China either individually or jointly with other investors; and (iv) making investment through other means provided by laws, administrative regulations, or State Council provisions.

The *Foreign Investment Law* stipulates that China implements the management system of pre-establishment national treatment plus a negative list to foreign investment and the government generally will not expropriate foreign investment, except under special circumstances, in which case it will provide fair and reasonable compensation to foreign investors. Foreign investors are barred from investing in prohibited industries on the negative list and must comply with the specified requirements when investing in restricted industries on that list. When a license is required to enter a certain industry, the foreign investor must apply for one, and the government must treat the application the same as one by a domestic enterprise, except where laws or regulations provide otherwise. In addition, foreign investors or FIEs are required to file information reports and foreign investment shall be subject to the national security review.

On December 26, 2019, the State Council issued the *Implementation Regulation of the Foreign Investment Law* which came into effect on January 1, 2020 and replaced the *Implementation Regulation of the Sino-Foreign Equity Joint Venture Enterprise Law*, the *Provisional Regulations on the Duration of Sino-Foreign Equity Joint Venture Enterprise Law*, the *Implementing Rules on Wholly Foreign-owned Enterprises* and the *Implementing Regulations on the Sino-foreign Cooperative Joint Venture Enterprise Law*. According to the *Implementation Regulation of the Foreign Investment Law*, the foreign-invested enterprises shall submit investment information to the competent commerce authorities via the enterprise registration system and the enterprise credit information publicity system.

Regulations relating to Foreign Investment Restrictions

Investment activities in China by foreign investors are classified into four categories with regard to foreign investment: (i) “encouraged”, (ii) “restricted”, (iii) “prohibited” and (iv) “permitted”. National Development and Reform Committee (the “NDRC”) and Ministry of Commerce of the PRC (the “MOFCOM”) jointly promulgated the *2020 version of Special Administrative Measures (Negative List)* on June 23, 2020 and *Catalog of Industries for Encouraging Foreign Investment (2020 Version)* on December 27, 2020, which became effective from July 23, 2020 and January 27, 2021, respectively. Industries that are not listed in the *2020 version of Special Administrative Measures (Negative List)* are permitted areas for foreign investments, and are generally open to foreign investment unless specifically restricted by other PRC regulations. Some restricted industries are limited to equity or contractual joint ventures, while in some cases Chinese partners are required to hold the majority interests in such joint ventures. In addition, restricted category projects may be subject to higher-level government approvals. Foreign investors are not allowed to invest in industries in the prohibited category. Pursuant to the *2020 version of Special Administrative Measures (Negative List)*, the Gene diagnosis and treatment technology falls in the prohibited industry for foreign investment.

Regulations relating to M&A and Overseas Listing

On August 8, 2006, Six PRC governmental and regulatory agencies, including the MOFCOM and the CSRC, jointly promulgated the *Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors*, or M&A rules, a new regulation with respect to the mergers and acquisitions of domestic enterprises by foreign investors that became effective on September 8, 2006 and revised on June 22, 2009. Foreign investors shall comply with the M&A rules when they purchase equity interests of a domestic company or subscribe for the increased capital of a domestic company, and thus changing the nature of the domestic company into a foreign-invested enterprise; or when the foreign investors establish a foreign-invested enterprise in the PRC for the purpose of purchasing the assets of a domestic company and operating the asset; or when the foreign investors purchase the asset of a domestic company, establish a foreign-invested enterprise by injecting such assets, and operate the assets. The M&A rules, among other things, purport to require that an offshore special vehicle, or a special purpose vehicle, formed for listing purposes and controlled directly or indirectly by PRC companies or individuals, shall obtain the approval of the CSRC prior to the listing and trading of such special purpose vehicle’s securities on an overseas stock exchange.

Regulations relating to Tax

Enterprise Income Tax

On March 16, 2007, the National People’s Congress promulgated the *Enterprise Income Tax Law of the PRC* which was amended on February 24, 2017 and December 29, 2018, and on December 6, 2007, the State Council enacted the *Regulations for the Implementation of the Law on Enterprise Income Tax* which were amended on April 23, 2019 (collectively, the “EIT Law”). The EIT Law came into effect on January 1, 2008. According to the EIT Law, taxpayers consist of resident enterprises and non-resident enterprises. Resident enterprises are defined as enterprises that are established in China in accordance with PRC laws, or that are established in accordance with the laws of foreign countries but whose actual or de facto control is administered from within the PRC. Non-resident enterprises are defined as enterprises that are set up in accordance with the laws of foreign countries and whose actual administration is conducted outside the PRC, but have established institutions or premises in the PRC, or have no such established institutions or premises but have income generated from inside the PRC. Under the EIT Law and relevant implementing regulations, a uniform corporate income tax rate of 25% is applicable. However, if non-resident enterprises have not formed permanent establishments or premises in the PRC, or if they have formed permanent establishment institutions or premises in the PRC but there is no actual relationship between the relevant income derived in the PRC and the established institutions or premises set up by them, the enterprise income tax is, in that case, set at the rate of 10% for their income sourced from inside the PRC.

The Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies promulgated by the SAT on April 22, 2009 and amended on December 29, 2017 sets out the standards and procedures for determining whether the “de facto management body” of an enterprise registered outside of the PRC and controlled by PRC enterprises or PRC enterprise groups is located within the PRC.

According to the EIT Law, the EIT tax rate of a high-tech enterprise is 15%. Pursuant to *the Administrative Measures for the Recognition of High and New Technology Enterprises*, come into effect from January 1, 2008 and amended on January 29, 2016, the certificate of a high and new technology enterprise is valid for three years. An enterprise shall, after being accredited as a high-tech enterprise, fill out and submit the statements on annual conditions concerning the intellectual property rights, scientific and technical personnel, expenses on research and development and operating income for the previous year on the “website for the administration of accreditation of high-tech enterprises”. Besides, when any high-tech enterprise has changed its name or has undergone any major change concerning the accreditation conditions (such as a division, merger, reorganization or change of business), it shall report the change to the accreditation institution within three months upon occurrence of the change. If the high-tech enterprise is qualified upon review by the accreditation institution, it continues to have the qualification as a high-tech enterprise, and in case of change in the name, a new accreditation certificate will be issued with the number and term of validity remaining the same as the previous certificate; otherwise, the qualification as a high-tech enterprise shall be canceled as of the year of change in the name or any other condition.

Value Added Tax

Pursuant to the *Provisional Regulations of the PRC on Value-added Tax*, promulgated by the State Council on November 19, 2017, *the Detailed Rules for the Implementation of the Provisional Regulations of the PRC on Value-added Tax*, promulgated by the Ministry of Finance and the SAT on December 15, 2008 and latest amended and came into effect on November 1, 2011 (collectively, the “VAT Law”), all enterprises and individuals engaged in the sale of goods, the provision of processing, repair and replacement services, and the importation of goods within the territory of the PRC must pay value-added tax.

Dividend Withholding Tax

Pursuant to the EIT Law and its implementation rules, if a non-resident enterprise has not set up an organization or establishment in the PRC, or has set up an organization or establishment but the income derived has no actual connection with such organization or establishment, it will be subject to a withholding tax on its PRC-sourced income at a rate of 10%. Pursuant to the *Arrangement Between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion With Respect to Tax on Income*, the withholding tax rate in respect to the payment of dividends by a PRC enterprise to a Hong Kong enterprise is reduced to 5% from a standard rate of 10% if the Hong Kong enterprise directly holds at least 25% of the PRC enterprise. Pursuant to the *Notice of the SAT on the Issues concerning the Application of the Dividend Clauses of Tax Agreements*, or SAT Circular 81, promulgated by the SAT in February 2009, a Hong Kong resident enterprise must meet the following conditions, among others, in order to enjoy the reduced withholding tax: (1) it should be a company as provided in the tax treaty; (2) it must directly own the required percentage of equity interests and voting rights in the PRC resident enterprise; and (3) it must have directly owned such percentage in the PRC resident enterprise throughout the 12 months prior to receiving the dividends. In October 2019, the SAT promulgated the *Administrative Measures for Non-Resident Taxpayers to Enjoy Treatments under Tax Treaties*, or SAT Circular 35 which became effective in January 2020. SAT Circular 35 provides that non-resident enterprises are not required to obtain pre-approval from the relevant tax authority in order to enjoy the reduced withholding tax rate. Instead, non-resident enterprises and their withholding agents may, by self-assessment and on confirmation that the prescribed criteria to enjoy the tax treaty benefits are met, directly apply the reduced withholding tax rate, and file necessary forms and supporting documents when performing tax filings, which will be subject to post-tax filing examinations by the relevant tax authorities. If our Hong Kong subsidiary satisfies all the requirements under the tax arrangement and receives approval from the relevant tax authority, the dividends paid to the Hong Kong subsidiary would be subject to withholding tax at the standard rate of 5%.

Income Tax for Share Transfers

According to the *Public Notice Regarding Certain Enterprise Income Tax Matters on Indirect Transfer of Properties by Non-resident Enterprise*, or SAT Bulletin 7, promulgated by the SAT in February 2015, if a non-resident enterprise transfers the equity interests of a PRC resident enterprise indirectly by transfer of the equity interests of an offshore holding company (other than a purchase and sale of shares in public securities market) without a reasonable commercial purpose, the PRC tax authorities have the power to reassess the nature of the transaction and the indirect equity transfer will be treated as a direct transfer. As a result, the gain derived from such transfer, which means the equity transfer price less the cost of equity, will be subject to PRC withholding tax at a rate of up to 10%. In October 2017, SAT issued the *Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source*, or the SAT Bulletin 37, which, among others, repeals certain rules stipulated in SAT Bulletin 7 and became effective on December 1, 2017. The SAT Bulletin 37 further details and clarifies the tax withholding methods in respect of income of non-resident enterprises.

Regulations relating to Dividend Distribution

Under our current corporate structure, our Cayman Islands holding company may rely on dividend payments from our PRC Subsidiaries, which is a foreign invested enterprise incorporated in China, to fund any cash and financing requirements we may have. The principal legislation with respect to payment or distribution of dividends by foreign invested enterprises include (1) *the Company Law of the PRC*, most recently amended by the SCNPC in October 2018, and (2) the *Foreign Investment Law*, promulgated by the National People's Congress in March 2019, and its implementation rules. Under these laws, foreign invested enterprises in the PRC may pay dividends only out of accumulated profits, after setting aside annually at least 10% of accumulated after-tax profits as reserve fund, if any, unless these reserves have reached 50% of the registered capital of the enterprises. These reserve funds may not be distributed as cash dividends. A foreign invested enterprise may allocate a portion of its after-tax profits to its employee welfare and bonus funds at its discretion. Profit of a foreign invested enterprise shall not be distributed before the losses thereof for the previous accounting years have been made up. Profits retained from prior fiscal years may be distributed together with distributable profits from the current fiscal year.

Regulations relating to Import and Export of Goods

Pursuant to *the Customs Law of the PRC* which was promulgated by the SCNPC on January 22, 1987 and became effective as of July 1, 1987, and latest amended on November 4, 2017 and came into force on November 5, 2017, the import of goods throughout the period from the time of arrival in the territory of China to the time of customs clearance, the export of goods throughout the period from the time of declaration to the customs to the time of departure from the territory of China, and the transit, transshipment and through-shipment goods throughout the period from the time of arrival in the territory of China to the time of departure from the territory of China shall be subject to customs control.

Pursuant to *the Foreign Trade Law of the PRC* which was promulgated by the SCNPC on May 12, 1994 and became effective as of July 1, 1994, and latest amended and came into force on November 7, 2016, any foreign trade business operator that is engaged in the import and export of goods or technology shall be registered for archival purposes with the administrative authority of foreign trade of the State Council or the institution entrusted thereby, unless it is otherwise provided for by any law, administrative regulation or the foreign trade department of the State Council. Where any foreign trade business operator that fails to file for archival registration according to relevant provisions, the customs may not handle the procedures of customs declarations and release of the import or export goods.

Pursuant to *the Administrative Provisions on the Registration of Customs Declaration Entities of the PRC* which was promulgated by the General Administration of Customs on and became effective as of March 13, 2014, and amended on May 29, 2018 and came into force on July 1, 2018, the import and export of goods shall be declared by the consignor or consignee itself, or by a customs declaration enterprise entrusted by the consignor or consignee and duly registered with the customs authority. Consignors and consignees of imported and exported goods shall go through customs declaration entity registration formalities with the competent customs departments in accordance with the applicable provisions. After completing the registration formalities with the customs, consignors and consignees of the imported and exported goods may handle their own customs declarations at customs ports or localities where customs supervisory affairs are concentrated within the customs territory of the PRC.

Regulations relating to Foreign Exchange

Foreign Currency Exchange

The principal regulations governing foreign currency exchange in China are the *PRC Foreign Exchange Administration Regulations*, or the *Foreign Exchange Administration Regulations*, which were promulgated by the State Council on January 29, 1996 and last amended on August 5, 2008. Under the *Foreign Exchange Administration Regulations*, Renminbi is generally freely convertible for payments of current account items, such as trade and service-related foreign exchange transactions and dividend payments, but not freely convertible for capital account items, such as direct investment, loan or investment in securities outside China, unless prior approval of State Administration of Foreign Exchange, or the SAFE, or its local counterparts has been obtained.

On February 13, 2015, SAFE promulgated the *Notice on Further Simplifying and Improving the Direct Investment-related Foreign Exchange Administration Policies*, or SAFE Notice 13, according to which, entities and individuals may apply for such foreign exchange registrations from qualified banks. The qualified banks, under the supervision of SAFE, may directly review the applications and conduct the registration.

On March 30, 2015, SAFE promulgated the *Circular on Reforming the Management Approach regarding the Settlement of Foreign Capital of Foreign-invested Enterprise*, or Circular 19, which came into effect on June 1, 2015. According to Circular 19, the foreign exchange capital of foreign-invested enterprises shall be subject to the *Discretionary Foreign Exchange Settlement*, which means that the foreign exchange capital in the capital account of a foreign-invested enterprise for which the rights and interests of monetary contribution have been confirmed by the local foreign exchange bureau (or the book-entry registration of monetary contribution by the banks) can be settled at the banks based on the actual operational needs of the foreign-invested enterprise, and if a foreign-invested enterprise needs to make further payment from such account, it still needs to provide supporting documents and proceed with the review process with the banks. Furthermore, Circular 19 stipulates that the use of capital by foreign-invested enterprises shall follow the principles of authenticity and self-use within the business scope of enterprises. The capital of a foreign-invested enterprise and capital in Renminbi obtained by the foreign-invested enterprise from foreign exchange settlement shall not be used for the following purposes: (i) directly or indirectly used for payments beyond the business scope of the enterprises or payments as prohibited by relevant laws and regulations; (ii) directly or indirectly used for investment in securities unless otherwise provided by the relevant laws and regulations; (iii) directly or indirectly used for granting entrust loans in Renminbi (unless permitted by the scope of business), repaying inter-enterprise borrowings (including advances by the third-party) or repaying the bank loans in Renminbi that have been sub-lent to third parties; or (iv) directly or indirectly used for expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises).

The *Circular on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account*, or Circular 16, was promulgated by SAFE on June 9, 2016 and became effective on the same date. Pursuant to Circular 16, enterprises registered in the PRC may also convert their foreign debts from foreign currency to Renminbi on a self-discretionary basis. Circular 16 reiterates the principle that Renminbi converted from foreign currency-denominated capital of a company may not be directly or indirectly used for purposes beyond its business scope or prohibited by PRC Laws, while such converted Renminbi shall not be provided as loans to its non-affiliated entities.

On January 26, 2017, SAFE promulgated the *Circular on Further Improving Reform of Foreign Exchange Administration and Optimizing Genuineness and Compliance Verification*, or Circular 3, which stipulates several capital control measures with respect to the outbound remittance of profit from domestic entities to offshore entities, including (i) under the principle of genuine transaction, banks shall check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities shall hold income to account for previous years' losses before remitting the profits. Moreover, pursuant to Circular 3, domestic entities shall make detailed explanations of the sources of capital and utilization arrangements, and provide board resolutions, contracts and other proof when completing the registration procedures in connection with an outbound investment.

In October 2019, the SAFE promulgated the *Notice for Further Advancing the Facilitation of Cross-border Trade and Investment*, or the SAFE Circular 28, which, among other things, allows all FIEs to use Renminbi converted from foreign currency denominated capital for equity investments in China, as long as the equity investment is genuine, does not violate applicable laws, and complies with the negative list on foreign investment. The *Circular Regarding Further Optimizing the Cross-border RMB Policy to Support the Stabilization of Foreign Trade and Foreign Investment* jointly promulgated by the People's Bank of China, NDRC, MOFCOM, the State-owned Assets Supervision and Administration Commission of the State Council, the China Banking and Insurance Regulatory Commission and SAFE on December 31, 2020 and took effect on February 4, 2021 allows the non-investment foreign-invested enterprises make domestic reinvestment with RMB capital in accordance with the law on the premise that they comply with prevailing regulations and the invested projects in China are authentic and compliant. In addition, if a foreign-invested enterprise uses RMB income under capital accounts to conduct domestic reinvestment, the invested enterprise is not required to open a special deposit account for RMB capital.

On April 10, 2020 the SAFE issued the *Notice of the SAFE on Optimizing Foreign Exchange Administration to Support the Development of Foreign-related Business*, or the SAFE Circular 8. The SAFE Circular 8 provides that under the condition that the use of the funds is genuine and compliant with current administrative provisions on use of capital relating to capital account, enterprises are allowed to use capital under capital account such as capital funds, foreign debts and overseas listings for domestic payment, without submission to the bank prior to each transaction of materials evidencing the veracity of such payment.

Foreign Exchange Registration of Overseas Investment by PRC Resident

On July 4, 2014, SAFE promulgated the *Circular on Relevant Issues Concerning Foreign Exchange Administration on Domestic Residents' Overseas Investment, Financing and Roundtrip Investment via Special Purpose Vehicles*, or SAFE Circular 37, which replaced the former circular commonly known as "SAFE Circular 75" promulgated by SAFE on October 21, 2005. SAFE Circular 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a "special purpose vehicle." SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as an increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from making profit distributions to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its PRC subsidiary. Furthermore, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for evasion of foreign exchange controls.

Share Option Rules

Pursuant to the *Notice on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participation in Equity Incentive Plans of Overseas Listed Companies* promulgated by SAFE on February 15, 2012, or the SAFE Circular 7, PRC residents who are granted shares or share options by companies listed on overseas stock exchanges under share incentive plans are required to (i) register with SAFE or its local branches, (ii) retain a qualified PRC agent, which may be a PRC subsidiary of the overseas listed company or another qualified institution selected by the PRC subsidiary, to conduct SAFE registration and other procedures with respect to the share incentive plans on behalf of the participants, and (iii) retain an overseas institution to handle matters in connection with their exercise of share options, purchase and sale of shares or interests and funds transfers.

UNITED STATES REGULATION

Federal and state laboratory licensing requirements

Under CLIA, a laboratory is any facility that performs laboratory testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease, or the impairment of or assessment of health. CLIA requires that a laboratory hold a certificate applicable to the type of laboratory examinations it performs and that it complies with, among other things, standards covering operations, personnel, facilities administration, quality systems and proficiency testing, which are intended to ensure, among other things, that clinical laboratory testing services are accurate, reliable and timely.

To renew our CLIA certificate, we are subject to survey and inspection every two years to assess compliance with program standards. Because we are a CAP accredited laboratory, CMS does not perform this survey and inspection and relies on our CAP survey and inspection. We also may be subject to additional unannounced inspections. Laboratories performing high complexity testing are required to meet more stringent requirements than laboratories performing less complex tests. In addition, a laboratory that is certified as “high complexity” under CLIA may develop, manufacture, validate and use proprietary tests referred to as laboratory developed tests, or LDTs. CLIA requires analytical validation including accuracy, precision, specificity, sensitivity and establishment of a reference range for any LDT used in clinical testing. The regulatory and compliance standards applicable to any testing we perform may change over time and any such changes could have a material effect on our business.

CLIA provides that a state may also adopt laboratory regulations that are more stringent than those under federal law, and a number of states have implemented their own more stringent laboratory regulatory requirements. For example, state laws may require that nonresident laboratories, or out-of-state laboratories, maintain an in-state laboratory license to perform tests on samples from patients who reside in that state. As a condition of state licensure, these state laws may require that laboratory personnel meet certain qualifications, specify certain quality control procedures or facility requirements or prescribe record maintenance requirements. Because our U.S. laboratory is located in the State of Maryland, we are required to maintain a Maryland state laboratory license. We maintain a current license with Maryland Department of Health for our Maryland laboratory.

Failure to comply with CLIA certification and state clinical laboratory licensure requirements may result in a range of enforcement actions, including certificate or license suspension, limitation, or revocation, directed plan of action, onsite monitoring, civil monetary penalties, criminal sanctions, and revocation of the laboratory’s approval to receive Medicare and Medicaid payment for its services, as well as significant adverse publicity.

CLIA and state laws and regulations, operating together, sometimes limit the ability of laboratories to offer consumer-initiated testing (also known as “direct access testing”). CLIA certified laboratories are permitted to perform testing only upon the order of an “authorized person,” defined as an individual authorized under state law to order tests or receive test results, or both. Many states do not permit persons other than licensed healthcare providers to order tests. We currently do not offer direct access testing and our CLIA tests may only be ordered by authorized healthcare providers.

Regulatory framework for medical devices in the United States

Pursuant to its authority under the FDCA, the FDA has jurisdiction over medical devices, which are defined to include, among other things, IVDs. The FDA regulates, among other things, the research, design, development, pre-clinical and clinical testing, manufacturing, safety, effectiveness, packaging, labeling, storage, recordkeeping, pre-market clearance or approval, adverse event reporting, marketing, promotion, sales, distribution and import and export of medical devices. Unless an exemption applies, each new or significantly modified medical device we seek to commercially distribute in the United States will require either a premarket notification to the FDA requesting permission for commercial distribution under Section 510(k) of the FDCA, also referred to as a 510(k) clearance, or approval from the FDA of a PMA. Both the 510(k) clearance and premarket approval (PMA) processes can be resource intensive, expensive, and lengthy, and require payment of significant user fees.

Device classification

Under the FDCA, medical devices are classified into one of three classes-Class I, Class II or Class III-depending on the degree of risk associated with each medical device and the extent of control needed to provide reasonable assurances with respect to safety and effectiveness.

Class I includes devices with the lowest risk to the patient and are those for which safety and effectiveness can be reasonably assured by adherence to a set of FDA regulations, referred to as the General Controls for Medical Devices, which require compliance with the applicable portions of the FDA’s quality system regulation (“QSR”) facility registration and product listing, reporting of adverse events and malfunctions, and appropriate, truthful and non-misleading labeling and promotional materials. Some Class I devices also require premarket clearance by the FDA through the 510(k) premarket notification process described below. Most Class I products are exempt from the premarket notification requirements.

Class II devices are those that are subject to the General Controls, as well as special controls as deemed necessary by the FDA to ensure the safety and effectiveness of the device. These special controls can include performance standards, patient registries, FDA guidance documents and post-market surveillance. Most Class II devices are subject to premarket review and clearance by the FDA. Premarket review and clearance by the FDA for Class II devices is accomplished through the 510(k) premarket notification process.

Class III devices include devices deemed by the FDA to pose the greatest risk such as life-supporting or life-sustaining devices, or implantable devices, in addition to those deemed novel and not substantially equivalent following the 510(k) process. The safety and effectiveness of Class III devices cannot be reasonably assured solely by the General Controls and special controls described above. Therefore, these devices are subject to the PMA process, which is generally more costly and time-consuming than the 510(k) process. As part of the PMA process, the applicant must submit data and information demonstrating reasonable assurance of the safety and effectiveness of the device for its intended use to the FDA's satisfaction. Accordingly, a PMA application typically includes, but is not limited to, extensive technical information regarding device design and development, pre-clinical and clinical trial data, manufacturing information, labeling and financial disclosure information for the clinical investigators in device studies. A PMA application must also provide valid scientific evidence that demonstrates to the FDA's satisfaction a reasonable assurance of the safety and effectiveness of the device for its intended use.

The investigational device exemption (IDE) process

In the United States, absent certain limited exceptions, human clinical trials intended to support medical device clearance or approval require an IDE application. Some types of studies deemed to present "non-significant risk" are deemed to have an approved IDE once certain requirements are addressed and institutional review board, or IRB, approval is obtained. If the device presents a "significant risk" to human health, as defined by the FDA, the sponsor must submit an IDE application to the FDA and obtain IDE approval prior to commencing the human clinical trials. The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. Generally, clinical trials for a significant risk device may begin only after the IDE application is approved by the FDA and the study protocol and informed consent are approved by appropriate IRBs at the clinical trial sites. There can be no assurance that submission of an IDE will result in the ability to commence clinical trials, and although the FDA's approval of an IDE allows clinical testing to go forward for a specified number of subjects, it does not bind the FDA to accept the results of the trial as sufficient to prove the product's safety and efficacy, even if the trial meets its intended success criteria.

Such clinical trials must be conducted in accordance with the FDA's IDE regulations that govern investigational device labeling, prohibit promotion and specify an array of recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators. Such clinical trials must also comply with the FDA's good clinical practice regulations for IRB approval and for informed consent and other human subject protections. Required records and reports are subject to inspection by the FDA. The results of clinical testing may be unfavorable, or, even if the intended safety and efficacy success criteria are achieved, may not be considered sufficient for the FDA to grant marketing approval or clearance of a product. The commencement or completion of any clinical trial may be delayed or halted, or be inadequate to support approval of a PMA application, for numerous reasons, including, but not limited to, the following:

- the FDA or other regulatory authorities do not approve a clinical trial protocol or a clinical trial, or place a clinical trial on hold;
- patients do not enroll in clinical trials at the rate expected;
- patients do not comply with trial protocols;
- patient follow-up is not at the rate expected;
- patients experience adverse events;
- patients die during a clinical trial, even though their death may not be related to the products that are part of the trial;
- device malfunctions occur with unexpected frequency or potential adverse consequences;

- side effects or device malfunctions of similar products already in the market that change the FDA's view toward approval of new or similar PMAs or result in the imposition of new requirements or testing;
- institutional review boards and third-party clinical investigators may delay or reject the trial protocol;
- third-party clinical investigators decline to participate in a trial or do not perform a trial on the anticipated schedule or consistent with the clinical trial protocol, investigator agreement, investigational plan, good clinical practices, the IDE regulations or other FDA or IRB requirements;
- third-party investigators are disqualified by the FDA;
- we or third-party organizations do not perform data collection, monitoring and analysis in a timely or accurate manner or consistent with the clinical trial protocol or investigational or statistical plans, or otherwise fail to comply with the IDE regulations governing responsibilities, records and reports of sponsors of clinical investigations;
- third-party clinical investigators have significant financial interests related to us or our study such that the FDA deems the study results unreliable, or we or investigators fail to disclose such interests;
- regulatory inspections of our clinical trials or manufacturing facilities, which may, among other things, require us to undertake corrective action or suspend or terminate our clinical trials;
- changes in government regulations or administrative actions;
- the interim or final results of the clinical trial are inconclusive or unfavorable as to safety or efficacy; or
- the FDA concludes that our trial designs are unreliable or inadequate to demonstrate safety and efficacy.

The 510(k) clearance process

Under the 510(k) clearance process, the manufacturer must submit to the FDA a premarket notification, demonstrating that the device is “substantially equivalent” to a legally marketed predicate device. A predicate device is a legally marketed device that is not subject to a PMA, i.e., a device that was legally marketed prior to May 28, 1976 (pre-amendments device) and for which a PMA is not required, a device that has been reclassified from Class III to Class II or I, or a device that was previously found substantially equivalent through the 510(k) process. To be “substantially equivalent,” the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data is sometimes required to support substantial equivalence.

After a 510(k) premarket notification is submitted, the FDA determines whether to accept it for substantive review. If it lacks necessary information for substantive review, the FDA will refuse to accept the 510(k) notification. If it is accepted for filing, the FDA begins a substantive review. By statute, the FDA is required to complete its review of a 510(k) notification within 90 days of receiving the 510(k) notification. As a practical matter, clearance often takes longer, and clearance is never assured. Although many 510(k) premarket notifications are cleared without clinical data, the FDA may require further information, including clinical data, to make a determination regarding substantial equivalence, which may significantly prolong the review process. If the FDA agrees that the device is substantially equivalent, it will grant clearance to commercially market the device.

If the FDA determines that the device is not “substantially equivalent” to a predicate device, or if the device is automatically classified into Class III, the device sponsor must then fulfill the much more rigorous pre-marketing requirements of the PMA approval process, or seek reclassification of the device through the de novo process. The de novo classification process is an alternate pathway to classify medical devices that are automatically classified into Class III but which are low to moderate risk. A manufacturer can submit a petition for direct de novo review if the manufacturer is unable to identify an appropriate predicate device and the new device or new use of the device presents a moderate or low risk. De novo classification may also be available after receipt of a “not substantially equivalent” letter following submission of a 510(k) to FDA.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a new or major change in its intended use, will require a new 510(k) clearance or, depending on the modification, could require a PMA application. The FDA requires each manufacturer to determine whether the proposed change requires a new submission in the first instance, but the FDA can review any such decision and disagree with a manufacturer's determination. Many minor modifications are accomplished by a letter-to-file in which the manufacturer documents the change in an internal letter-to-file. The letter-to-file is in lieu of submitting a new 510(k) to obtain clearance for such change. The FDA can always review these letters to file in an inspection. If the FDA disagrees with a manufacturer's determination regarding whether a new premarket submission is required for the modification of an existing 510(k)-cleared device, the FDA can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or approval of a PMA application is obtained. In addition, in these circumstances, the FDA can impose significant regulatory fines or penalties for failure to submit the requisite application(s).

In addition, over the last several years, the FDA has proposed reforms to its 510(k) clearance process, and such proposals could include increased requirements for clinical data and a longer review period, or could make it more difficult for manufacturers to utilize the 510(k) clearance process for their products. For example, in November 2018, FDA officials announced forthcoming steps that the FDA intends to take to modernize the premarket notification pathway under Section 510(k) of the FDCA. Among other things, the FDA announced that it planned to develop proposals to drive manufacturers utilizing the 510(k) pathway toward the use of newer predicates. These proposals included plans to potentially sunset certain older devices that were used as predicates under the 510(k) clearance pathway, and to potentially publish a list of devices that have been cleared on the basis of demonstrated substantial equivalence to predicate devices that are more than 10 years old. In May 2019, the FDA solicited public feedback on these proposals. The FDA requested public feedback on whether it should consider certain actions that might require new authority, such as whether to sunset certain older devices that were used as predicates under the 510(k) clearance pathway. These proposals have not yet been finalized or adopted, and the FDA may work with Congress to implement such proposals through legislation.

In September 2019, the FDA finalized guidance describing an optional "safety and performance based" premarket review pathway for manufacturers of "certain, well-understood device types" to demonstrate substantial equivalence under the 510(k) clearance pathway by showing that such device meets objective safety and performance criteria established by the FDA, thereby obviating the need for manufacturers to compare the safety and performance of their medical devices to specific predicate devices in the clearance process. The FDA intends to develop and maintain a list device types appropriate for the "safety and performance based" pathway and will continue to develop product-specific guidance documents that identify the performance criteria for each such device type, as well as the testing methods recommended in the guidance documents, where feasible.

The PMA process

Following receipt of a PMA application, the FDA conducts an administrative review to determine whether the application is sufficiently complete to permit a substantive review. If it is not, the agency will refuse to file the PMA. If it is, the FDA will accept the application for filing and begin the review. The FDA has 180 days to review a filed PMA application, although the review of an application more often occurs over a significantly longer period of time. During this review period, the FDA may request additional information or clarification of information already provided and may issue a major deficiency letter to the applicant, requesting the applicant's response to deficiencies communicated by the FDA.

Before approving or denying a PMA, an FDA advisory committee may review the PMA at a public meeting and provide the FDA with the committee's recommendation on whether the FDA should approve the submission, approve it with specific conditions, or not approve it. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Prior to approval of a PMA, the FDA may conduct inspections of the clinical trial data and clinical trial sites, as well as inspections of the manufacturing facility and processes. Overall, the FDA review of a PMA application generally takes between one and three years but may take significantly longer. The FDA can delay, limit or deny approval of a PMA application for many reasons, including:

- the device may not be shown safe or effective to the FDA's satisfaction;

- the data from pre-clinical studies and/or clinical trials may be found unreliable or insufficient to support approval;
- the manufacturing process or facilities may not meet applicable requirements; and
- changes in FDA approval policies or adoption of new regulations may require additional data.

If the FDA evaluation of a PMA is favorable, the FDA will issue either an approval letter, or an approvable letter, the latter of which usually contains a number of conditions that must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of the FDA, the agency will issue a PMA approval letter authorizing commercial marketing of the device, subject to the conditions of approval and the limitations established in the approval letter. If the FDA's evaluation of a PMA application or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. The FDA may also determine that additional tests or clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and data is submitted in an amendment to the PMA, or the PMA is withdrawn and resubmitted when the data are available. The PMA process can be expensive, uncertain and lengthy and a number of devices for which the FDA approval has been sought by other companies have never been approved for marketing.

New PMA applications or PMA supplements are required for modification to the manufacturing process, equipment or facility, quality control procedures, sterilization, packaging, expiration date, labeling, device specifications, ingredients, materials or design of a device that has been approved through the PMA process. PMA supplements often require submission of the same type of information as an initial PMA application, except that the supplement is limited to information needed to support changes from the device covered by a PMA and may or may not require as extensive technical or clinical data or the convening of an advisory panel, depending on the nature of the proposed change.

In approving a PMA application, as a condition of approval, the FDA may require some form of post-approval study or post-market surveillance, whereby the applicant conducts a follow-up study or follows certain patient groups for a number of years and makes periodic reports to the FDA on the clinical status of those patients when necessary to protect the public health or to provide additional or longer term safety and effectiveness data for the device. The FDA may also approve a PMA application with other post-approval conditions intended to ensure the safety and effectiveness of the device, such as restrictions on labeling, promotion, sale, distribution and use. New PMA applications or PMA supplements may also be required for modifications to approved diagnostic tests, including modifications to manufacturing processes, device labeling and device design, based on the findings of post-approval studies.

FDA regulation of laboratory developed tests

Although the FDA regulates medical devices, including IVDs, the FDA has historically exercised its enforcement discretion and not enforced applicable provisions of the FDCA and FDA regulations with respect to LDTs, which are a subset of IVDs that are intended for clinical use and are developed, validated and offered within a single laboratory for use only in that laboratory.

Legislative and administrative proposals addressing oversight of LDTs were introduced in recent years and we expect that new legislative and administrative proposals will be introduced from time to time. It is possible that legislation could be enacted into law or regulations or guidance could be issued by the FDA which may result in new or increased regulatory requirements for us to continue to offer our LDTs or to develop and introduce new tests as LDTs. For example, in 2014 the FDA issued two draft guidance documents proposing a risk-based framework with respect to applying the FDA's oversight over LDTs. The Framework Guidance stated that the FDA intended to modify its policy of enforcement discretion with respect to LDTs in a risk-based manner consistent with the existing classification of medical devices. Thus, we believe the FDA planned to begin to enforce its medical device requirements, including premarket submission requirements, on LDTs that have historically been marketed without

FDA premarket review and oversight. In November 2016, the FDA announced its intention not to finalize the 2014 draft guidance to allow for further public discussion on an appropriate oversight approach to LDTs and to give congressional authorizing committees the opportunity to develop a legislative solution. In January 2017, the FDA issued a discussion paper on possible approaches to LDT regulation.

The FDA could ultimately modify its current approach to LDTs in a way that would subject our products marketed as LDTs to the enforcement of regulatory requirements.

Research use only or investigational use only devices

A research use only (“RUO”) device is an IVD that is in the laboratory research phase of development. RUO devices must bear prominent labeling stating: “For Research Use Only. Not for use in diagnostic procedures.” An IUD device is an IVD that in the product testing phase of development. An IUD device must bear prominent labeling stating: “For Investigational Use Only. The performance characteristics of this product have not been established.” Neither RUO or IUD devices may be used in clinical practice, and such devices cannot be advertised or promoted for clinical or diagnostic purposes. Devices that are intended for RUO or IUD and are properly labeled as RUO or IUD are exempt from compliance with the FDA requirements discussed above, including the approval or clearance and QSR requirements. A device labeled RUO or IUD but intended to be used diagnostically may be viewed by the FDA as adulterated and misbranded under the FDCA and is subject to FDA enforcement activities. The FDA may consider the totality of the circumstances surrounding distribution and use of an RUO or IUD device, including how the device is marketed, when determining its intended use.

EAP (Expedited Access Program)/Breakthrough Devices Program

The EAP was a voluntary program for certain medical devices that demonstrate the potential to address unmet medical needs for life threatening or irreversibly debilitating diseases or conditions that are subject to premarket submissions. Under the EAP, the FDA worked with device sponsors to try to reduce the time and cost from development to marketing decision without changing the FDA’s PMA standard of reasonable assurance of safety and effectiveness or any other standards of valid scientific evidence. Components of the EAP include priority review, more interactive review, senior management involvement, and assignment of a case manager.

Pursuant to the 21st Century Cures Act, the Breakthrough Devices provisions were added to the FDCA. The Breakthrough Devices Program is a voluntary program intended to expedite the review, development, assessment and review of certain medical devices that provide for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human diseases or conditions for which no approved or cleared treatment exists or that offer significant advantages over existing approved or cleared alternatives. For Breakthrough Devices, the FDA intends to provide interactive and timely communication with the sponsor during device development and throughout the review process. FDA also intends to assign staff to be available within a reasonable time to address questions by institutional review committees concerning the conditions and clinical testing expectations applicable to the investigational use of a Breakthrough Device. In addition, all submissions for devices designated as Breakthrough Devices will receive priority review, meaning that the review of the submission is placed at the top of the appropriate review queue and receives additional review resources, as needed. The Breakthrough Devices Program superseded the EAP and the previous priority review program for medical device submissions. The FDA has indicated that all participants previously granted EAP designation will have designation as breakthrough devices, and that no separate action will be necessary for sponsors of EAP-designated devices to receive breakthrough device designation for such devices.

In September 2020, we received breakthrough device designation from the FDA for our HCCscreen™.

Emergency Use Authorization

While, in most cases, a therapeutic must be approved by FDA pursuant to a new drug application (“NDA”), an abbreviated new drug application (“ANDA”), or a biologics license application (“BLA”), before the product may be sold, when there is a public health emergency involving chemical, biological, radiological, or nuclear agents, including infectious diseases like COVID-19, new therapeutics may be distributed pursuant to an Emergency Use Authorization, or EUA. Under an EUA, FDA may authorize the emergency use of an unapproved medical product or an unapproved use of an approved product for certain emergency circumstances to diagnose, treat, or prevent serious or life-threatening diseases or conditions when certain statutory criteria have been met, and after the Secretary of the Department of Health and Human Services has issued a declaration of emergency or threat justifying emergency use. EUAs are intended to address serious or life threatening diseases or conditions caused by a chemical, biological, radiological, or nuclear agent, including emerging infectious disease threats, such as the COVID-19 pandemic. To receive an EUA, the product sponsor must demonstrate that the product “may be effective” in the prevention, diagnosis, or treatment of an applicable disease or condition. Additionally, FDA must determine that the product’s known and potential benefits outweigh the known and potential risks. Further there must be no adequate, approved, and available alternative product for the indication. Potential alternative products may be unavailable if there are insufficient supplies to meet the emergency need. FDA may establish additional conditions on an EUA that are necessary to protect public health, including conditions related to information that must be disseminated to health care providers and patients, the monitoring and reporting of adverse events, and record keeping. Conditions may also relate to how a product is distributed and administered and how a product is advertised. Importantly, EUAs are not full marketing approvals. Rather, EUAs are only effective for the duration of the applicable EUA declaration. Full approval of the product under applicable standards established under the the Federal Food, Drug, and Cosmetic Act (FDCA) would be necessary to continue to distribute the product absent an EUA. EUAs may also be revised or revoked by FDA at any time.

In June 2020, we received an EUA for Genetron SARS-CoV-2 RNA Test.

Companion Diagnostics

Companion diagnostics are regulated by the FDA as medical devices. The FDA issued a final guidance document in July 2014 addressing agency policy in relation to in vitro companion diagnostic tests. The guidance explains that for some drugs and therapeutic biologics, the use of a companion diagnostic test is essential for the safe and effective use of the product, such as when the use of a product is limited to a specific patient subpopulation that can be identified by using the test. According to the guidance, the FDA generally requires the therapeutic product and the companion diagnostic to be developed and approved or cleared contemporaneously. In July 2016, the FDA issued a draft guidance intended to assist sponsors of the drug therapeutic and in vitro companion diagnostic device on issues related to co-development of the products, and in December 2018, FDA issued a draft guidance describing considerations for the development and labeling of in vitro companion diagnostic devices to support the indicated uses of multiple drug or biological oncology products.

Pervasive and continuing FDA regulation

After a device enters commercial distribution, numerous regulatory requirements continue to apply. These include:

- the FDA's QSR, which requires manufacturers, including third-party manufacturers, to follow stringent design, testing, production, control, supplier/contractor selection, complaint handling, documentation and other quality assurance procedures during all aspects of the manufacturing process;
- labeling regulations, unique device identification requirements and FDA prohibitions against the promotion of products for uncleared, unapproved or off-label uses;
- advertising and promotion requirements;
- restrictions on sale, distribution or use of a device;
- PMA annual reporting requirements;
- PMA approval of product modifications, or the potential for new 510(k) clearances for certain modifications to 510(k)-cleared devices;
- medical device reporting regulations, which require that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur;
- medical device correction and removal reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health;
- recall requirements, including a mandatory recall if there is a reasonable probability that the device would cause serious adverse health consequences or death;
- an order of repair, replacement or refund;

- device tracking requirements; and
- post-market surveillance regulations, which apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device.

The FDA has broad post-market and regulatory enforcement powers. Medical device manufacturers are subject to unannounced inspections by the FDA and other state, local and foreign regulatory authorities to assess compliance with the QSR and other applicable regulations, and these inspections may include the manufacturing facilities of any suppliers. Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include sanctions such as: warning letters, fines, injunctions, consent decrees and civil penalties; unanticipated expenditures, repair, replacement, refunds, recall or seizure of our products; operating restrictions, partial suspension or total shutdown of production; the FDA's refusal of our requests for 510(k) clearance or premarket approval of new products, new intended uses or modifications to existing products; the FDA's refusal to issue certificates to foreign governments needed to export products for sale in other countries; and withdrawing 510(k) clearance or premarket approvals that have already been granted and criminal prosecution.

U.S. Healthcare Fraud and Abuse Laws

In the U.S., we are subject to a number of federal and state healthcare regulatory laws that apply to clinical laboratories, including, but are not limited to, federal and state anti-kickback, false claims, self-referral and other healthcare fraud and abuse laws.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, in cash or kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. The federal Anti-Kickback Statute includes statutory exceptions and regulatory safe harbors that protect certain arrangements. Failure to meet the requirements of the safe harbor, however, does not render an arrangement illegal. Rather, the government may evaluate such arrangements on a case-by-case basis, taking into account all facts and circumstances, including the parties' intent and the arrangement's potential for abuse, and may be subject to greater scrutiny by enforcement agencies.

The Stark Law generally prohibits a physician who has a financial relationship, or who has an immediate family member who has a financial relationship, with entities providing designated health services, or DHS, from referring Medicare and Medicaid patients to such entities for the furnishing of DHS, unless an exception applies. The Stark Law also prohibits the entity from billing for any such prohibited referral. The definition of DHS under the Stark Law includes clinical laboratory services. Unlike the federal Anti-Kickback Statute, the Stark Law is violated if the financial arrangement does not meet an applicable exception, regardless of any intent by the parties to induce or reward referrals or the reasons for the financial relationship and the referral.

The Federal False Claims Act, or FCA, prohibits a person from knowingly presenting, or caused to be presented, a false or fraudulent request for payment from the federal government, or from making a false statement or using a false record to have a claim approved. The federal FCA further provides that a lawsuit thereunder may be initiated in the name of the United States by an individual, a "whistleblower," who is an original source of the allegations. Moreover, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute or the Stark Law constitutes a false or fraudulent claim for purposes of the civil False Claims Act. Penalties for a violation of the FCA include fines for each false claim, plus up to three times the amount of damages caused by each false claim.

Further, the Civil Monetary Penalties Statute authorizes the imposition of civil monetary penalties, assessments and exclusion against an individual or entity based on a variety of prohibited conduct, including, but not limited to offering remuneration to a federal health care program beneficiary that the individual or entity knows or should know is likely to influence the beneficiary to order or receive health care items or services from a particular provider.

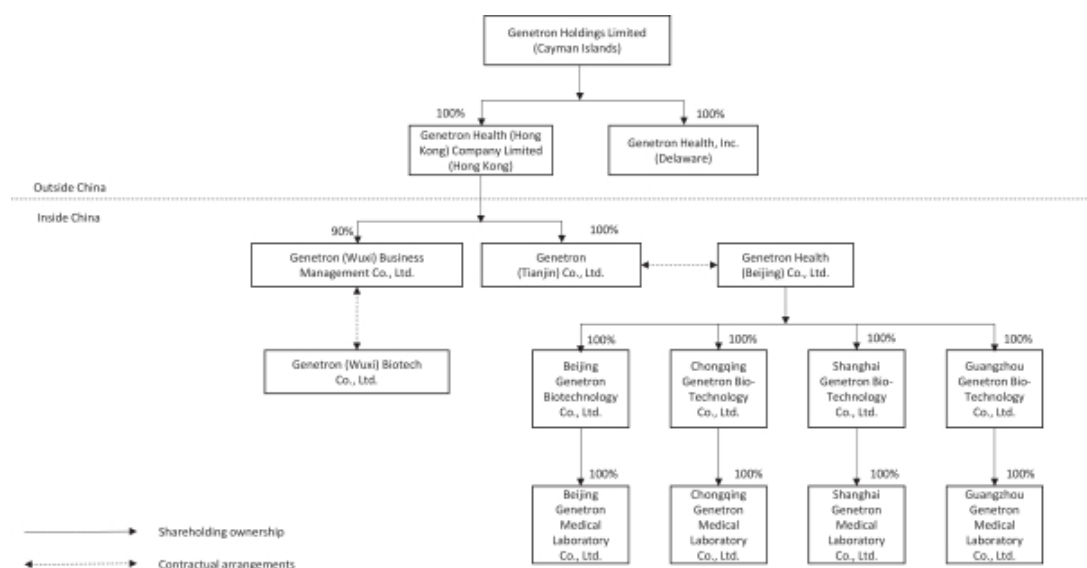
HIPAA also established federal criminal statutes that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the Anti-kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

Several states in which we operate have also adopted similar fraud and abuse laws as described above. The scope of these laws and the interpretations of them vary from state to state and are enforced by state courts and regulatory authorities, each with broad discretion. Some state fraud and abuse laws apply to items or services reimbursed by any payor, including patients and commercial insurers, not just those reimbursed by a federally funded healthcare program.

Violation of any of these laws or any other governmental regulations that apply may result in significant penalties, including, without limitation, administrative civil and criminal penalties, damages, disgorgement, fines, additional reporting requirements and compliance oversight obligations, contractual damages, the curtailment or restructuring of operations, exclusion from participation in governmental healthcare programs and/ or imprisonment.

4.C. Organizational Structure

The following diagram illustrates our corporate structure as of the date of this annual report, including our material subsidiaries and VIEs:



Contractual Arrangements with our VIEs and their Shareholders

Investment in the field of technology development and applications relating to human stem cells and genomic diagnosis and treatment is a prohibited category for foreign investment in the PRC. Precision oncology services fall within the scope of such prohibited category. Therefore, we established our VIEs, Genetron Health (Beijing) Co., Ltd., or Genetron Health and Genetron (Wuxi) Biotech Co., Ltd., to conduct precision oncology services business activities. We exercise effective control over our Genetron Health through contractual arrangements among Genetron (Tianjin) Co., Ltd., Genetron Health and its shareholders; and we exercise effective control over Genetron (Wuxi) Biotech Co., Ltd. through contractual arrangements among Genetron (Wuxi) Business Management Co., Ltd, Genetron (Wuxi) Biotech Co., Ltd. and its shareholders.

The contractual arrangements allow us to:

- exercise effective control over our VIEs;
- receive substantially all of the economic benefits of our VIEs; and
- have an exclusive option to purchase all or part of the equity interest in and/or assets of our VIEs when and to the extent permitted by laws.

As a result of these contractual arrangements, we are the primary beneficiary of our VIEs and, therefore, have consolidated the financial results of our VIEs in our consolidated financial statements in accordance with IFRS.

In the opinion of Shihui Partners, our PRC Legal Counsel:

- the ownership structures of our VIEs, currently do not, and will not result in any violation of the applicable PRC laws or regulations currently in effect; and
- the contractual arrangements among the PRC Subsidiaries, our VIEs and their shareholders, are governed by PRC laws or regulations, and are currently valid, binding and enforceable in accordance with the applicable PRC laws or regulations currently in effect, and do not result in any violation of the applicable PRC laws or regulations currently in effect.

However, our PRC Legal Counsel has also advised us that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules. In particular, in March 2019, the National People's Congress of the PRC adopted the *Foreign Investment Law*, which became effective on January 1, 2020. Among other things, the *Foreign Investment Law* defines the "foreign investment" as investment activities in China by foreign investors in a direct or indirect manner, including those circumstances explicitly listed thereunder as establishing new projects or foreign invested enterprises or acquiring shares of enterprises in China, and other approaches of investment as stipulated by laws, administrative regulations or otherwise regulated by the State Council. The *Foreign Investment Law* leaves uncertainty as to whether foreign investors' controlling PRC onshore variable interest entities via contractual arrangements will be recognized as "foreign investment" and thus be subject to the restrictions/prohibitions on foreign investments. Accordingly, the PRC regulatory authorities may take a view that is contrary to the opinion of our PRC legal counsel.

The following is a summary of the contractual arrangements by and among the PRC Subsidiaries, our VIEs and the shareholders of our VIEs and their spouses, as applicable. For the complete text of these contractual arrangements, please see the copies filed as exhibits to the registration statement filed with the SEC of which this annual report forms a part. For a more detailed description of the risks related to these contractual arrangements and our corporate structure, please see "Item 3. Key Information—3.D. Risk Factors—Risks Relating to Our Corporate Structure."

Agreements that Provide us with Effective Control over the VIEs

Shareholder Voting Rights Entrustment Agreements. Pursuant to (i) the Shareholder Voting Rights Entrustment Agreement dated July 30, 2019 among the Genetron (Tianjin) Co., Ltd., Genetron Health and its shareholders, and (ii) the Shareholder Voting Rights Entrustment Agreement dated December 7, 2020 among the Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and its shareholders, these shareholders irrevocably authorize the respective PRC Subsidiaries to act as his or her attorney-in-fact to exercise all of his or her rights as a shareholder of respective VIE, including, but not limited to, the right to call and attend shareholders' meetings, execute and deliver any and all written resolutions and meeting minutes as a shareholder, vote by itself or by proxy on any matters discussed on shareholders' meetings, sell, transfer, pledge or dispose of any or all of the shares, nominate, appoint or remove the directors, supervisors and senior management, and other shareholders rights conferred by the articles of association of such VIE and the relevant laws and regulations. Each of these agreements shall terminate once (i) either of the PRC Subsidiaries directly holds the entire assets of the respective VIE, and such PRC Subsidiary is allowed to conduct the business of the respective VIE under the then PRC laws, or (ii) either of the PRC Subsidiaries is registered as the sole shareholder of respective VIE, and such PRC Subsidiary is allowed to conduct the business of the respective VIE under the then PRC laws. The shareholders shall not have the right to terminate these agreements or revoke the appointment of the attorney-in-fact without the prior written consent of the respective PRC Subsidiary.

Spousal Consent Letters. The spouse of each of Mr. Sizhen Wang, Mrs. Xiaoge Wang, Mrs. Shuyan Wei and Mr. Yuchen Jiao has signed a spousal consent letter. Under the spousal consent letter, the spouse unconditionally and irrevocably waives any rights or entitlements whatsoever to such shares that may be granted to his/her pursuant to applicable laws and undertakes not to make any assertion of rights to such shares. The spouse agrees and undertakes that he/she will take all necessary actions to ensure the proper performance of the contractual arrangements, and will be bound by the contractual arrangements in case he/she obtains any equity of respective VIE due to any reason.

Equity Interest Pledge Agreements. Pursuant to (i) the Equity Interest Pledge Agreement dated July 30, 2019 among Genetron (Tianjin) Co., Ltd. and its shareholders and (ii) the Equity Interest Pledge Agreement dated December 7, 2020 among the Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and its shareholders, the shareholders of VIEs have pledged 100% equity interest in VIEs in favor of PRC Subsidiaries to guarantee the performance by VIEs and their shareholders of their obligations under the Exclusive Business Cooperation Agreements, the Exclusive Option Agreements and any other agreements to be executed among our PRC Subsidiaries, our VIEs and their shareholders from time to time. If VIEs or their respective shareholders breach their contractual obligations under these agreements, the respective PRC Subsidiary, as pledgee, will have the right to dispose of the pledged shares entirely or partially. The shareholders of VIEs also agreed, without the respective PRC Subsidiary's prior written consent, not to transfer the pledged shares, establish or permit the existence of any security interest or other encumbrance on the pledged shares, or dispose of the pledged shares by any other means, except by the performance of the Exclusive Option Agreements. We have completed the registration of the pledge of equity interests in VIEs with the relevant office of Administration for Industry and Commerce in accordance with applicable PRC laws.

Agreements that Allow us to Receive Economic Benefits from the VIEs

Exclusive Business Cooperation Agreements. Pursuant to (i) the Exclusive Business Cooperation Agreement dated July 2, 2019 between the Genetron (Tianjin) Co., Ltd. and Genetron Health and (ii) the Exclusive Business Cooperation Agreement dated December 7, 2020 between the Genetron (Wuxi) Business Management Co., Ltd. and Genetron (Wuxi) Biotech Co., Ltd., the respective PRC Subsidiary has the exclusive right to provide the respective VIE with technical support, business support and consulting services in return for fees equal to 100% of the consolidated net profits of such VIE. Without the PRC Subsidiaries' prior written consents, the respective VIE shall not, directly and indirectly, obtain the same or similar services as provided under these agreements from any third party, or enter into any similar agreement with any third party. The PRC Subsidiaries have the right to determine the service fee charged to the respective VIE under these agreements by considering, among other things, the complexity of the services, the time spent by employees of the PRC Subsidiaries to provide the services, contents and commercial value of the service provided, as well as the benchmark price of similar services in the market. The PRC Subsidiaries will have the exclusive ownership of all intellectual property rights developed by performance of these agreements. Each of the Exclusive Business Cooperation Agreements will remain effective until it is terminated at the discretion of the respective PRC Subsidiary or upon the transfer of all the shares of such VIE to the respective PRC Subsidiary.

Agreements that Provide us with the Option to Purchase the Equity Interests in the VIEs

Exclusive Option Agreements. Pursuant to (i) the Exclusive Option Agreement dated July 30, 2019 among the Genetron (Tianjin) Co., Ltd., Genetron Health and its shareholders and (ii) the Exclusive Option Agreement dated December 7, 2020 among Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and its shareholders, the shareholders of VIEs irrevocably granted the PRC Subsidiaries an exclusive option to purchase all or part of their equity interests in such VIEs at the lowest price permitted by applicable PRC laws. Those shareholders further undertake that they will neither allow the encumbrance of any security interest in such VIEs, except for the pledge created pursuant to the Equity Interest Pledge Agreements, nor transfer, mortgage or otherwise dispose of their legal or beneficial interests in VIEs without the prior written consent of the respective PRC Subsidiary, and will cause the shareholders' meeting and/or the board of directors and/or the executive directors of VIEs not to approve such proposal. Each of these agreements will remain effective until it is terminated at the discretion of the respective PRC Subsidiary or upon the transfer of all the equity interest in such VIEs to the respective PRC Subsidiary.

4.D. Property, Plants and Equipment

We are headquartered in Beijing, China and have material offices and clinical laboratories in Shanghai, Chongqing, Guangzhou, Tianjin, China and Maryland, USA. As of December 31, 2020, we had leased office space, plants and clinical laboratories for our material facilities as summarized below. We lease our premises under operating lease agreements from independent third parties. See Item 4. "Information on the Company—B. Business Overview—Property and Facilities."

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included elsewhere in this annual report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those we describe under "Item 3.D. Risk Factors" and elsewhere in this annual report.

5.A. Operating Results

Key Factors Affecting Our Results of Operations

General Factors Affecting Our Results of Operations

Our business and results of operations are affected by a number of general factors, including:

- global macroeconomic environment, especially China's overall economic growth;
- technology development and commercialization of precision oncology industry;
- changes in regulations over China's precision oncology industry; and

- market acceptance of precision oncology services and products.

Unfavorable changes in any of these general factors could materially and adversely affect our business and results of operations.

Specific Factors Affecting Our Results of Operations

Increased adoption of our diagnosis and monitoring services and products

Our revenue growth is mainly driven by our ability to increase the adoption of our services and products. For the years of 2018, 2019 and 2020, we performed approximately 15,600, 22,900 and 21,900 diagnostic tests, respectively. The results of our operations will largely depend on our ability to attract both individual customers and institutional clients, as well as retain and broaden adoption with existing institutional clients. Because our technology is relatively novel to customers in China, we have established a robust sales and marketing team to provide doctors, patients and other clients with the customized support. We especially focus on developing our partnership with both national and regional KOLs and specialists in local hospitals to promote and raise awareness of the clinical application of precision oncology among physicians and patients. Since 2017 and as of December 31, 2020, we had provided services and products to patients in over 500 hospitals in China.

Comprehensive offerings for broadening monetization channels

We continuously review market demands in precision oncology medicine industry, so we can strategically develop and expand our services and products. For our diagnosis and monitoring services, we have developed LDT services covering whole exome, comprehensive gene panels, and focused gene panels to address different needs across eight out of the top ten major cancer types in China. We are also a pioneer in IVD registration for both platforms and assays. We have recently entered early cancer screening market with LDT services to capture the long-term potential for early cancer screening targeting asymptomatic individuals who are at a higher risk of developing cancer and individuals who are generally concerned with cancer risks. In addition, we monetize capacity of our high-throughput sequencing platforms to provide genomic sequencing services to peer companies and institutions. We believe our comprehensive services and products will effectively address market demands and therefore drive our revenues.

Investment in technology and product innovation to support commercial growth

Investment in research and development, including development of new products, is critical to establish and maintain our industry leading position. We have developed innovative technology platforms since our inception, including Genetron One-Step Seq™ Method, ctDNA low frequency mutations detection technology and Mutation Capsule™ technology. We conduct adequate and well-controlled trials to collect scalable data for supporting the development of our technologies. Those core technologies are the basis of our growth. Our pipeline products are the main drivers for our future growth. We plan to allocate more resources to develop and market our new services and products, especially early screening services and development services. We expect to increase our research and development expense with the goal of fueling further innovation.

Obtaining regulatory approval for our pipeline products

There is an increasing demand of hospitals to provide one-stop IVD genomic testing services as the concept of precision oncology wins gradual acceptance among physicians. Adoption by public hospitals and insurance coverage often requires registration from the NMPA—each IVD product must be registered in association with a specific sequencing platform. Companies with NMPA-registered IVD products and platforms are expected to win larger market shares. We have an experienced regulatory team dedicating in handling regulatory approval for our pipeline IVD products and platforms. As of December 31, 2020, we have an in-depth IVD pipeline of seven assays, covering both diagnosis and monitoring services and early screening. We obtained NMPA approval for Genetron S5 platform on November 1, 2019 and Genetron S2000 platform on February 5, 2020. We believe once we obtained NMPA registrations for these products, we will gain significant advantage compared to our peers and therefore, achieve future growth and create new drivers for our revenues. We believe our leadership and experience in obtaining regulatory approvals of our pipeline products will be the foundation to further achieve economies of scale. On contrast, any failure to obtain regulatory approval for our pipeline products may cause adverse impact on the results of operations.

Expanding collaboration with biopharmaceutical company customers

We intend to pursue further growth in our collaboration with biopharmaceutical companies. Our revenue and business opportunities depend in part on our ability to attract new biopharmaceutical company customers and to maintain and expand relationships with existing customers. We believe our products and services could be used by biopharmaceutical companies for a wide range of applications, including discovery of new targets and mechanisms of acquired resistance, retrospective sample analysis to rapidly identify biomarkers associated with response and lack of response, prospective screening and patient referral to accelerate clinical trial enrollment, and companion diagnostic development to support the approval and commercialization of therapeutics and may become one of our revenue drivers. For instance, we have recently entered into a multi-year collaboration agreement with CStone to develop CDx tests to support CStone's development and commercialization of one of its licensed products in Greater China. As of December 31, 2020 we have partnered with 35 biopharmaceutical companies in genomics research and clinical development. We will further optimize our research and development capacities to satisfy the potential demands of existing and new biopharmaceutical company customers.

Managing our costs and expenses effectively

Our ability to manage our costs and expenses efficiently is critical to the success of our business. Our cost of revenue primarily consists of cost of raw materials, labor cost, equipment and infrastructure expenses associated with diagnosis and monitoring and development services. We expect our cost of revenue to grow in absolute amount in line with our growth. Meanwhile, driven by the increased economics of scale, our cost of revenue as a percentage of revenues decreased from 55.2% in 2019 to 38.7% in 2020.

We incurred operating expenses in sales and marketing, general administration, and research and development. In particular, we have historically incurred a substantial amount of selling expenses, which was primarily attributed to our efforts to promote our expended product and service offerings and expand our market coverage. Such marketing and promotion efforts solidify existing customer relationships and expand business reach, which in turn will generate more revenue in the long term. We expect our operating expenses to grow in absolute amount with our continuing investments in sales and marketing, the development of new technologies and innovative products, and additional costs resulted from operating as a public company. Meanwhile, our operating expenses, representing the sum of selling expenses, administrative expenses, research and development expenses net impairment losses on financial and contract assets and other income, as a percentage of revenues decreased from 139.7% in 2019 to 124.5% in 2020.

We plan to leverage our growing bargaining power to negotiate favorable pricing with our raw material suppliers, and we are able to utilize infrastructure and manage operations more effectively, both of which will allow us to increase our gross margin.

Key Components of Results of Operations

Revenue

We derive our revenues from (i) diagnosis and monitoring; and (ii) development services.

Our chief operating decision maker has determined that we have three reportable segments, namely (i) diagnosis and monitoring—provision of LDT services, (ii) diagnosis and monitoring—sale of IVD products and (iii) development services.

Diagnosis and monitoring. Diagnosis and monitoring revenue is generated from the sales from diagnosis and monitoring service business and early screening business in the form of LDT services and IVD products. For LDT services rendered for diagnosis and monitoring service business, we primarily sell LDT services either directly to patients or to hospitals that have entered into testing services agreements with us. For IVD products sold for diagnosis and monitoring service business, we sell our IVD products either directly to hospitals or through distributors to reach more hospitals. We expected our revenue from diagnosis and monitoring—sale of IVD products to continue to grow.

For LDT services rendered for early screening business, we retail such tests targeting higher risk population directly or sell such tests to medical examination centers or enterprises to reach a larger customer base. We expect our revenue from LDT services rendered for early screening business to continue to grow.

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We expect our revenue from diagnosis and monitoring to increase as a result of our increased brand awareness, further penetration of the market, broader coverage of hospitals, institutions and enterprises, broader adoptions of current IVD products and the registration of our pipeline IVD products.

Development services. Development services revenue is generated from research services and sequencing services. We provide research services to hospitals, colleges and other institutional customers, sequencing services to genomic sequencing companies, and cooperate with biopharmaceutical companies in development of new drugs. We expect our revenue from development services to increase primarily driven by our expanded collaboration with biopharmaceutical companies.

Cost of Revenue

Our cost of revenue mainly consists of cost of raw materials, labor cost, equipment and infrastructure expenses associated with diagnosis and monitoring and development services. Raw materials primarily include reagents such as enzymes, plasmid and buffer solution. Infrastructure expenses include depreciation of laboratory equipment, rent costs, amortization of information technology costs. We expect that our cost of revenue will increase in the foreseeable future in line with the growth of services and products we offer.

Selling Expenses

Our selling expenses consist primarily of employee benefits for our selling and marketing personnel, marketing and promotion expenses from our direct sales, and other expenses. We have devoted significant resources to educating the market, including hosting medical conferences and seminars, promoting awareness, and establishing collaboration with leading KOLs. We expect our selling and marketing expenses to increase in the foreseeable future, as we plan to continue investing substantially in our sales and marketing efforts to expand our sales and marketing team, broaden adoption of our existing services and products, further educate and promote precision oncology market, and promote our pipeline services and products to be launched in 2021.

Administrative Expenses

Our administrative expenses consist primarily of compensation for our management and administrative personnel, listing expenses, and professional fees. We expect that our administrative expenses will continue to increase, primarily due to increased headcount and costs associated with operating as a public company, including expenses related to legal, accounting, maintaining compliance with exchange listing and requirements of the SEC, director and officer insurance premiums and investor relations.

Research and Development Expenses

Our research and development expenses mainly consist of cost of research and development materials and equipment, research and development personnel compensation expenses, and rental, utilities and office expenses. These expenses are primarily related to our clinical trials and validation. Research and development costs are expensed as incurred. We expect our research and development expenses to increase in the foreseeable future as we continue to make investments in expanding our technology infrastructure and developing new services and products.

Results of Operations

The following table summarizes our consolidated results of operations both in absolute amounts and as percentages of our revenue from contracts with customers for the periods presented. This information should be read together with our consolidated financial statements and related notes included elsewhere in this annual report. The operating results in any period are not necessarily indicative of the results that may be expected for any future period.

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	For the Year Ended December 31,					
	2018		2019		2020	
	RMB	%	RMB	%	RMB	US\$
	(in thousands, except for percentages, shares and per share data)					
Revenue	225,176	100.0	323,425	100.0	424,485	65,055
Cost of revenue	(132,450)	(58.8)	(178,435)	(55.2)	(164,268)	(25,175)
Gross profit	92,726	41.2	144,990	44.8	260,217	39,880
Selling expenses	(182,474)	(81.0)	(253,558)	(78.4)	(246,959)	(37,848)
Administrative expenses	(88,233)	(39.2)	(117,169)	(36.2)	(126,318)	(19,359)
Research and development expenses	(71,411)	(31.7)	(91,697)	(28.4)	(148,999)	(22,835)
Net impairment losses on financial and contract assets	(658)	(0.3)	(2,733)	(0.8)	(14,843)	(2,275)
Other income and gains—net	17,074	7.6	13,297	4.1	8,526	1,307
Operating expenses	(325,702)	(144.6)	(451,860)	(139.7)	(528,593)	(81,010)
Operating loss	(232,976)	(103.5)	(306,870)	(94.9)	(268,376)	(41,130)
Finance income	1,615	0.7	2,483	0.8	28,330	4,341
Finance costs	—	—	(11,704)	(3.6)	(5,627)	(862)
Finance income /(costs)—net	1,615	0.7	(9,221)	(2.9)	22,703	3,479
Financial Instruments with preferred rights						
—loss on fair value changes	(233,632)	(103.8)	(333,401)	(103.1)	(2,823,370)	(432,700)
—other losses	—	—	(26,542)	(8.2)	—	—
Loss before income tax	(464,993)	(206.5)	(676,034)	(209.0)	(3,069,043)	(470,351)
Income tax expense	—	—	—	—	—	—
Loss for the year	(464,993)	(206.5)	(676,034)	(209.0)	(3,069,043)	(470,351)
Loss attributable to:						
Owners of the Company	(464,993)	(206.5)	(676,034)	(209.0)	(3,069,043)	(470,351)
Loss per share						
—Basic and diluted	(4.09)	N/A	(5.41)	N/A	(10.18)	(1.56)

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Revenue

We generate revenue mainly from (i) diagnosis and monitoring and (ii) development services.

The following table sets forth our revenue in absolute amounts and as percentages of total revenue for the periods indicated:

	For the Year Ended December 31,				
	2019		2020		
	RMB	%	RMB	US\$	%
	(in thousands, except for percentages)				
Revenues from					
Diagnosis and monitoring	269,484	83.3	385,684	59,108	90.9
provision of LDT services	234,569	72.5	291,702	44,705	68.7
sale of IVD products	34,915	10.8	93,982	14,403	22.2
Development services	53,941	16.7	38,801	5,947	9.1
Total	323,425	100.0	424,485	65,055	100.0

Our revenue increased by 31.3% from RMB323.4 million in 2019 to RMB424.5 million (US\$65.1 million) in 2020. The growth of our revenue was largely driven by the increase in revenue generated from diagnosis and monitoring.

Diagnosis and monitoring

Our diagnosis and monitoring revenue consists of revenue generated from provision of LDT services and sale of IVD products. Our revenue generated from diagnosis and monitoring increased by 43.1% from RMB269.5 million in 2019 to RMB385.7 million (US\$59.1 million) in 2020. Such increase was driven by both the increase in revenue generated from provision of LDT services and sale of IVD products. Our revenue generated from the provision of LDT services in 2020 accounted for 75.6% of our total diagnosis and monitoring revenue in 2020.

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The increase in the revenue generated from provision of LDT services was mainly attributable to the increased average selling price of our diagnostic tests. LDT diagnostic tests sold in 2020 totaled approximately 21,900 units, representing a decrease of 4.1% compared to the number of LDT diagnostic tests sold in 2019, primarily due to the impact of COVID throughout the year. However, the average selling price increased compared to the same period in 2019, attributable to a shift to higher value products such as Onco PanScan™, and better pricing management. In 2020, sales of LDT services included sales of our early screening test, HCCscreen™, in the form of LDT services.

Our revenue generated from sales of IVD products increased by 169.2% from RMB34.9 million in 2019 to RMB94.0 million (US\$14.4 million) in 2020. Such increase was mainly driven by the increase in the number of assays and sequencing platforms sold in 2020, notably the Genetron S5 instrument and 8-gene Lung Cancer Assay (Tissue). Our revenue generated from sales of IVD products in 2020 accounted for 24.4% of our total diagnosis and monitoring revenue.

Development services

Our revenue generated from development services decreased by 28.1% from RMB53.9 million in 2019 to RMB38.8 million (US\$5.9 million) in 2020, mainly driven by a decreased of RMB22.1 million (US\$3.4 million) in the revenues generated from our sequencing services, reflecting the continued adjustment of our business strategy towards biopharmaceutical services. Biopharmaceutical revenue increased in 2020 compared to 2019.

Cost of revenue

Our cost of revenue primarily consists of (i) diagnosis and monitoring and (ii) development services. The following table sets forth cost of revenue in absolute amounts and as percentages of revenue for the periods indicated:

	For the Year Ended December 31,				
	2019		2020		
	RMB	%	RMB	US\$	%
	(in thousands, except for percentages)				
Revenues	323,425	100.0	424,485	65,055	100.0
Cost of revenue:					
Diagnosis and monitoring	115,976	35.9	127,248	19,501	30.0
provision of LDT services	93,027	28.8	93,532	14,334	22.1
sale of IVD products	22,949	7.1	33,716	5,167	7.9
Development services	62,459	19.3	37,020	5,674	8.7
Total	178,435	55.2	164,268	25,175	38.7

Our cost of revenue decreased by 7.9% from RMB178.4 million in 2019 to RMB164.3 million (US\$25.2 million) in 2020. Meanwhile, our cost of revenue as a percentage of our revenues decreased from 55.2% in 2019 to 38.7% in 2020, mainly driven by the increased economies of scale and lower cost of certain reagents.

Cost of revenue for diagnosis and monitoring increased by 9.7% from RMB116.0 million in 2019 to RMB127.2 million (US\$19.5 million) in 2020. The increase in cost of revenue for diagnosis and monitoring was attributed to (i) an increase in cost of revenue associated with LDT services from RMB93.0 million in 2019 to RMB93.5 million (US\$14.3 million) in 2020; and (ii) an increase in cost of revenue associated with IVD products from RMB22.9 million in 2019 to RMB33.7 million (US\$5.2 million) in 2020, which in turn was in line with growth of our LDT services and IVD products sold. Meanwhile, the cost of revenue for diagnosis and monitoring as a percentage of revenues from diagnosis and monitoring decreased from 43.0% in 2019 to 33.0% in 2020.

Cost of revenue for development services decreased by 40.7% from RMB62.5 million in 2019 to RMB37.0 million (US\$5.7 million) in 2020, and the cost of revenue for development services as a percentage of revenues from development services decreased from 115.8% in 2019, to 95.4% in 2020, which is in line with the decrease of our revenue from sequencing services.

Gross profit

As a result of the foregoing, our gross profit increased by 79.5% from RMB145.0 million in 2019 to RMB260.2 million (US\$39.9 million) in 2020. In particular, our gross profit for diagnosis and monitoring increased by 68.4% from RMB153.5 million in 2019 to RMB258.4 million (US\$39.6 million) in 2020. Our gross margin increased from 44.8% in 2019 to 61.3% in 2020.

The following table sets forth gross profit and gross margin for the periods indicated:

	For the Year Ended December 31,		
	2019	2020	
	RMB	RMB	US\$
	(in thousands, except for percentages)		
Gross profit			
Diagnosis and monitoring	153,508	258,436	39,607
provision of LDT services	141,542	198,170	30,371
sale of IVD products	11,966	60,266	9,236
Development services	(8,518)	1,781	273
Total	144,990	260,217	39,880
Gross margin			
Diagnosis and monitoring	57.0%	67.0%	—
provision of LDT services	60.3%	67.9%	—
sale of IVD products	34.3%	64.1%	—
Development services	(15.8%)	4.6%	—
Total	44.8%	61.3%	—

Selling expenses

Our selling expenses decreased by 2.6% from RMB253.6 million in 2019 to RMB247.0 million (US\$37.8 million) in 2020, which was mainly attributable to (i) decreased spending on business travels as a result of COVID-19 and (ii) relatively stable level of employee compensation attributable to our sales and marketing personnel. Our selling expenses as a percentage of our net revenues decreased from 78.4% in 2019 to 58.2% in 2020.

Administrative expenses

Our administrative expenses increased by 7.8% from RMB117.2 million in 2019 to RMB126.3 million (US\$19.4 million) in 2020. The increase in administrative expenses was primarily due to an increase in headcount and professional fees.

Research and development expenses

Our research and development expenses increased by 62.5% from RMB91.7 million in 2019 to RMB149.0 million (US\$22.8 million) in 2020, which was mainly attributable to continued innovation efforts, including development of new products and technologies, clinical trial activities, more headcount for research and development personnel and share-based compensation.

Net impairment losses on financial and contract assets

Our net impairment losses on financial and contract assets increased by 443.1% from RMB2.7 million in 2019 to RMB14.8 million (US\$2.3 million) in 2020, which was primarily due to (i) an increase in trade receivables, which is in line with the increase of revenues and (ii) an increased number of public hospital customers and certain other customers, who have longer payment cycles.

Other income—net

Our other income—net was RMB8.5 million (US\$1.3 million) in 2020 compared to RMB13.3 million in 2019, a decrease of RMB4.8 million, or 35.9%. The decrease was primarily attributable to decreased government subsidy.

Operating loss

As a result of the foregoing, our operating loss decreased by 12.5% from RMB306.9 million in 2019 to RMB268.4 million (US\$41.1 million) in 2020.

Finance income

Our finance income was RMB28.3 million (US\$4.3 million) in 2020, as compared to RMB2.5 million in 2019, which was primarily attributable to the increase in net exchange gains.

Finance costs

We incurred RMB11.7 million and RMB5.6 million (US\$0.9 million) finance costs in 2019 and 2020, respectively. The finance costs incurred in 2020 was primarily attributable to the interest of lease liabilities and financing activities.

Fair value loss of financial instruments with preferred right

We recorded RMB333.4 million and RMB2,823.4 million (US\$432.7 million) fair value loss of financial instruments with preferred right in 2019 and 2020, respectively. With the significant increase of valuation directly observable through the IPO offering price, the fair value loss of financial instruments with preferred rights recorded was significantly higher, amounting to RMB2,823.4 million (US\$432.7 million) in 2020. Upon the consummation of the IPO, all preferred shares were converted to ordinary shares and no further impact after the consummation of the IPO.

Other loss of financial instruments with preferred right

We recorded RMB26.5 million and zero other loss of financial instruments with preferred right in 2019 and 2020, respectively. The other loss of financial instruments with preferred right was primarily attributable to the loss incurred in connection with our series C-2 round of financing in 2019 due to the fair value of the preferred shares issued exceeding the sum of consideration of the ordinary shares and the fair value of the historical preferred shares being replaced.

Loss for the year

As a result of the foregoing, our loss for the period increased by 354.0% from RMB676.0 million in 2019 to RMB3,069.0 million (US\$470.4 million) in 2020.

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Year Ended December 31, 2019 Compared to Year Ended December 31, 2018” beginning on page 100 of the Company’s prospectus filed with the Securities and Exchange Commission on July 18, 2020 pursuant to Rule 424(b)(4) under the Securities Act (Securities Act File No. 333-234805) incorporated by reference into this annual report.

Non-IFRS Financial Measures

We use non-IFRS net loss and non-IFRS net loss per ordinary share for the year, which are non-IFRS financial measures, in evaluating our operating results and for financial and operational decision-making purposes. We believe that non-IFRS net loss and non-IFRS net loss per ordinary share help identify underlying trends in our business that could otherwise be distorted by the effect of certain expenses that we include in our loss for the year. We believe that non-IFRS net loss and non-IFRS net loss per ordinary share for the year provide useful information about our results of operations, enhance the overall understanding of our past performance and future prospects and allows for greater visibility with respect to key metrics used by our management in our financial and operational decision-making.

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Non-IFRS net loss and non-IFRS net loss per ordinary share for the year should not be considered in isolation or construed as an alternative to operating profit, net loss for the year or any other measure of performance or as an indicator of its operating performance. Investors are encouraged to review non-IFRS net loss and non-IFRS net loss per ordinary share for the year and the reconciliation to its most directly comparable IFRS measures. Non-IFRS net loss and non-IFRS net loss per ordinary share for the year presented here may not be comparable to similarly titled measures presented by other companies. Other companies may calculate similarly titled measures differently, limiting their usefulness as comparative measures to our data. We encourage investors and others to review its financial information in its entirety and not rely on a single financial measure.

Non-IFRS net loss and non-IFRS net loss per ordinary share for the year represent net loss for the year excluding share-based compensation expenses, fair value changes of financial instruments with preferred rights and other loss of financial instruments with preferred rights (if applicable).

The following table sets forth a reconciliation of non-IFRS net loss for the years ended December 31, 2018, 2019 and 2020, to net loss for the year, its most directly comparable IFRS measure:

	Year ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Loss for the year	(464,993)	(676,034)	(3,069,043)	(470,351)
Adjustments:				
Share-based compensation	29,644	35,884	29,951	4,590
Financial instruments with preferred rights				
-loss on fair value changes	233,632	333,401	2,823,370	432,700
-other loss	—	26,542	—	—
Non-IFRS Loss	<u>(201,717)</u>	<u>(280,207)</u>	<u>(215,722)</u>	<u>(33,061)</u>
Attributable to:				
Owners of the Company	<u>(201,717)</u>	<u>(280,207)</u>	<u>(215,722)</u>	<u>(33,061)</u>

The following table sets forth a reconciliation of non-IFRS net loss per ordinary share for the years ended December 31, 2018, 2019 and 2020 to net loss per ordinary share for the year, its most directly comparable IFRS measure:

	Year ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Non-IFRS loss per share				
- Basic and diluted	<u>(1.77)</u>	<u>(2.24)</u>	<u>(0.72)</u>	<u>(0.11)</u>
Non-IFRS loss per ADS (5 ordinary shares equal to 1 ADS)				
- Basic and diluted			<u>(3.58)</u>	<u>(0.55)</u>
Share used in non-IFRS loss per ordinary share computation:				
- Basic and diluted	113,757,127	124,894,707	301,379,911	301,379,911
ADS used in non-IFRS loss per ADS computation:				
- Basic and diluted			60,275,982	60,275,982

Taxation

Cayman Islands

We are incorporated in the Cayman Islands. Under the current laws of the Cayman Islands, we are not subject to income, corporation or capital gains tax in the Cayman Islands. In addition, our payment of dividends, if any, is not subject to withholding tax in the Cayman Islands.

Hong Kong

Our subsidiary incorporated in Hong Kong was subject to Hong Kong profits tax at a rate of 16.5% for taxable income earned in Hong Kong before April 1, 2018. Starting from the financial year commencing on April 1, 2018, the two-tiered profits tax regime took effect, under which the tax rate is 8.25% for assessable profits on the first HK\$2 million and 16.5% for any assessable profits in excess of HK\$2 million.

PRC

Our subsidiaries and consolidated VIEs in China are companies incorporated under PRC law and, as such, are subject to PRC enterprise income tax on their taxable income in accordance with the relevant PRC income tax laws. Pursuant to the PRC EIT Law, which became effective on January 1, 2008 and amended on December 29, 2018, a uniform 25% enterprise income tax rate is generally applicable to both foreign-invested enterprises and domestic enterprises, except where a special preferential rate applies. Certain entities in PRC within our group have been eligible as High/New Technology Enterprises (“HNTEs”) with preferential tax rate of 15% as set out in PRC EIT Law. The enterprise income tax is calculated based on the entity’s global income as determined under PRC tax laws and accounting standards.

We were subject to VAT at a rate of 3%, 6% or 16% on the services we provided and related surcharges before April 1, 2019 and are subject to VAT at a rate of 3%, 6% or 13% on the services we provide and related surcharges after April 1, 2019. We are also subject to surcharges on VAT payments in accordance with PRC law.

As a Cayman Islands holding company, we may receive dividends from our PRC Subsidiaries through Genetron Health (Hong Kong) Company Limited. The PRC EIT Law and its implementing rules provide that dividends paid by a PRC entity to a nonresident enterprise for income tax purposes is subject to PRC withholding tax at a rate of 10%, subject to reduction by an applicable tax treaty with China. Pursuant to the Arrangement between Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion on Income, the withholding tax rate in respect to the payment of dividends by a PRC enterprise to a Hong Kong enterprise may be reduced to 5% from a standard rate of 10% if the Hong Kong enterprise directly holds at least 25% of the PRC enterprise. Pursuant to the Notice of the State Administration of Taxation on the Issues concerning the Application of the Dividend Clauses of Tax Agreements, or SAT Circular 81, a Hong Kong resident enterprise must meet the following conditions, among others, in order to apply the reduced withholding tax rate: (i) it must be a company; (ii) it must directly own the required percentage of equity interests and voting rights in the PRC resident enterprise; and (iii) it must have directly owned such required percentage in the PRC resident enterprise throughout the 12 months prior to receiving the dividends. In October 2019, the State Administration of Taxation promulgated the Administrative Measures for Nonresident Taxpayers to Enjoy Treatment under Tax Treaties, or SAT Circular 35 which became effective in January 2020. SAT Circular 35 provides that non-resident enterprises are not required to obtain pre-approval from the relevant tax authority in order to enjoy the reduced withholding tax. Instead, nonresident enterprises and their withholding agents may, by self-assessment and on confirmation that the prescribed criteria to enjoy the tax treaty benefits are met, directly apply the reduced withholding tax rate, and file necessary forms and supporting documents when performing tax filings, which will be subject to post-tax filing examinations by the relevant tax authorities. Accordingly, Genetron Health (Hong Kong) Company Limited may be able to benefit from the 5% withholding tax rate for the dividends it receives from our PRC Subsidiaries, if it satisfies the conditions prescribed under SAT Circular 81 and other relevant tax rules and regulations. However, according to SAT Circular 81 and SAT Circular 35, if the relevant tax authorities consider the transactions or arrangements, we have are for the primary purpose of enjoying a favorable tax treatment, the relevant tax authorities may adjust the favorable withholding tax in the future.

If our holding company in the Cayman Islands or any of our subsidiaries outside of China were deemed to be a “resident enterprise” under the PRC EIT Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in the PRC—If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders.”

Critical Accounting Policies, Judgments and Estimates

Basis of Preparation

We prepare our financial statements in accordance with the IFRS issued by the IASB, which requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the balance sheet dates and revenues and expenses during the reporting periods. We have adopted IFRS 16 retrospectively from January 1, 2019, but have not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognized in the opening balance sheet on January 1, 2019. We continually evaluate these judgments and estimates based on our own historical experience, knowledge and assessment of current business and other conditions, our expectations regarding the future based on available information and assumptions that we believe to be reasonable, which together form our basis for making judgments about matters that are not readily apparent from other sources. Since the use of estimates is an integral component of the financial reporting process, our actual results could differ from those estimates. Some of our accounting policies require a higher degree of judgment than others in their application.

The selection of critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors that should be considered when reviewing our financial statements. We believe the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements. You should read the following description of critical accounting policies, judgments and estimates in conjunction with our consolidated financial statements and other disclosures included in this annual report.

Revenue Recognition

We have two revenue streams including diagnosis and monitoring and development services for the years ended December 31, 2018, 2019 and 2020.

(a) Diagnosis and monitoring

The diagnosis and monitoring refers to diagnosis and monitoring as well as early screening performed in the form of LDT services and IVD products. The services period of each diagnosis and monitoring is generally around 1 to 2 weeks. Our customers include individuals and enterprises, distributors and hospitals. Revenue is recognized when the performance obligations are satisfied.

Diagnosis and monitoring is designed for each individual. We recognize revenue over time when it has an enforceable right to payment for performance completed to date. The progress of diagnosis and monitoring recognized over time is measured based on our input to the satisfaction of related performance obligation.

Revenue from diagnosis and monitoring is recognized at a point in time when we do not have enforceable right to payment for performance completed to date. For those arrangements, we recognize revenue when the report is delivered.

Revenue from sales of IVD products is recognized when control of IVD products is transferred upon that hospitals and institutional customers have received and accepted the products.

(b) Development services

Revenue from development services refers to the research services and sequencing services. Research services are recognized over time when it has an enforceable right to payment for performance completed to date. The progress of research services is measured based on our outputs to the satisfaction of related performance obligation of research services. Sequencing services are recognized at a point in time when we do not have enforceable right to payment for performance completed to date. For those arrangements, we recognize revenue when the report is delivered.

Consolidation of variable interest entities

We exercise control over the VIEs and have the right to recognize and receive substantially all the economic benefits through the Contractual Arrangements. We consider that we control the VIEs notwithstanding the fact that they do not hold direct equity interests in the VIEs, as we have power over the VIEs and receive substantially all the economic benefits from the business activities of the VIEs through the Contractual Arrangements. Accordingly, the VIEs and subsidiaries of VIEs are accounted for as a controlled structured entities and their financial statements have also been consolidated by us.

Impairment of receivables

We apply the IFRS 9 simplified approach to measure expected credit losses which use a lifetime expected loss allowance and makes impairment loss based on assessments of the recoverability of the trade receivables and contract assets, including the current creditworthiness, the past collection history of each debtor and forward looking information. A considerable amount of judgement is required to estimate the expected loss rates. Where the actual result is different from the original estimate, such difference will impact the carrying value of the trade receivables and contract assets and loss allowances in the year in which such estimate is changed.

Financial instruments with preferred rights

Financial instruments with preferred rights issued by us are convertible into ordinary shares upon the completion of a qualified IPO or at the option of the holders and redeemable upon occurrence of certain future events.

We designate the financial instruments with preferred rights as financial liabilities at fair value through profit or loss. They are initially recognized at fair value. Any directly attributable transaction costs are expensed in the consolidated statements of loss.

Prior to the IPO, the fair value of preferred shares that were not traded in an active market was determined using valuation techniques. We have used the discounted cash flow method to determine the equity value of our group and adopted equity allocation model to determine the fair value of the preferred shares. Key assumptions are discount rate, risk-free interest rate and discount for lack of marketability.

Subsequent to initial recognition, the amount of change in the fair value of the financial instruments with preferred rights that is attributable to changes in the credit risk of that liability shall be presented in other comprehensive income with the remaining changes in fair value recognized in the profit or loss.

As at December 31, 2019, the financial instruments with preferred rights were classified as non-current liabilities unless we had an obligation to settle the liabilities within 12 months after the end of the reporting period.

As of December 31, 2020, all financial instruments with preferred rights were converted into ordinary shares upon completion of the IPO on June 19, 2020.

Share-based Payment

Share-based compensation benefits (including restricted ordinary shares and share options and restricted share units (“RSU”)) are provided to employees and consultants via a share incentive plan and share incentive scheme.

The fair value of restricted shares, options and RSU granted under the plan and scheme is recognized as an employee benefits expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the restricted shares, options granted and RSU:

- including any market performance conditions (e.g. the entity’s share price),

- excluding the impact of any service and non-market performance vesting conditions (e.g. profitability, sales growth targets and remaining an employee of the entity over a specified time period), and
- including the impact of any non-vesting conditions (e.g. the requirement for employees to save or holdings shares for a specific period of time).

The total expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, we revise our estimates of the vesting period and the number of restricted shares and options and RSU that are expected to vest based on the service and non-market performance vesting conditions. We recognize the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity. We apply prospective treatment in respect of accounting for modifications of equity-settled awards that reduce the vesting period, if any.

Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the taxable income of current period based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where we and our subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax

We recognize deferred tax assets based on estimates that it is probable to generate sufficient taxable profits in the foreseeable future against which the deductible losses will be utilized. The recognition of deferred tax assets mainly involves management's judgments and estimations about the timing and the amount of taxable profits of the companies which have tax losses.

Uncertain tax positions

There are many transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgment is required from us in determining the provision for income taxes. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

In determining the amount of current and deferred income tax, we take into account the impact of uncertain tax positions and whether preferential tax rates, additional taxes, interest or penalties may be due and whether future taxable profits will be available to enable deferred tax assets resulting from deductible temporary differences and tax losses to be recognized. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes us to change its judgment regarding the adequacy of existing tax liabilities. Such changes to tax liabilities will impact tax expense in the period that such a determination is made.

Recent Accounting Pronouncements

For detailed discussion on recent accounting pronouncements, see Note 2.2 and Note 2.3 to our consolidated financial statements included elsewhere in this annual report.

5.B. Liquidity and Capital Resources

Since our inception, we have incurred net losses and negative cash flow from our operations. We expect to incur additional operating losses in the near future and our operating expenses will increase as we continue to expand our sales organization, increase our marketing efforts to drive market adoption, invest in clinical trials, develop new IVD product offerings and increase in administrative expenses as a public company. We anticipate that our capital expenditure requirements will also increase in order to build additional capacity. Moreover, we expect to incur additional costs associated with operating as a public company, including expenses related to legal, accounting, regulatory, maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums, and investor relations.

Our principal source of liquidity has been cash generated from the proceeds received from the issuance and sale of our shares. As of December 31, 2020, we had RMB1,375.8 million (US\$210.8 million) in cash and cash equivalents, a significant portion of which were held by our PRC Subsidiaries and VIEs and their subsidiaries in China. Our cash and cash equivalents consist primarily of bank deposits and are primarily denominated in RMB. Based on our current business plan, we believe the proceeds from our financing activities and our current cash and cash equivalents will be sufficient to meet our anticipated cash needs, including our cash needs for working capital and capital expenditures, for at least the next 12 months.

We have based these future funding requirements on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We may, therefore, require additional cash due to changing business conditions or other future developments. If our available cash balances, anticipated cash generated from diagnosis and monitoring and development services, and the proceeds from our financing activities, including net proceeds from our initial public offering, are insufficient to satisfy our liquidity requirements, we may seek to sell additional common or preferred equity or convertible debt securities, enter into an additional credit facility or another form of third-party funding or seek other debt financing. See “Item 3. Key Information—D. Risk Factors—Risks Relating to our Financial Prospects and Need for Additional Capital—We may need to obtain substantial additional financing to fund our growth and operations.” The sale of equity and convertible debt securities may result in dilution to our stockholders and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. Additional capital may not be available on reasonable terms, or at all.

As a holding company with no material operations of our own, we conduct our operations primarily through our PRC Subsidiaries, variable interest entities and their subsidiaries. We are permitted under PRC laws and regulations to provide funding to our PRC Subsidiaries in China through capital contributions or loans, subject to the approval of government authorities and limits on the amount of capital contributions and loans. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in the PRC— PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our initial public offering to make loans or additional capital contributions to our PRC Subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.”

Substantially all of our future revenues are likely to continue to be denominated in RMB. Under existing PRC foreign exchange regulations, RMB may be converted into foreign currencies for current account items, including profit distributions, interest payments and trade- and service-related foreign exchange transactions, without prior SAFE approval as long as certain routine procedural requirements are fulfilled. Therefore, our PRC Subsidiaries are allowed to pay dividends in foreign currencies to us without prior SAFE approval by following certain routine procedural requirements. However, approval from or registration with competent government authorities is required where the RMB is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future.

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The following table presents our selected consolidated cash flow data for the years ended December 31, 2018, 2019 and 2020.

	For the Year Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net cash used in operating activities	(201,016)	(196,957)	(300,897)	(46,115)
Net cash generated from/(used in) investing activities	171,489	(96,807)	(84,649)	(12,973)
Net cash generated from financing activities	49,400	371,731	1,744,512	267,358
Net increase in cash and cash equivalents	19,873	77,967	1,358,966	208,270
Cash and cash equivalents at beginning of year	42,030	62,126	139,954	21,449
Exchange differences on cash and cash equivalents	223	(139)	(123,154)	(18,874)
Cash and cash equivalents at end of year	62,126	139,954	1,375,766	210,845

Operating activities

Net cash used in operating activities was RMB300.9 million (US\$46.1 million) in 2020. The difference between our loss before income tax of RMB3,069.0 million (US\$470.4 million) and the net cash used in operating activities was mainly due to (i) losses related to financial instruments with preferred rights of RMB2,823.4 million (US\$432.7 million), (ii) share-based compensation of RMB30.0 million (US\$4.6 million), (iii) depreciation and amortization of RMB53.2 million (US\$8.2 million), and (iv) an increase in other payables and accruals of RMB11.9 million (US\$1.8 million), partially offset by (i) finance net income of RMB22.3 million (US\$3.4 million), (ii) an increase in trade receivables of RMB95.7 million (US\$14.7 million) and (iii) an increase in other receivables and prepayments of RMB22.9 million (US\$3.5 million).

Net cash used in operating activities was RMB197.0 million in 2019. The difference between our loss before income tax of RMB676.0 million and the net cash used in operating activities was mainly due to (i) losses related to financial instruments with preferred rights of RMB359.9 million, (ii) share-based compensation of RMB35.9 million, (iii) depreciation and amortization of RMB46.6 million, (iv) an increase in other payables and accruals RMB41.6 million, and (v) an increase in trade payables of RMB26.6 million, in line with the growth of our business, partially offset by an increase in trade receivables of RMB48.2 million.

Net cash used in operating activities was RMB201.0 million in 2018. The difference between our loss before income tax of RMB465.0 million and the net cash used in operating activities was mainly due to (i) fair value changes of financial instruments with preferred rights of RMB233.6 million, (ii) depreciation of RMB26.8 million, (iii) share-based compensation of RMB29.6 million and (iv) an increase in other payables and accruals of RMB26.6 million, partially offset by (i) an increase in trade receivables of RMB27.4 million, (ii) an increase in other current asset of RMB11.7 million and (iii) an increase in inventories of RMB8.8 million.

Investing activities

Net cash used in investing activities was RMB84.7 million (US\$13.0 million) in 2020, which was primarily attributable to purchase of wealth management products of RMB1,628.6 million (US\$249.6 million), and purchase of property, plant and equipment, and intangible assets of RMB50.0 million (US\$7.7 million), partially offset by redemption of wealth management products of RMB1,620.9 million (US\$248.4 million).

Net cash used in investing activities was RMB96.8 million in 2019, which was primarily attributable to purchase of wealth management products of RMB479.1 million, partially offset by redemption of wealth management products of RMB395.7 million.

Net cash generated from investing activities was RMB171.5 million in 2018, which was primarily attributable to redemption of wealth management products of RMB1,109.7 million, partially offset by purchase of wealth management products of RMB895.1 million.

Financing activities

Net cash generated from financing activities was RMB1,744.5 million (US\$267.4 million) in 2020, which was mainly attributable to the proceeds from issuance of ordinary shares of RMB1,676.8 million (US\$257.0 million), the proceeds from issuance of financial instruments with preferred rights of RMB70.0 million (US\$10.7 million), and the proceeds from borrowings of RMB61.2 million (US\$9.4 million), partially offset by the repurchase of ordinary shares of RMB4.1 million (US\$0.6 million), proceeds from an investor upon reorganization RMB299.1 million (US\$45.8 million) offset by the repayments to investor upon reorganization RMB314.4 million (US\$48.2 million), the repayments of borrowings RMB20.7 million (US\$3.2 million) and the principal elements of lease payments of RMB19.6 million (US\$3.0 million).

Net cash generated from financing activities was RMB371.7 million in 2019, which was mainly attributable to the proceeds from issuance of financial instruments with preferred rights of RMB456.6 million, and the proceeds from borrowings of RMB33.0 million, partially offset by the repurchase of ordinary shares of RMB54.5 million, the repurchase of financial instruments with preferred rights of RMB43.3 million, the repayments of borrowings RMB9.8 million and the principal elements of lease payments of RMB12.3 million.

Net cash generated from financing activities in 2018 was RMB49.4 million, which was mainly attributable to proceeds from issuance of financial instruments with preferred rights of RMB60.0 million, partially offset by RMB10.6 million paid in 2018 which is related to the issuance costs of financial instruments with preferred rights issued in 2017.

Capital Expenditures

Our capital expenditures are incurred primarily in connection with purchases of equipment. Our capital expenditures were RMB47.4 million, RMB25.6 million and RMB50.0 million (US\$7.7 million) respectively, in 2018, 2019, 2020. We intend to fund our future capital expenditures with our existing cash balance and net proceeds from our initial public offering. We will continue to make capital expenditures to meet the expected growth of our business.

Holding Company Structure

Genetron Holdings Limited is a holding company with no material operations of its own. We conduct our operations primarily through our subsidiaries and our consolidated VIEs. As a result, our ability to pay dividends depends upon dividends paid by our subsidiaries. If our subsidiaries or any newly formed subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us.

In addition, our subsidiaries in China are permitted to pay dividends to us only out of their retained earnings, if any, as determined in accordance with the Accounting Standards for Business Enterprise as promulgated by the Ministry of Finance of the PRC, or PRC GAAP. In accordance with PRC company laws, our consolidated VIEs in China must make appropriations from their after-tax profit to non-distributable reserve funds including (i) statutory surplus fund and (ii) discretionary surplus fund. The appropriation to the statutory surplus fund must be at least 10% of the after-tax profits calculated in accordance with PRC GAAP. Appropriation is not required if the statutory surplus fund has reached 50% of the registered capital of our consolidated VIEs. Appropriation to discretionary surplus fund is made at the discretion of our consolidated VIEs. Pursuant to the law applicable to China's foreign investment enterprise, our subsidiaries that are foreign investment enterprise in the PRC have to make appropriation from their after-tax profit, as determined under PRC GAAP, to reserve funds including (i) general reserve fund, (ii) enterprise expansion fund and (iii) staff bonus and welfare fund. The appropriation to the general reserve fund must be at least 10% of the after-tax profits calculated in accordance with PRC GAAP. Appropriation is not required if the reserve fund has reached 50% of the registered capital of our subsidiary. Appropriation to the other two reserve funds are at our subsidiary's discretion.

As an offshore holding company, we are permitted under PRC laws and regulations to provide funding from the proceeds of our offshore fund raising activities to our PRC Subsidiaries only through loans or capital contributions, and to our VIEs only through loans, in each case subject to the satisfaction of the applicable government registration and approval requirements. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in the PRC—PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our initial public offering to make loans or additional capital contributions to our PRC Subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business." As a result, there is uncertainty with respect to our ability to provide prompt financial support to our PRC Subsidiaries and VIEs when needed. Notwithstanding the foregoing, our PRC Subsidiaries may use their own retained earnings (rather than RMB converted from foreign currency denominated capital) to provide financial support to our VIEs either through entrustment loans from our PRC Subsidiaries to our VIEs or direct loans to such VIE's nominee shareholders, which would be contributed to the VIEs as capital injections. Such direct loans to the nominee shareholders would be eliminated in our consolidated financial statements against the VIE's share capital.

5.C. Research and Development, Patents and Licenses, Etc.

Our advanced technology infrastructure and capabilities allow us to efficiently and effectively provide our services. See “Item 4. Information on the Company—4.B. Business Overview—Our Proprietary Technologies,” “Item 4. Information on the Company—4.B. Business Overview—Our Research and Development Capabilities,” and “Item 4. Information on the Company—4.B. Business Overview—Intellectual Property.”

5.D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2020 that are reasonably likely to have a material and adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future results of operations or financial condition.

5.E. Off-Balance Sheet Commitments and Arrangements

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholder’s equity or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or product development services with us.

5.F. Tabular Disclosure of Contractual Obligations

	Payments Due by December 31, 2020				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Capital commitments(1)	14,578	14,578	—	—	—
Operating leases(2)	73,899	22,288	36,098	12,509	3,004
Short-term bank borrowings(3)	50,497	50,497	—	—	—
Long-term borrowing(4)	15,971	10,192	5,779	—	—
Total	154,945	97,555	41,877	12,509	3,004

Notes:

- (1) Capital commitments relate to contracts for equipment and intangible assets.
- (2) Operating leases relate to certain office buildings under non-cancellable operating lease agreements.
- (3) The short-term bank borrowings were obtained for working capital purpose.
- (4) The long-term borrowing was obtained for working capital purpose.

Other than those shown above, we did not have any significant capital and other commitments, long-term obligations or guarantees as of December 31, 2020.

5.G. Safe harbor

See “Forward-Looking Information.”

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

6.A. Directors and Senior Management

The following table sets forth information regarding our executive officers and directors as of the date of this annual report.

Name	Age	Position/Title
Executive Officers		
Sizhen Wang	44	Chief Executive Officer and Director
Hai Yan, Ph.D./M.D.	53	Chief Scientific Officer and Director
Yuchen Jiao, Ph.D./M.D.	43	Chief Technology Officer
Evan Ce Xu	39	Chief Financial Officer
Kevin Ying Hong	49	Chief Operations Officer
Yun-Fu Hu, Ph.D	58	Chief Medical Officer
Non-executive Directors		
Weiwei He, Ph.D.	55	Chairman of the Board of the Directors
Xia Wu	39	Director
Weidong Liu	52	Director
Dian Kang	72	Independent Director
Webster Cavenee	69	Independent Director
Wing Kee Lau	56	Independent Director

Executive Officers

Sizhen Wang is our co-founder and has served as our Chief Executive Officer since May 2015. Prior to founding our company, Mr. Wang co-founded iTalkBB in 2004, a company providing voice, TV, data and mobile communication services globally and served as executive vice president until October 2013. He led iTalkBB to enter America's VoIP residential service market and expand its business to Canada, Australia, Singapore and China over eight years and made iTalkBB to become the biggest VoIP and IPTV service provider for overseas Chinese. He previously spent seven years in finance industry, where he gained valuable experience working for Capital One and GD Capital. Mr. Wang received his bachelor's degree in economics from the Central University of Finance and Economics in 1995 and his M.B.A. degree from the HEC Paris School of Management in 2000.

Hai Yan, Ph.D./M.D. is our co-founder and has served as our Chief Scientific Officer since our inception. Dr. Yan serves as Henry S. Friedman professor of neuro-oncology in the School of Medicine of Duke University. Dr. Yan has been a co-director of the neuro oncology program at the Duke Cancer Center and the director of the Molecular Genomics Lab since 2016 and 2013, respectively. He has also served as an investigator at the Preston Robert Tisch Brain Tumor Center at Duke since April 2003. Dr. Yan has been a selected member of the American Society for Clinical Investigation since 2013. Throughout his career, Dr. Yan has also received various awards and prizes, including the Founders Award for Research Excellence by the National Brain Tumor Society of the United States in 2009 and AACR Team Science Award in 2014 by the American Association for Cancer Research. Dr. Yan received his M.D. in basic medicine from Peking University Health Center in 1991 and his Ph.D. degree in molecular and cellular biology from Columbia University in 1997. Dr. Yan also served as research associate at Johns Hopkins University.

Yuchen Jiao, Ph.D./M.D. has served as our Chief Technology Officer since August 2017. From December 2013 to date, Dr. Jiao is also serving as a professor at National Cancer Center/Cancer Hospital, Chinese Academy of Medical Sciences, focusing on the studying of cancer genomics and early diagnosis of cancer. Dr. Jiao's research has been published in multiple renowned academic journals such as *Science* and *Nature Genetics*. Dr. Jiao has also received various awards throughout his academic and research careers, including Hans Joaquim Prochaska Research Award, which was awarded by the Johns Hopkins School of Medicine. Dr. Jiao received his M.D. in clinical medicine from Peking Union Medical College in July 2003, and his Ph.D. degree in biological chemistry at the Johns Hopkins University in 2009.

Evan Ce Xu has served as our Chief Financial Officer since March 2018. Mr. Xu has more than 12 years of experience in corporate finance and mergers and acquisition transactions. Prior to joining our Company, Mr. Xu served as director of investment banking division at Deutsche Bank AG, Hong Kong Branch, from December 2016 to March 2018. Prior to that, Mr. Xu served as associate and executive director at investment banking division of Goldman Sachs (Asia) L.L.C., from July 2010 to September 2016. Prior to that, Mr. Xu spent a number of years in various roles at different financial institutions, such as Citigroup, Lehman Brothers and Nomura Securities (Hong Kong) Limited. Mr. Xu received his bachelor's degree in computer engineering from the National University of Singapore in 2004 and his master's degree in information and computer engineering from the National University of Singapore in 2005.

Kevin Ying Hong has served as our Chief Operating Officer since January 2016. Mr. Hong has over 16 years of operations and general management experience in healthcare industry. Prior to joining us, Mr. Hong served as general manager of China and vice president of North Asia at C.R. Bard, Inc. from August 2008 to December 2014. Mr. Hong served as director of marketing and franchise director of Ethicon Endo-Surgery at Johnson & Johnson from August 1998 to July 2008. Mr. Hong received his bachelor's degree from Hunan University in 1994 and his M.B.A. degree from Simon Business School, University of Rochester in 1998.

Yun-Fu Hu, Ph.D. has served as our Chief Medical Officer since 2020. Dr. Hu brings over two decades of experience in regulatory and managerial capacities related to medical devices and pharmaceutical industries. Dr. Hu had more than ten years of service at US Food and Drug Administration ("FDA"), where he had served as Deputy Director and other positions at Division of Molecular Genetics and Pathology, Office of In Vitro Diagnostics and Radiological Health, Center for Device and Radiological Health. During his tenure at FDA, Dr. Hu supervised a staff of scientists, engineers, consumer safety officers and medical officers in premarket reviews and post-market compliance of IVD products and LDTs for genetic testing, molecular cancer diagnostics, companion diagnostics, radio dosimetry, digital pathology and artificial intelligence devices. Some of the notable authorizations by Dr. Hu's group at FDA include: the first NGS-based LDT as CDx (Foundation Medicine FoundationFocus CDxBRCA); the first NGS-based CDx kit (Thermo Fisher Oncomine Dx Target Test); the first NGS-based LDT for tumor profiling (MSK-IMPACT) and later on FoundationOne CDx); the first liquid biopsy test for NSCLC (Roche Cobas EGFR Mutation Test v2); and FDA's only two approved cancer screening tests in the last decade (Exact Sciences' Cologuard and Epigenomics' Epi ProColon). He was a member of the steering committee to stand up the FDA's Oncology Center of Excellence (OCE) under the 21st Century Cures and served as the Center's first Acting Associate Director of In Vitro Diagnostics.

Prior to joining FDA, Dr. Hu has more than ten years of product development experience in diagnostic and pharmaceutical industries, including his prior employments at GlaxoSmithKline and Becton Dickinson Diagnostic Systems. Dr. Hu received his bachelor degree from Central China Agricultural University in 1983, his master degree in reproductive endocrinology from the Ohio State University in 1990 and his Ph.D. degree in veterinary physiology & pharmacology from the Ohio State University in 1994 followed by a postdoctoral cancer research fellowship at Fox Chase Cancer Center. Dr. Hu has four US patents and over 30 publications.

Non-executive Directors

Weiwu He, Ph.D., is our co-founder and has served as our Chairman of the Board of the Directors since May 2015. Dr. He began his career as a research fellow at Massachusetts General Hospital and Mayo Clinic, then joined Human Genome Sciences, a biopharmaceutical corporation, in 1993 where he served as a scientist until 1996. Dr. He has served as chairman of OriGene Technologies, Inc. since 1995 and served as its chief executive officer from 1995 through April 2, 2019. In 2000, Dr. He founded Emerging Technology Partners, LLC, a venture capital firm specializing in the investment of biotechnology companies, where he serves as its general partner. Dr. He received his bachelor's degree in biochemistry from Nanjing University, his Ph.D. degree in molecular biology from Baylor college of Medicine in 1991, and his M.B.A. degree from Wharton Business School in 1999. Dr. He also serves on the Board of Directors of other biotechnology companies, including CASI Pharmaceuticals, Inc., a Nasdaq listed company.

Xia Wu has served as our Director since September 2017. Ms. Wu has over 10 years of experience in investments, particularly healthcare industry. Ms. Wu has been serving in CICC Jia Cheng Investment Management Company Limited since July 2008 and has served as vice president from January 2012 to December 2014, as executive director from January 2015 to February 2019, and as managing director since March 2019. She currently serves as a member of the investment committee of CICC Kangrui I (Ningbo) Equity Investment Limited Partners (Limited Partnership). Ms. Wu received her bachelor degree in finance from Peking University in 2003 and her master degree in economics and finance from the Warwick Business School of Warwick University in 2005.

Weidong Liu, Ph.D., has served as our director since November 2019. Dr. Liu has been working at Vivo Capital since August 2017 and currently serves as a managing director of Vivo Capital. Dr. Liu served as a principal research investigator and held various positions at Array BioPharma, INC from October 2001 to May 2015. Afterwards, Dr. Liu served as a director of process chemistry at Avista Pharma Solutions from June 2015 to March 2016 and served as an executive director of process research & development at STA-WuXi AppTec from March 2016 to April 2017. Dr. Liu received his bachelor of science degree in chemistry and his master of science degree in organometallic chemistry from Peking University in July 1989 and August 1994, respectively. Dr. Liu received his Ph.D. degree in organic chemistry from University of Pittsburgh in December 1999.

Dian Kang has served as our independent director since June 2020. Mr. Kang served as the chief executive officer, and the executive director and the chairman of board of directors of New China Life Insurance Company Ltd. (HKEx: 1336) from 2013 to 2016 and from 2009 to 2016, respectively. Prior to that, he served as chairman of the board of supervisors of Shenzhen Development Bank Company Limited (a company listed on the Shenzhen Stock Exchange, stock code: 000001) from 2005 to 2009, chairman of Springridge Investment Management Limited from 2001 to 2005, director and vice president of the Guangdong Enterprises (Holdings) Limited, chairman of the board of the Guangdong Securities Limited and Guangdong Capital Holdings Ltd. from 1994 to 2000, as well as vice president of China National Packaging Corporation from 1990 to 1994. He also served as vice president of China Agribusiness Trust & Investment Corporation from 1987 to 1990 and worked at the Overseas Investment Department of China International Trust & Investment Corporation from 1984 to 1987. Mr. Kang also served as an independent non-executive director of Silver Grant International Industries Limited (a company listed on the HKSE, stock code: 00171) from May 1998 to February 2014. Mr. Kang graduated from Beijing Steel and Iron Institute in 1982. He also received a master's degree in economics from the Graduate School of the Chinese Academy of Social Sciences in 1984.

Webster Cavenee, Ph.D. has served as our independent director since June 2020. He has served as a director of Strategic Alliances in Central Nervous System Cancers at Ludwig Cancer Research since 2015 and as Distinguished Professor at the University of California San Diego since 1991. Dr. Cavenee joined Ludwig Cancer Research as a member in 1985 and served as Ludwig Montreal branch director from December 1985 to September 1991. Dr. Cavenee served as Ludwig San Diego branch director from September 1991 to June 2015. Prior to joining Ludwig Cancer Research, Dr. Cavenee did postdoctoral work between November 1977 and September 1983 at the Jackson Laboratory, at Massachusetts Institute of Technology, to and the Howard Hughes Medical Institute at the University of Utah. Dr. Cavenee held professorships at the University of Cincinnati from September 1983 to December 1985 and at McGill University from December 1985 to September 1991. Dr. Cavenee received his Bachelor of Science degree in Microbiology from Kansas State University in 1973 and his Ph.D. with honors from the University of Kansas in 1977.

Wing Kee Lau has served as our independent director since June 2020. Mr. Lau served as the director of Perfect World Holding Company Limited during the period from April 2016 to June 2018. Mr. Lau served as the Chief Financial Officer of Perfect World Company Limited (Nasdaq: PWRD) from March 2007 to March 2016. Prior to joining PWRD, Mr. Lau was the chief financial officer and company secretary of Beijing Media Corporation Limited (HKEX: 1000) from November 2004 to February 2007. From July 2000 to October 2004, Mr. Lau was the group finance director of Shanghai Ogilvy & Mather Advertising Limited Beijing Branch. Mr. Lau worked for PricewaterhouseCoopers Hong Kong, Shanghai and Beijing offices from September 1990 to June 2000. Mr. Lau received his bachelor's degree in business administration from Hong Kong Baptist University in 1990 and his EMBA degree from Cheung Kong Graduate School of Business in 2011. He is a member of Association of Chartered Certified Public Accountants and Hong Kong Institution of Certified Public Accountants.

6.B. Compensation

Compensation

For the fiscal year ended December 31, 2020, we paid an aggregate of RMB8.0 million (US\$1.2 million) in cash to our executive officers, and we did not pay any cash compensation to our non-executive directors. We have accrued RMB0.7 million (US\$0.1 million) for compensation to our independent non-executive directors. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our executive officers and directors. Our PRC Subsidiaries, variable interest entities and their subsidiaries are required by law to make contributions equal to certain percentages of each employee's salary for his or her pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund. For share incentive grants to our directors and executive officers, see "—Share Incentive Plan."

Employment Agreements and Indemnification Agreements

We have entered into employment agreements with each of our executive officers. Each of our executive officers is employed for a specified time period, which can be renewed upon both parties' agreement before the end of the current employment term. We may terminate an executive officer's employment for cause at any time without advance notice in certain events. We may terminate an executive officer's employment by giving a prior written notice or by paying certain compensation. An executive officer may terminate his or her employment at any time by giving a prior written notice.

Each executive officer has agreed to hold, unless expressly consented to by us, at all times during and after the termination of his or her employment agreement, in strict confidence and not to use, any of our confidential information or the confidential information of our customers and suppliers. In addition, each executive officer has agreed to be bound by certain non-competition and non-solicitation restrictions during the term of his or her employment and for two years following the last date of employment.

We have also entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we agree to indemnify our directors and executive officers against certain liabilities and expenses incurred by such persons in connection with claims made by reason of their being a director or officer of our company.

Share Incentive Plan

2017 Genetron Health Share Incentive Plan and 2018 Genetron Health Share Incentive Plan

In January 2017, Genetron Health adopted the 2017 Genetron Health Share Incentive Plan, or the 2017 Plan. Under the 2017 Plan, Genetron Health reserved 2,375,800 options to certain of its management members and employees to purchase the equity interests of Genetron Health. The term of the options will not exceed ten years from the date of the grant.

In June 2018, Genetron Health adopted the 2018 Genetron Health Share Incentive Plan, or the 2018 Plan. Under the 2018 Plan, Genetron Health reserved 4,416,500 options to certain of its management members and employees to purchase the equity interests of Genetron Health. The term of the options will not exceed ten years from the date of the grant.

The options granted under the 2017 Plan and 2018 Plan have been completely replaced by the awards under the 2019 Plan.

2019 Genetron Health Share Incentive Plan and 2019 Genetron Health Share Incentive Scheme

We adopted the 2019 Genetron Health Share Incentive Plan, or the 2019 Plan, in July 2019, and the 2019 Genetron Health Share Incentive Scheme, or the 2019 Scheme, in November 2019. The purpose of the 2019 Plan and the 2019 Scheme is to attract and retain exceptionally qualified personnel and to encourage them to acquire a proprietary interest in our growth and performance. The 2019 Plan provides for the issuance of up to an aggregate of 33,961,500 of our ordinary shares. As of March 31, 2021, we have granted 145 awards under the 2019 Plan to purchase up to 20,820,270 ordinary shares, excluding awards that were forfeited, cancelled or exercised after the relevant grant dates. The 2019 Scheme provides for the issuance of up to an aggregate of 20,830,100 of our ordinary shares. As of March 31, 2021, we have granted 5 awards under the 2019 Scheme to purchase up to 2,685,000 ordinary shares.

We initially issued 9,523,900 and 13,031,720 ordinary shares to Genetron Health (Hong Kong) Limited and EVER PRECISE INVESTMENTS LIMITED, respectively, our employee shareholding platforms established to hold the ordinary shares underlying the restricted shares and options granted under the 2019 Plan and the 2019 Scheme. As of March 31, 2021, some of the awards have been exercised and as a result Genetron Health (Hong Kong) Limited and EVER PRECISE INVESTMENTS LIMITED directly held 7,951,100 and 12,056,020 ordinary shares, respectively, as of March 31, 2021. Accordingly, those 22,555,620 and 20,007,120 ordinary shares are issued but deemed not outstanding and are excluded from the number of our outstanding ordinary shares as of December 31, 2020 and March 31, 2021, respectively.

The terms under the 2019 Plan and the 2019 Scheme are substantially the same. The following paragraphs summarize the principal terms of the 2019 Plan and the 2019 Scheme.

Types of Awards. The 2019 Plan and the 2019 Scheme permit the awards of options, phantom options, restricted shares, restricted share units (“RSUs”) and phantom RSUs under the 2019 Plan and the 2019 Scheme.

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Plan Administration. The 2019 Plan and the 2019 Scheme shall be administrated by our Board of Directors or the management committee of the Company to be established by the Board of Directors unless otherwise resolved by the Board of Directors.

Eligibility. The plan administrators may decide that an award under the 2019 Plan and the 2019 Scheme be granted to any employee or director of the Company or its related entities, or that it be granted to any consultant, adviser or other person who provides services to the Company or its related entities, selected by the Plan Administrators.

Award Agreements. Each award under the 2019 Plan and the 2019 Scheme shall be evidenced and governed exclusively by an award agreement executed by the Company and the participants, including any amendments thereto. The terms of the award agreements will be determined by the plan administrators and consistent with the terms of the 2019 Plan and the 2019 Scheme.

Conditions of Award. The plan administrators shall determine the participants, types of awards, numbers of shares to be covered by awards, terms and conditions of each award, including, but not limited to, the types of awards, award vesting schedule, number of awards to be granted and the number of shares to be covered by the awards, exercise price of options (if applicable), restricted shares price (if applicable), any restrictions or limitations on the award and term of each award.

Transfer Restrictions. No right of interest of a participant in any award may be pledged, encumbered, or hypothecated to or in favor of any party other than the Company or its related entities, or shall be subject to any lien, obligation, or liability of such participant to any other party other than the Company or its related entities. This restriction does not apply to the transmission of an award on the death of a participant to his or her personal representatives, nor does it apply to the assignment of an award, with the prior written consent of the plan administrators, subject to any terms and conditions the plan administrators impose.

Reduction or Clawback of Awards. Within the time period specified in the 2019 Plan and the 2019 Scheme, the plan administrators may decide that the number of shares subject to any award be reduced, that the participant must transfer to or to the order of the Company a number of shares equal or less than the number of shares issued or transferred to such participant pursuant to the award, or that the award be otherwise limited or paid back to the Company, if certain events occur. Such events include but are not limited to, that the participant has engaged in financial misstatement, that the participant breaches any non-competition covenant, and that the participant's behavior has resulted in material reputational damage to the Company or its related entities as determined by the plan administrators.

Amendment of the 2019 Plan and the 2019 Scheme. The plan administrators may in its sole discretion at any time amend the 2019 Plan and the 2019 Scheme in any way, including any performance condition or other terms of an award granted.

Termination of the 2019 Plan and the 2019 Scheme. The 2019 Plan and the 2019 Scheme will terminate on the tenth anniversary of our listing on Nasdaq or any earlier date as the plan administrators may determine. No additional awards may be granted after termination.

The following table summarizes, as of March 31, 2021, the number of ordinary shares under outstanding options, restricted shares and RSUs that we granted to our directors and executive officers under the 2019 Plan, which replaced the 2017 Plan and the 2018 Plan, and under the 2019 Scheme.

<u>Name</u>	<u>Ordinary Shares Underlying Equity Awards Granted</u>	<u>Exercise Price (US\$/Share)</u>	<u>Date of Grant</u>	<u>Date of Expiration</u>
Executive Officers				
Sizhen Wang	—	—	—	—
Hai Yan, Ph.D./M.D.	—	—	—	—
Yuchen Jiao, Ph.D./M.D.	3,259,000	0.03	October 14, 2019	October 14, 2029
Evan Ce Xu	*	*	March 31, 2018	March 31, 2028
Kevin Ying Hong	2,536,000	0.03	June 15, 2018	June 15, 2028
Yun-Fu Hu	*	*	October 1, 2020	October 1, 2030
Non-Executive Directors				
Weiwu He, Ph.D.	—	—	—	—

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<u>Name</u>	<u>Ordinary Shares Underlying Equity Awards Granted</u>	<u>Exercise Price (US\$/Share)</u>	<u>Date of Grant</u>	<u>Date of Expiration</u>
Xia Wu	—	—	—	—
Weidong Liu	—	—	—	—
Dian Kang	*	*	July 1, 2020	July 1, 2030
Webster Cavenee			July 1, 2018 and July 1, 2020	July 1, 2028 and July 1, 2030
Wing Kee Lau	*	*	July 1, 2020	July 1, 2030
All directors and executive officers as a group			Various dates from March 31, 2018 to October 1, 2020	Various dates from March 31, 2028 to October 1, 2030
	11,013,330	0.03 – 0.99		

Notes:

* Less than 1% of our total outstanding shares.

As of March 31, 2021, our award holders other than our directors and executive officers as a group held awards to purchase 15,040,440 ordinary shares, with a weighted-average exercise price of US\$0.04 per share under the 2019 Plan and the 2019 Scheme.

For discussions of our accounting policies and estimates for awards granted pursuant to the 2019 Plan and the 2019 Scheme, see “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Critical Accounting Policies, Judgments and Estimates—Share-based Payment.”

6.C. Board Practices

Board of Directors

Our Board of Directors consists of eight directors, including three independent directors, namely Dian Kang, Webster Cavenee and Wing Kee Lau. A director is not required to hold any shares in our company to qualify to serve as a director. The Corporate Governance Rules of the Nasdaq generally require that a majority of an issuer's board of directors must consist of independent directors. However, the Corporate Governance Rules of the Nasdaq permit foreign private issuers like us to follow "home country practice" in certain corporate governance matters. We rely on this "home country practice" exception and do not have a majority of independent directors serving on our Board of Directors.

A director who is in any way, whether directly or indirectly, interested in a contract or proposed contract with our company is required to declare the nature of his or her interest at a meeting of our directors. A general notice given to the directors by any director to the effect that he or she is a member, shareholder, director, partner, officer or employee of any specified company or firm and is to be regarded as interested in any contract or transaction with that company or firm shall be deemed a sufficient declaration of interest for the purposes of voting on a resolution in respect to a contract or transaction in which he/she has an interest, and after such general notice it shall not be necessary to give special notice relating to any particular transaction. A director may vote in respect of any contract or proposed contract or arrangement notwithstanding that he/she may be interested therein and if he/she does so, his/her vote shall be counted and he/she may be counted in the quorum at any meeting of the directors at which any such contract or proposed contract or arrangement is considered, subject to any separate requirement for Audit Committee approval under applicable law or the Listing Rules of the Nasdaq. Our Board of Directors may exercise all of the powers of our company to borrow money, to mortgage or charge its undertaking, property and uncalled capital, or any part thereof, and to issue debentures, debenture stock or other securities whenever money is borrowed or as security for any debt, liability or obligation of our company or of any third party. None of our directors has a service contract with us that provides for benefits upon termination of service as a director.

Committees of the Board of Directors

We have established an audit committee, a compensation committee and a nominating and corporate governance committee under our Board of Directors. We have also adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee. Our audit committee consists of Dian Kang, Webster Cavenee and Wing Kee Lau, and is chaired by Wing Kee Lau. We have determined that each of Dian Kang, Webster Cavenee and Wing Kee Lau satisfies the requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq and meet the independence standards under Rule 10A-3 under the Securities Exchange Act of 1934, as amended. We have determined that Wing Kee Lau qualifies as an "audit committee financial expert." The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. The audit committee is responsible for, among other things:

- reviewing and recommending to our board for approval, the appointment, re-appointment or removal of the independent auditor, after considering its annual performance evaluation of the independent auditor;
- approving the remuneration and terms of engagement of the independent auditor and pre-approving all auditing and non-auditing services permitted to be performed by our independent auditors at least annually;
- obtaining a written report from our independent auditor describing matters relating to quality control procedures;
- reviewing with the independent registered public accounting firm any audit problems or difficulties and management's response;
- discussing with our independent auditor, among other things, the audits of the financial statements, including whether any material information should be disclosed, issues regarding accounting and auditing principles and practices;

- reviewing and approving all proposed related party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;
- discussing the annual audited financial statements with management and the independent registered public accounting firm;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any special steps taken to monitor and control major financial risk exposures;
- at least annually, reviewing and reassessing the adequacy of the committee charter;
- approving annual audit plans, and undertaking an annual performance evaluation of the internal audit function;
- establishing and overseeing procedures for the handling of complaints and whistleblowing;
- meeting separately and periodically with management and the independent registered public accounting firm;
- overseeing compliance with our code of business conduct and ethics; and
- reporting periodically to the board.

Compensation Committee. Our compensation committee consists of Sizhen Wang, Xia Wu and Dian Kang and is chaired by Sizhen Wang. We have determined that Dian Kang satisfies the “independence” requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which their compensation is deliberated upon. The compensation committee is responsible for, among other things:

- overseeing the development and implementation of compensation programs in consultation with our management;
- at least annually, reviewing and approving, or recommending to the board for its approval, the compensation for our executive officers;
- at least annually, reviewing and recommending to the board for determination with respect to the compensation of our non-executive directors;
- at least annually, reviewing periodically and approving any incentive compensation or equity plans, programs or other similar arrangements;
- reviewing executive officer and director indemnification and insurance matters;
- overseeing our regulatory compliance with respect to compensation matters, including our policies on restrictions on compensation plans and loans to directors and executive officers;
- periodically reviewing and reassessing the adequacy of the committee charter;
- selecting compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person’s independence from management; and
- reporting regularly to the board.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Sizhen Wang, Dian Kang and Webster Cavenee, and is chaired by Sizhen Wang. We have determined that each of Dian Kang and Webster Cavenee satisfies the “independence” requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq. The nominating and corporate governance committee assists the board in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- recommending nominees to the board for election or re-election to the board, or for appointment to fill any vacancy on the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience, expertise, diversity and availability of service to us;
- developing and recommending to our board such policies and procedures with respect to nomination or appointment of members of our board and chairs and members of its committees or other corporate governance matters as may be required pursuant to any SEC or Nasdaq rules, or otherwise considered desirable and appropriate;
- selecting and recommending to the board the names of directors to serve as members of the audit committee and the compensation committee, as well as of the nominating and corporate governance committee itself;
- periodically reviewing and reassessing the adequacy of the committee charter;
- evaluating the performance and effectiveness of the board as a whole.

Duties and Functions of Directors

Under Cayman Islands law, our directors owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also owe to our company a duty to exercise the skill they actually possess and such care and diligence that a reasonable prudent person would exercise in comparable circumstances. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association, as amended and restated from time to time. Our company has the right to seek damages if a duty owed by our directors is breached. In limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our directors is breached. The functions and powers of our Board of Directors include, among others, (i) convening shareholders’ annual general meetings and reporting its work to shareholders at such meetings, (ii) declaring dividends, (iii) appointing officers and determining their terms of offices and responsibilities, and (iv) approving the transfer of shares of our company, including the registering of such shares in our share register.

Terms of Directors and Officers

Our officers are elected by and serve at the discretion of the Board of Directors. Each director is not subject to a term of office and holds office until such time as his successor takes office or until the earlier of his death, resignation or removal from office pursuant to the applicable provisions of our memorandum and articles of association. A director will be removed from office automatically if, among other things, the director (i) becomes bankrupt or makes any arrangement or composition with his creditors; (ii) dies or is found by our company to be of unsound mind; (iii) resigns by notice in writing to our company; (iv) is prohibited by law or applicable stock exchange rules from being a director; (v) without special leave of absence from our Board of Directors, is absent from three consecutive meetings of the board and the board resolves that his office be vacated; or (vi) is removed from office pursuant to any other provisions of our post-offering amended and restated memorandum and articles of association.

6.D. Employees

We had 799 employees as of December 31, 2020. The following table sets forth the breakdown of our employees by function as of December 31, 2020.

<u>Function</u>	<u>Number of Employees</u>
Research and development	184
Testing operation	188
Sales, products, and marketing	262
Regulatory, manufacturing, and quality control	37
Administration and management	128
Total	799

Our success depends on our ability to attract, motivate, train and retain qualified personnel. We believe we offer our employees competitive compensation packages and an environment that encourages self-development and, as a result, have generally been able to attract and retain qualified personnel and maintain a stable core management team.

As required by regulations in China, we participate in various employee social security plans that are organized by municipal and provincial governments, including pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds. We are required under PRC law to make contributions to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government from time to time. We have granted, and plan to continue to grant, share-based incentive awards to our employees in the future to incentivize their contributions to our growth and development.

We believe that we maintain a good working relationship with our employees, and we have not experienced any material labor disputes. None of our employee is represented by labor unions.

6.E. Share Ownership

The following table sets forth information concerning the beneficial ownership of our ordinary shares, as of March 31, 2021, by:

- each of our directors and executive officers; and
- each person known to us to beneficially own more than 5% of our ordinary shares.

The calculations in the table below are based on 444,358,600 ordinary shares issued and outstanding as of March 31, 2021.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option, warrant, or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person. The table below excludes 7,951,100 and 12,056,020 ordinary shares held by Genetron Health (Hong Kong) Limited and EVER PRECISE INVESTMENTS LIMITED, respectively, and reserved for the purpose of our employee shareholding platforms established for the restricted shares and options granted under the 2019 Plan, before the corresponding equity awards vest pursuant to the vesting schedule, except when calculating the number of shares underlying share options held by such person or group that are exercisable or RSUs that will become vested within 60 days after March 31, 2021.

	<u>Ordinary Shares Beneficially Owned as of March 31, 2021</u>	
	<u>Number</u>	<u>%*</u>
Executive Officers†		
Sizhen Wang ⁽¹⁾	106,898,800	24.1%
Hai Yan, Ph.D./M.D. ⁽²⁾	33,332,000	7.5%
Yuchen Jiao, Ph.D./M.D. ⁽³⁾	7,105,500	1.6%
Evan Ce Xu	**	**
Kevin Ying Hong ⁽⁴⁾	10,052,000	2.3%
Yun-Fu Hu	**	**

	Ordinary Shares Beneficially Owned as of March 31, 2021	
	Number	%*
Non-Executive Directors		
Weiwu He, Ph.D.(5)	25,949,300	5.8%
Xia Wu	—	—
Weidong Liu	—	—
Dian Kang	—	—
Webster Cavenee	—	***
Wing Kee Lau	—	—
All directors and executive officers as a group	187,741,630	42.3%
Principal Shareholders:		
FHP acting-in-concert group(6)	79,065,280	17.8%
CICC entities(7)	57,824,500	13.0%
Hai Yan, Ph.D. (2)	33,332,000	7.5%
Tianjin Genetron Jun'an Business Management Partnership (Limited Partnership)(8)	26,083,650	5.9%
Weiwu He, Ph.D. (5)	25,949,300	5.8%
Vivo Capital Fund IX, L.P.(9)	31,699,300	7.1%
EASY BENEFIT INVESTMENT LIMITED and its affiliated entity(10)	23,401,500	5.3%

Notes:

- * For each person and group included in this table, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group by the sum of (i) 444,358,600, being the number of ordinary shares as of March 31, 2021 and (ii) the number of ordinary shares underlying share options held by such person or group that are exercisable within 60 days after March 31, 2021.
- ** Represents beneficial ownership of less than one percent.
- † The address of our directors and executive officers, except for Weiwu He, Xia Wu, Weidong Liu, Dian Kang, Webster Cavenee and Wing Kee Lau, is 1F/2F, Building No. 2, 8 Sheng Ming Yuan Road, Life Science Park, Zhong Guan Cun, Changpin District, Beijing, PRC. The address of Weiwu He is Unit 502, China Central Place Tower 3, Jianguo Road, Chaoyang District, Beijing, PRC. The address of Xia Wu is Unit 909, China World Office 2, 1 Jianguomenwai Avenue, Chaoyang District, Beijing, PRC. The address of Weidong Liu is Suite 1801, West Tower, Twin Towers B12 Jianguomenwai Ave Chaoyang District, Beijing, 100022. The address of Dian Kang is Room S, 26/F., One Midtown, 11 Hoi Shing Road, Tsuen Wan, Hong Kong. The address of Webster Cavenee is Ludwig Institute, 9500 Gilman Drive, La Jolla, CA 92093-0660 USA. The address of Wing Kee Lau is Flat 6, 23rd floor, Mei Fai Court, Yue Fai Yuen, Aberdeen, Hong Kong.
- (1) Represents (i) 79,065,280 ordinary shares collectively held by FHP acting-in-concert group, as set forth in note (6) below, (ii) 14,504,020 ordinary shares in the form of ADSs held by Mr. Sizhen Wang, (iii) 8,990,000 ordinary shares held by SUPER SAIL, LLC, a wholly owned limited liability company solely owned by Alliance Trust Company, Trustee of Super E Growth Trust, where Mr. Sizhen Wang is the settlor, and (iv) total of 4,339,500 ordinary shares held by Genetron Discovery Holdings Limited as a record holder, which Mr. Sizhen Wang owns approximately 50.8% equity interests. The registered address of Genetron Discovery Holdings Limited is Harneys Corporate Services Limited, Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands.
- (2) Represents 33,332,000 ordinary shares directly held by Mr. Hai Yan.
- (3) Represents (i) 3,259,000 ordinary shares held by Eugene Health Limited, a British Virgin Islands company wholly owned by Mr. Yuchen Jiao; (ii) 587,500 ordinary shares held by Genetron Discovery Holdings Limited and (iii) 3,259,000 ordinary shares Mr. Yuchen Jiao may purchase upon exercise of options within 60 days of March 31, 2021. Mr. Yuchen Jiao owns approximately 13.5% equity interests in Genetron Discovery Holdings. The registered address of Eugene Health Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands. The registered address of Genetron Discovery Holdings Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands.
- (4) Represents (i) 5,313,500 ordinary shares directly held by Mr. Kevin Ying Hong; (ii) 2,202,500 ordinary shares held by Genetron Alliance Holdings Limited and (iii) 2,536,000 ordinary shares Mr. Kevin Ying Hong may purchase upon exercise of options within 60 days of March 31, 2021. Mr. Kevin Ying Hong owns approximately 38.0% equity interests in Genetron Alliance Holdings Limited. The registered address of Genetron Alliance Holdings Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands.

- (5) Represents (i) 6,296,500 ordinary shares directly held by Mr. Weiwu He, (ii) 14,094,000 ordinary shares in the form of ADSs held by Mr. Weiwu He; and (iii) 2,144,000 ordinary shares held by Genetron Alliance Holdings Limited and (iv) 3,414,800 ordinary shares held by ETP BioHealth II Fund, L.P. Mr. Weiwu He owns approximately 37.0% equity interests in Genetron Alliance Holdings Limited. The general partner of ETP BioHealth II Fund, L.P. is Emerging Technology Partners LLC, a limited liability company ultimately controlled by Mr. Weiwu He. The registered address of Genetron Alliance Holdings Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands. The registered address of ETP BioHealth II Fund, L.P. is Corporation Service Company, 251 Little Falls Drive, in the City of Wilmington, County of New Castle, 19808.
- (6) Represents the shares held by FHP act-in-concert group, consisting of (i) 10,814,480 ordinary shares held by FHP Holdings Limited, a British Virgin Islands company wholly owned by Mr. Sizhen Wang, (ii) 33,332,000 ordinary shares held by Mr. Hai Yan; (iii) 20,390,500 ordinary shares directly held by Mr. Weiwu He; (iv) 5,313,500 ordinary shares directly held by Mr. Kevin Ying Hong; (v) 5,800,000 ordinary shares held by Genetron Alliance Holdings Limited; and (vi) 3,414,800 ordinary shares held by ETP BioHealth II Fund, L.P. On November 19, 2019, FHP Holdings Limited, Mr. Hai Yan, Mr. Weiwu He, Mr. Kevin Ying Hong, Genetron Alliance Holdings Limited and ETP BioHealth II Fund, L.P. entered into a concert party agreement, pursuant to which the parties agree to (i) always be acting in concert in respect of their respective direct or indirect voting rights at our shareholders' general meetings and our board meetings, (ii) recognize the controlling position of FHP Holdings Limited; and (iii) act in concert in accordance with FHP Holdings Limited's opinions in respect of the daily operations and management and the major decision-making of us. The registered address of FHP Holdings Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands. The registered address of Genetron Alliance Holdings Limited is Craigmuir Chambers, P.O. Box 71, Road Town, Tortola, VG 1110, British Virgin Islands. The registered address of ETP BioHealth II Fund, L.P. is Corporation Service Company, 251 Little Falls Drive, in the City of Wilmington, County of New Castle, 19808. 10,814,480 ordinary shares held by FHP Holdings Limited, 6,296,478 ordinary shares held by Mr. Weiwu He, 5,313,500 ordinary shares held by Mr. Kevin Ying Hong, and 5,800,000 ordinary shares held by Genetron Alliance Holdings Limited have been pledged to secure a payment of consideration for purchasing certain shares of Genetron Health from a shareholder of Genetron Health.
- (7) Represents (i) 44,165,500 ordinary shares held by Tianjin Kangyue Business Management Partnership (Limited Partnership), or Tianjin Kangyue, a limited partnership incorporated in the People's Republic of China; and (ii) 13,659,000 ordinary shares held by CICC Healthcare Investment Fund, L.P., or CICC Healthcare, a partnership incorporated in Cayman Island. The general partner of Tianjin Kangyue is CICC Kangzhi (Ningbo) Equity Investment Management Co., Ltd., or CICC Kangzhi. CICC Kangzhi is controlled by CICC Capital Management Co., Ltd., which is a wholly owned subsidiary of China International Capital Corporation Limited. The general partner of CICC Healthcare is CICC Capital Healthcare Investment Management Limited, which is controlled by China International Capital Corporation Limited. China International Capital Corporation Limited is a listed company on The Stock Exchange of Hong Kong. The registered address of Tianjin Kangyue is Custody No. 0700, Deqin (Tianjin) Registrar Co., Ltd., 113 Building No. 2, Guo Tai Mansion, East Side of Yingbin Avenue, Tianjin Pilot Free Trade Zone, PRC. The registered address of CICC Healthcare is PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.
- (8) Represents 26,083,650 ordinary shares held by Tianjin Genetron Jun'an Business Management Partnership (Limited Partnership), or Tianjin Genetron Jun'an, a limited partnership incorporated in the People's Republic of China. The general partner of Tianjin Genetron Jun'an is Zhuhai Jinchang Junying Management Consulting Co., Ltd. The limited partners of Tianjin Genetron Jun'an are Suzhou Fenxiang High-tech Healthcare Entrepreneurship Investment Co. (Limited Partnership) (or Suzhou Fenxiang), Guangxi Yueyin Dade Investment Management Partnership (Limited Partnership) (or Guangxi Yueyin Dade), Shenzhen Fenxiang Precision Medicine Investment Partnership (Limited Partnership) (or Shenzhen Fenxiang), Shanghai Yuanxing Yinshi Equity Investment Partnership (Limited Partnership) (or Shanghai Yuanxing) and Shenzhen Shenshang Xingye Entrepreneurship Investment Fund Partnership (Limited Partnership) (or Shenzhen Shenshang). In accordance with a supplemental limited partnership agreement entered among the general partner and the limited partners of Tianjin Genetron Jun'an, the investment or divestment decision for Tianjin Genetron Jun'an requires the unanimous approval of all limited partners of Tianjin Genetron Jun'an. The general partner of both Suzhou Fenxiang and Shenzhen Fenxiang is Shenzhen Fenxiang Chengzhang Investment Management Limited, whose designated executive representative is Wentao Bai. The general partner of Guangxi Yueyin Dade is Ningbo Meishan Baoshui Gangqu Yueyin Kangtai Equity Investment Partnership (Limited Partnership), whose designated executive representative is Yufen Zheng. The general partner of Shanghai Yuanxing is Ningbo Yuanxing Haozhi Equity Investment Management Partnership (Limited Partnership), whose designated executive representative is Fumin Zhuo. The general partner of Shenzhen Shenshang is Shenzhen City Shenshang Fubo Xingye Fund Management Limited Company, whose designated executive representative is Muxiong Lin. The registered address of Tianjin Genetron Jun'an is Custody No. 0703, Deqin (Tianjin) Registrar Co., Ltd., 113 Building No. 2, Guo Tai Mansion, East Side of Yingbin Avenue, Tianjin Pilot Free Trade Zone, PRC.

- (9) Represents (i) 25,449,300 ordinary shares held by Vivo Capital Fund IX, L.P., a limited partnership incorporated in the State of Delaware, (ii) 3,125,000 ordinary shares in the form of ADSs held by Vivo Capital Fund IX, L.P., and (iii) 3,125,000 ordinary shares in the form of ADSs held by Vivo Opportunity Fund, L.P., an affiliate of Vivo Capital Fund IX, L.P. The general partner of Vivo Capital Fund IX, L.P. is Vivo Capital IX, LLC. The voting members of Vivo Capital IX, LLC are Frank Kung, Albert Cha, Shan Fu, Edgar Engleman and Chen Yu, none of whom has individual voting or investment power with respect to these shares and each of whom disclaims beneficial ownership of such shares. The registered address of Vivo Capital Fund IX, L.P. is 1209 Orange Street, Wilmington, Delaware 19801.
- (10) Represents (i) 20,865,500 ordinary shares held by EASY BENEFIT INVESTMENT LIMITED, and (ii) 2,536,000 ordinary shares held by EASY BEST INVESTMENT LIMITED. Both EASY BENEFIT INVESTMENT LIMITED and EASY BEST INVESTMENT LIMITED are British Virgin Islands companies wholly owned by Mr. KUNG Hung Ka. The registered address of EASY BENEFIT INVESTMENT LIMITED is OMC Chambers, Wickhams Cay 1, Road Town, Tortola, British Virgin Islands.

To our knowledge, as of March 31, 2021, a total of 118,953,520 ordinary shares are held by one record holder in the United States, representing approximately 26.8% of our total outstanding shares. The holder is the depositary of our ADS program. In addition, 23.3% of our outstanding ordinary shares are held by record holders in the United States.

We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

7.A. Major Shareholders

Please refer to “Item 6. Directors, Senior Management and Employees — E. Share Ownership.” The company’s major shareholders do not have different voting rights than the other shareholders.

7.B. Related Party Transactions

Employment Agreements

See “Item 6. Directors, Senior Management and Employees—6.B. Compensation—Employment Agreements and Indemnification Agreements” for a description of the employment agreements we have entered into with our senior executive officers.

Share Incentives

See “Item 6. Directors, Senior Management and Employees—6.B. Compensation—Share Incentive Plan” for a description of share options we have granted to our directors, officers and other individuals as a group.

Contractual Arrangements

See “Item 4. Information on the Company—C. Organizational Structure— Contractual Arrangements with our VIEs and their Shareholders” for a description of the contractual arrangements by and among our WOFEs, our VIEs and the shareholders of our VIEs.

Other Related Party Transactions

Transaction with Mr. Sizhen Wang

In February 2018, we provided a loan of RMB35.0 million to Mr. Sizhen Wang. The loan is with an interest rate of 4.35% per annum and a term of six months, and permits prepayment. We settled all the outstanding balance of the related-party loan due from Mr. Sizhen Wang in June 2018.

In March 2018, we provided a loan of RMB2.6 million to Mr. Sizhen Wang. The loan is with an interest rate of 4.35% per annum and due December 2019, and permits prepayment. We settled all the outstanding balance of the related-party loan due from Mr. Sizhen Wang in October 2019.

In August 2018, we provided a loan of RMB6.0 million to Mr. Sizhen Wang. The loan is with an interest rate of 4.35% per annum and a term of six months, and permits prepayment. We settled all the outstanding balance of the related-party loan due from Mr. Sizhen Wang in December 2018.

In January 2019, we provided a loan of RMB5.0 million to Mr. Sizhen Wang. The loan is with an interest rate of 4.35% per annum and a term of six months, and permits prepayment. We settled all the outstanding balance of the related-party loan due from Mr. Sizhen Wang in October 2019.

Transaction with Edigene (Beijing) Inc.

We provide gene sequencing services to Edigene (Beijing) Inc., or Edigene, which is an affiliate of Mr. Sizhen Wang. The amounts for the provision of the service were RMB0.1 million, RMB1.1 million and RMB0.6 million (US\$0.1 million) in 2018, 2019 and 2020, respectively, and as of December 31, 2019 and 2020, the amount due from Edigene were RMB0.5 million and RMB0.2 million (US\$0.03 million), respectively.

Transaction with Vcanbio Gene Technology Corp., Ltd.

We provide gene sequencing services to Vcanbio Gene Technology Corp., Ltd., or Vcanbio, an affiliate of Tianjin Tianyuantong Equity Investment Partnership (Limited Partnership), one of our shareholders. The amount for the provision of the service was RMB1.2 million, zero and zero in 2018, 2019 and 2020, respectively; and the amount due from Vcanbio were zero and zero as of December 31, 2019 and 2020, respectively.

Transaction with Juventas Cell Therapy Ltd.

In August 2019, we received a loan of RMB35.0 million from Juventas Cell Therapy Ltd., which is guaranteed by Mr. Sizhen Wang. The loan is with an interest rate of 12% per annum and repayable on August 31, 2019. As of date of December 31, 2020, we have settled all the outstanding balance due to Juventas Cell Therapy Ltd. Certain directors of Juventas Cell Therapy Ltd. are also our directors.

Transaction with TCRCure Entities

We provided gene sequencing services to TCRCure Biopharma (Beijing) Ltd., or TCRCure Beijing, and TCRCure Biopharma (Chongqing) Ltd., or TCRCure Chongqing, each an affiliate of Mr. Weihua He, our Chairman of the Board.

The amounts for the provision of the service to TCRCure Beijing were zero, RMB0.6 million and zero in 2018, 2019 and 2020, respectively, and as of December 31, 2019 and 2020, the amount due from TCRCure Beijing were RMB0.6 million and zero, respectively.

The amounts for the provision of the service to TCRCure Chongqing were zero, zero and RMB0.9 million in 2018, 2019 and 2020, respectively, and as of December 31, 2019 and 2020, the amount due from TCRCure Chongqing were zero and zero, respectively.

7.C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

8.A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal and Administrative Proceedings

We are currently not a party to any material legal or administrative proceedings. We may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in a substantial cost and diversion to our resources, including our management's time and attention. For risks relating to legal and administrative proceedings against us, please see "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Operations—Allegations or lawsuits against us or our management may harm our reputation and business."

Dividend Policy

We have not previously declared or paid cash dividends and we have no plan to declare or pay any dividends in the near future on our shares or the ADSs representing our ordinary shares. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

We are a holding company incorporated in the Cayman Islands. We rely principally on dividends from our PRC Subsidiaries for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC Subsidiaries to pay dividends to us. See "Item 4. Information of the Company—B. Business Overview—Regulation—Regulations relating to Dividend Distribution."

Our Board of Directors has discretion as to whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may, subject to the provisions of our articles of association, by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our Board of Directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our Board of Directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant. If we pay any dividends on our ordinary shares, we will pay those dividends which are payable in respect of the ordinary shares underlying the ADSs to the depositary, as the registered holder of such ordinary shares, and the depositary then will pay such amounts to the ADS holders in proportion to the ordinary shares underlying the ADSs held by such ADS holders, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. See "Item 12. Description of Securities Other Than Equity Securities—D. American Depositary Shares."

8.B. Significant Changes

Except as otherwise disclosed in this report, we have not experienced any significant changes since the date of the annual financial statements included herein.

ITEM 9. THE OFFER AND LISTING

9.A. Offering and Listing Details

Our ADSs have been listed on the Nasdaq Global Market since June 19, 2020 under the symbol "GTH." Each ADS represents five ordinary shares, par value US\$0.00002 per share.

9.B. Plan of Distribution

Not applicable.

9.C. Markets

Our ADSs have been listed on the Nasdaq Global Market since June 19, 2020 under the symbol “GTH.”

9.D. Selling Shareholders

Not applicable.

9.E. Dilution

Not applicable.

9.F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

10.A. Share Capital

Not applicable.

10.B. Memorandum and Articles of Association

We incorporate by reference into this annual report our fourth amended and restated memorandum and articles of association, the form of which was filed as Exhibit 3.2 to our registration statement on Form F-1 (File Number 333-234805), as amended, filed with the Securities and Exchange Commission on June 15, 2020. Our members adopted our amended and restated memorandum and articles of association by a special resolution on January 14, 2020, which became effective immediately prior to completion of our initial public offering of ADSs representing our ordinary shares.

The following are summaries of material provisions of our fourth amended and restated memorandum and articles of association and the Companies Act (as amended) insofar as they relate to the material terms of our ordinary shares.

Registered Office and Objects

Our registered office in the Cayman Islands is at the offices of Walkers Corporate Limited, Cayman Corporate Centre, 190 Elgin Avenue, George Town, Grand Cayman KY1-9008, Cayman Islands.

According to Clause 3 of our fourth amended and restated memorandum of association, the objects for which the Company is established are unrestricted and the Company shall have full power and authority to carry out any object not prohibited by any law as provided by Section 7(4) of the Companies Act (as amended) of the Cayman Islands.

Board of Directors

See “Item 6. Directors, Senior Management and Employees.”

Ordinary Shares

General. As of March 31, 2021, our authorized share capital is US\$50,000 divided into 2,500,000,000 ordinary shares, with a par value of US\$0.00002 each. Holders of ordinary shares have the same rights except for voting and conversion rights. All of our issued and outstanding ordinary shares are fully paid and non-assessable. Certificates representing the ordinary shares are issued in registered form. We may not issue share to bearer. Our shareholders who are nonresidents of the Cayman Islands may freely hold and transfer their ordinary shares.

Dividends. The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors subject to our fourth amended and restated memorandum and articles of association and the Companies Act (as amended). In addition, our shareholders may, subject to the provisions of our articles of association, by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Our fourth amended and restated memorandum and articles of association provide that dividends may be declared and paid out of our profits, realized or unrealized, or from any reserve set aside from profits which our board of directors determine is no longer needed. Dividends may also be declared and paid out of share premium account or any other fund or account which can be authorized for this purpose in accordance with the Companies Act. No dividend may be declared and paid unless our directors determine that, immediately after the payment, we will be able to pay our debts as they become due in the ordinary course of business and we have funds lawfully available for such purpose.

Voting Rights. In respect of all matters subject to a shareholders' vote, each ordinary share is entitled to one vote for each ordinary share registered in his or her name on our register of members. Voting at any meeting of shareholders is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any one shareholder.

A quorum required for a meeting of shareholders consists of the holders of ordinary shares being not less than one-half of the votes attaching to the issued and outstanding shares entitled to vote at general meetings present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative. As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our fourth amended and restated memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we will specify the meeting as such in the notices calling it, and the annual general meeting will be held at such time and place as may be determined by our board of directors. Each general meeting, other than an annual general meeting, shall be an extraordinary general meeting. Shareholders' annual general meetings and any other general meetings of our shareholders may be called by a majority of our Board of Directors or our chairman or upon a requisition of shareholders holding at the date of deposit of the requisition not less than ten (10) percent of the votes attaching to the issued and outstanding shares entitled to vote at general meetings, in which case the directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting; however, our fourth amended and restated memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders. Advance notice of at least seven (7) calendar days is required for the convening of our annual general meeting and other general meetings unless such notice is waived in accordance with our fourth amended and restated memorandum and articles of association.

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast by those shareholders entitled to vote who are present in person or by proxy at a general meeting, while a special resolution also requires the affirmative vote of no less than two-thirds of the votes attaching to the ordinary shares cast by those shareholders entitled to vote who are present in person or by proxy at a general meeting. A special resolution will be required for important matters such as a change of name or making changes to our fourth amended and restated memorandum and articles of association.

Transfer of Ordinary Shares. Subject to the restrictions in our fourth amended and restated memorandum and articles of association as set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four;

- the shares are free from any lien in favor of the Company; and
- a fee of such maximum sum as the Nasdaq may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, after compliance with any notice required of the Nasdaq, be suspended and the register or members closed at such times and for such periods as our board of directors may from time to time determine, *provided, however*, that the registration of transfers shall not be suspended nor the register closed for more than 30 days in any year as our board may determine.

Liquidation. On a return of capital on winding up or otherwise (other than on conversion, redemption or purchase of ordinary shares), if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed amongst our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders in proportion to the par value of the shares held by them. Any distribution of assets or capital to a holder of ordinary share will be the same in any liquidation event.

Calls on Ordinary Shares and Forfeiture of Ordinary Shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their ordinary shares in a notice served to such shareholders at least 14 clear days prior to the specified time of payment. The ordinary shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Ordinary Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders thereof, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by an ordinary resolution of our shareholders. Our company may also repurchase any of our shares provided that the manner and terms of such purchase have been approved by our board of directors or by ordinary resolution of our shareholders, or are otherwise authorized by our fourth amended and restated memorandum and articles of association. Under the Companies Act (as amended), the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if the company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act (as amended) no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding, or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of Rights of Shares. If at any time our share capital is divided into different classes or series of shares, the rights attached to any class or series of shares (unless otherwise provided by the terms of issue of the shares of that class or series), whether or not our company is being wound- up, may be varied with the consent in writing of a majority the holders of the issued shares of that class or series or with the sanction of a special resolution at a separate meeting of the holders of the shares of the class or series. The rights conferred upon the holders of the shares of any class issued shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking *pari passu* with such existing class of shares.

Inspection of Books and Records. Holders of our ordinary shares have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records. However, we will provide our shareholders with annual audited financial statements. See "Where You Can Find Additional Information."

Limitations on the Rights to Own Ordinary Shares. There are no limitations under the laws of the Cayman Islands or under the fourth amended and restated memorandum and articles of association that limit the right of non-resident or foreign owners to hold or vote ordinary shares.

Issuance of Additional Shares. Our fourth amended and restated memorandum and articles of association authorizes our board of directors to issue additional ordinary shares from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our fourth amended and restated memorandum and articles of association also authorizes our board of directors to establish from time to time one or more series of preferred shares and to determine, with respect to any series of preferred shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue preferred shares without action by our shareholders to the extent authorized but unissued. Issuance of these shares may dilute the voting power of holders of ordinary shares.

Anti-Takeover Provisions. Some provisions of our fourth amended and restated memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that authorize our board of directors to issue preferred shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preferred shares without any further vote or action by our shareholders.

Exempted Company. We are an exempted company with limited liability under the Companies Act (as amended). The Companies Act (as amended) distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;
- does not have to hold an annual general meeting;
- may issue shares with no par value;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 30 years in the first instance);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

“Limited liability” means that the liability of each shareholder is limited to the amount unpaid by the shareholder on that shareholder’s shares of the company.

10.C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in “Item 4. Information on the Company” or elsewhere in this annual report on Form 20-F.

10.D. Exchange Controls

The Cayman Islands currently has no exchange control regulations or currency restrictions. For exchange control regulations or currency restrictions in China, see “Item 4. Information of the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange.”

10.E. Taxation

The following discussion of Cayman Islands, PRC and United States federal income tax consequences of the ownership and disposition of the ADSs or ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This discussion does not deal with all possible tax consequences relating to the ownership and disposition of the ADSs or ordinary shares, such as the tax consequences under state, local and other tax laws. To the extent that the discussion relates to matters of Cayman Islands tax law, it represents the opinion of Walkers (Hong Kong), our Cayman Islands counsel. To the extent that the discussion relates to matters of PRC tax law, it represents the opinion of Shihui Partners, our PRC legal counsel.

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation, and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us or holders of our ADSs or ordinary shares levied by the government of the Cayman Islands, except for stamp duties which may be applicable on instruments executed in, or after execution brought within the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of the ADSs or ordinary shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of the ADSs or ordinary shares, nor will gains derived from the disposal of the ADSs or ordinary shares be subject to Cayman Islands income or corporation tax.

PRC Taxation

Under the PRC EIT Law, which became effective on January 1, 2008 and was amended on December 29, 2018, an enterprise established outside the PRC with “de facto management bodies” within the PRC is considered a “resident enterprise” for PRC enterprise income tax purposes and is generally subject to a uniform 25% enterprise income tax rate on its worldwide income. Under the implementation rules to the PRC EIT Law, a “de facto management body” is defined as a body that has material and overall management and control over the manufacturing and business operations, personnel and human resources, finances and properties of an enterprise.

In addition, the SAT Circular 82 issued by the SAT in April 2009 specifies that certain offshore incorporated enterprises controlled by PRC enterprises or PRC enterprise groups will be classified as PRC resident enterprises if the following are located or resident in the PRC: (a) senior management personnel and departments that are responsible for daily production, operation and management; (b) financial and personnel decision-making bodies; (c) key properties, accounting books, company seal, minutes of board meetings and shareholders’ meetings; and (d) half or more of the senior management or directors having voting rights. Further to SAT Circular 82, the SAT issued the SAT Bulletin 45, which took effect in September 2011, to provide more guidance on the implementation of SAT Circular 82. SAT Bulletin 45 provides for procedures and administration details of determination on resident status and administration on post-determination matters. Our company is a company incorporated outside the PRC. As a holding company, its key assets are its ownership interests in its subsidiaries, and its key assets are located, and its records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside the PRC. As such, we do not believe that our company meets all of the conditions above or is a PRC resident enterprise for PRC tax purposes. For similar reasons, we believe our other entities outside China are not PRC resident enterprises either. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” There can be no assurance that the PRC government will ultimately take a view that is consistent with us. If the PRC tax authorities determine that our Cayman Islands holding company is a PRC resident enterprise for PRC enterprise income tax purposes, a number of unfavorable PRC tax consequences could follow. For example, a 10% withholding tax would be imposed on dividends we pay to our non-PRC enterprise shareholders (including our ADS holders). In addition, nonresident enterprise shareholders (including our ADS holders) may be subject to PRC tax on at a rate of 10% gains realized on the sale or other disposition of ADSs or ordinary shares, if such income is treated as sourced from within the PRC. Furthermore, if we are deemed a PRC resident enterprise, dividends paid to our non-PRC individual shareholders (including our ADS holders) and any gain realized on the transfer of ADSs or ordinary shares by such shareholders may be subject to PRC tax at a rate of 20% (which, in the case of dividends, may be withheld at source by us). These rates may be reduced by an applicable tax treaty, but it is unclear whether non-PRC shareholders of our company would be able to obtain the benefits of any tax treaties between their country of tax residence and the PRC in the event that we are treated as a PRC resident enterprise. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in the PRC—If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders.”

Material U.S. Federal Income Tax Considerations

The following are material U.S. federal income tax consequences to the U.S. Holders described below of the ownership and disposition of the ADSs or ordinary shares, but it does not purport to be a comprehensive description of all tax considerations that may be relevant to a particular person's decision to hold ADSs or ordinary shares. This discussion applies only to a U.S. Holder that holds the ADSs or ordinary shares as capital assets for U.S. federal income tax purposes. In addition, it does not describe all of the tax consequences that may be relevant in light of a U.S. Holder's particular circumstances, including the alternative minimum tax, the Medicare contribution tax consequences, and tax consequences applicable to U.S. Holders subject to special rules, such as:

- certain financial institutions;
- dealers or traders in securities that use a mark-to-market method of tax accounting;
- persons holding ADSs or ordinary shares as part of a straddle, conversion transaction, integrated transaction or similar transaction;
- persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- entities classified as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt entities, "individual retirement accounts" or "Roth IRAs";
- persons that receive ADSs or ordinary shares as compensation for the performance of services;
- persons that own or are deemed to own 10% or more of our stock by vote or value; or
- persons holding ADSs or ordinary shares in connection with a trade or business conducted outside of the United States.

If an entity that is classified as a partnership for U.S. federal income tax purposes owns ADSs or ordinary shares, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships owning ADSs or ordinary shares and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of owning and disposing of ADSs and ordinary shares.

This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, and the income tax treaty between the United States and the PRC, or the Treaty, all as of the date hereof, any of which is subject to change, possibly with retroactive effect. This discussion assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms.

For purposes of this discussion, a "U.S. Holder" is a person that for U.S. federal income tax purposes is a beneficial owner of ADSs or ordinary shares and:

- a citizen or individual resident of the United States;

- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

In general, a U.S. Holder who owns ADSs will be treated as the owner of the underlying ordinary shares represented by those ADSs for U.S. federal income tax purposes. Accordingly, no gain or loss will be recognized if a U.S. Holder exchanges ADSs for the underlying ordinary shares represented by those ADSs.

This discussion does not address the effects of any state, local or non-U.S. tax laws, or any U.S. federal taxes other than income taxes (such as U.S. federal estate or gift tax consequences). U.S. Holders should consult their tax advisers concerning the U.S. federal, state, local and non-U.S. tax consequences of owning and disposing of ADSs or ordinary shares in their particular circumstances.

Taxation of Distributions

This discussion is subject to the discussion under “—Passive Foreign Investment Company Rules” below. Distributions other than certain pro rata distributions of ADSs or ordinary shares, will be treated as dividends to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because we do not maintain calculations of our earnings and profits under U.S. federal income tax principles, it is expected that distributions generally will be reported to U.S. Holders as “dividends” for U.S. federal income tax purposes. Dividends will not be eligible for the dividends-received deduction generally available to U.S. corporations under the Code. Subject to applicable limitations, dividends paid on our ADSs to certain non-corporate U.S. investors are taxable at the favorable rates applicable to long-term capital gains for so long as our ADSs are listed on the Nasdaq Global Market or if in the future we are eligible for benefits under the Treaty. The favorable rate does not apply if we are a passive foreign investment company, or PFIC, for the year the dividend is paid or the preceding year. Non-corporate U.S. Holders should consult their tax advisers to determine whether the favorable rate will apply to dividends they receive and whether they are subject to any special rules that limit their ability to be taxed at this favorable rate.

Dividends will be included in a U.S. Holder’s income generally on the date of the U.S. Holder’s, or in the case of ADSs, the Depositary’s, receipt. The amount of any dividend income paid in currency other than U.S. dollars will be the U.S. dollar amount calculated by reference to the spot rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars on that date. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder generally should not be required to recognize foreign currency gain or loss in respect of the amount received. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt.

Dividends will be treated as foreign-source income for foreign tax credit purposes. As described in “—PRC Taxation,” dividends paid by the Company may be subject to PRC withholding tax. For U.S. federal income tax purposes, the amount of the dividend income will include amounts withheld in respect of any PRC withholding tax. Subject to applicable limitations, which vary depending upon the U.S. Holder’s circumstances, PRC taxes withheld from dividend payments (at a rate not exceeding the applicable rate provided in the Treaty in the case of a U.S. Holder that is eligible for the benefits of the Treaty) generally will be creditable against the U.S. Holder’s U.S. federal income tax liability. The rules governing foreign tax credits are complex and U.S. Holders should consult their tax advisers regarding the creditability of foreign tax credits in their particular circumstances. In lieu of claiming a credit, a U.S. Holder may elect to deduct such PRC taxes in computing its taxable income, subject to applicable limitations. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year.

Sale or Other Disposition of ADSs or ordinary shares

This discussion is subject to the discussion under “—Passive Foreign Investment Company Rules” below. For U.S. federal income tax purposes, gain or loss realized on the sale or other taxable disposition of ADSs or ordinary shares will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the ADSs or ordinary shares for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder’s tax basis in the ADSs or ordinary shares disposed of and the amount realized on the disposition, in each case as determined in U.S. dollars.

As described in “—PRC Taxation” above, gains on the sale of ADSs or ordinary shares may be subject to PRC taxes if we are treated as a PRC resident enterprise for PRC tax purposes. A U.S. Holder will be entitled to use foreign tax credits to offset only the portion of its U.S. federal income tax liability that is attributable to foreign-source income. Because under the Code capital gains of U.S. persons are generally treated as U.S.-source income, this limitation may preclude a U.S. Holder from claiming a credit for all or a portion of any PRC taxes imposed on any such gains. However, U.S. Holders that are eligible for the benefits of the Treaty may be able to elect to treat the gain as PRC-source income for foreign tax credit purposes and therefore claim foreign tax credits in respect of PRC taxes on disposition gains. U.S. Holders should consult their tax advisers regarding their eligibility for the benefits of the Treaty and the creditability of any PRC tax on disposition gains in their particular circumstances.

Passive Foreign Investment Company

In general, a non-U.S. corporation is a PFIC for any taxable year in which (i) 75% or more of its gross income consists of passive income or (ii) 50% or more of the average value of its assets (generally determined on a quarterly basis) consists of assets that produce, or are held for the production of, passive income. For purposes of the above calculations, a non-U.S. corporation that owns, directly or indirectly, at least 25% by value of the shares of another corporation is treated as if it held its proportionate share of the assets of the other corporation and received directly its proportionate share of the income of the other corporation. Passive income generally includes dividends, interest, rents, royalties and certain gains. Cash is generally a passive asset for these purposes.

Based on the composition of our income and assets and the value of our assets, including goodwill, we believe that we were not a PFIC for our 2020 taxable year. However, our PFIC status for any taxable year is an annual determination that depends on the composition of our income and assets and the value of our assets from time to time (which may be determined, in large part, by reference to the market price of the ADSs, which could be volatile). Furthermore, we raised a substantial amount of cash during our financing activities and will hold a substantial amount of cash following our initial public offering and therefore our risk of being a PFIC for any taxable year will increase if our market capitalization declines. Moreover, it is not entirely clear how the contractual arrangements between us and our VIEs will be treated for purposes of the PFIC rules, and we may be or become a PFIC if our VIEs are not treated as owned by us for these purposes. Accordingly, there can be no assurance that we will not be a PFIC for 2020, our current or any future taxable year.

If we were a PFIC for any taxable year and any entity in which we own or are treated as owning equity interests (including our VIEs and their subsidiaries) were also a PFIC (any such entity, a “Lower-tier PFIC”), a U.S. Holder would be deemed to own a proportionate amount (by value) of the shares of each Lower-tier PFIC and would be subject to U.S. federal income tax according to the rules described in the subsequent paragraph on (i) certain distributions by a Lower-tier PFIC and (ii) dispositions of shares of Lower-tier PFICs, in each case as if the U.S. Holder held such shares directly, even though the U.S. Holder will not receive the proceeds of those distributions or dispositions.

In general, if we were a PFIC for any taxable year during which a U.S. Holder holds ADSs or ordinary shares, gain recognized by such U.S. Holder on a sale or other disposition (including certain pledges) of its ADSs or ordinary shares would be allocated ratably over that U.S. Holder’s holding period. The amounts allocated to the taxable year of the sale or disposition and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations, as appropriate, for that taxable year, and an interest charge would be imposed on the resulting tax liability for each such year. Furthermore, to the extent that distributions received by a U.S. Holder in any year on its ADSs or ordinary shares exceed 125% of the average of the annual distributions on the ADSs or ordinary shares received during the preceding three taxable years or the U.S. Holder’s holding period for the ADSs or ordinary shares, whichever is shorter, such distributions would be subject to taxation in the same manner. If we were a PFIC for any taxable year during which a U.S. Holder owned ADSs or ordinary shares, we would generally continue to be treated as a PFIC with respect to the U.S. Holder for all succeeding years during which the U.S. Holder owned ADSs or ordinary shares, even if we ceased to meet the threshold requirements for PFIC status, unless the U.S. Holder made a timely “deemed sale” election, in which case any gain on the deemed sale would be taxed under the PFIC rules described above.

Alternatively, if we were a PFIC and if the ADSs were “regularly traded” on a “qualified exchange,” as defined in applicable Treasury regulations, a U.S. Holder could make a mark-to-market election that would result in tax treatment different from the general tax treatment for PFICs described in the preceding paragraph. The ADSs would be treated as “regularly traded” for any calendar year in which more than a *de minimis* quantity of the ADSs were traded on a qualified exchange on at least 15 days during each calendar quarter. Nasdaq Global Market, where our ADSs are expected to be listed, is a qualified exchange for this purpose. U.S. Holders will not be able to make a mark-to-market election with respect to Lower-tier PFICs, if any. Accordingly, if we were a PFIC for any taxable year, a U.S. Holder that made the mark-to-market election would continue to be subject to the general PFIC rules with respect to such U.S. Holder’s indirect interest in any Lower-tier PFICs.

If a U.S. Holder makes the mark-to-market election, the U.S. Holder generally will recognize as ordinary income any excess of the fair market value of the ADSs at the end of each taxable year in which we were a PFIC over their adjusted tax basis, and would recognize an ordinary loss in respect of any excess of the adjusted tax basis of the ADSs over their fair market value at the end of the taxable year (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). If a U.S. Holder made the election, the U.S. Holder’s tax basis in the ADSs would be adjusted to reflect the income or loss amounts recognized. Any gain recognized on the sale or other disposition of ADSs in a year when the Company is a PFIC would be treated as ordinary income and any loss would be treated as an ordinary loss (but only to the extent of the net amount of income previously included as a result of the mark-to-market election, with any excess treated as capital loss). If a U.S. Holder made the mark-to-market election, distributions paid on ADSs would be treated as discussed under “—Taxation of Distributions” above, but subject to the discussion in the immediately preceding paragraph.

If we were a PFIC (or with respect to a particular U.S. Holder were treated as a PFIC) for a taxable year in which we paid a dividend or for the prior taxable year, the favorable tax rate described above with respect to dividends paid to certain non-corporate U.S. Holders would not apply.

We do not intend to provide the information that would otherwise enable U.S. Holders to make a “qualified electing fund election,” which would have resulted in alternate treatment if we were a PFIC for any taxable year.

If we were a PFIC for any taxable year during which a U.S. Holder owned any ADSs or ordinary shares, the U.S. Holder would generally be required to file annual reports with the Internal Revenue Service.

U.S. Holders should consult their tax advisers regarding the determination of whether we are a PFIC for any taxable year and the potential application of the PFIC rules to their ownership of ADSs or ordinary shares.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds from the sale or exchange of our ADSs or ordinary shares, that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding, generally on Internal Revenue Service Form W-9. Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder’s U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the Internal Revenue Service.

Certain U.S. Holders who are individuals (or certain specified entities) may be required to report information relating to their ownership of ADSs or ordinary shares, or non-U.S. accounts through which ordinary shares are held. U.S. Holders should consult their tax advisers regarding their reporting obligations with respect to the ADSs or ordinary shares.

10.F. Dividends and Paying Agents

Not applicable.

10.G. Statement by Experts

Not applicable.

10.H. Documents on Display

We previously filed with the SEC registration statement on Form F-1 (File Number 333-234805), as amended to register our ordinary shares in relation to our initial public offering. We also filed with the SEC related registration statement on Form F-6 (File Number 333-235249) to register the ADSs and registration statement on Form S-8 (File Number 333-252371) to register our securities to be issued under 2019 Genetron Health Share Incentive Plan and 2019 Genetron Health Share Incentive Scheme.

We are subject to the periodic reporting and other informational requirements of the Exchange Act as applicable to foreign private issuers. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year. Copies of reports and other information, when so filed with the SEC, can be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents, upon payment of a duplicating fee, by writing to the SEC. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the Commission at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules of the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

We will furnish The Bank of New York Mellon, the depository of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with IFRS, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depository will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depository from us.

10.I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest rate risk

Our exposure to interest rate risk primarily relates to the interest income generated by excess cash, which is mostly held in interest-bearing bank deposits. We have not used any derivative financial instruments to manage our interest risk exposure. Interest-earning instruments carry a degree of interest rate risk. We have not been exposed, nor do we anticipate being exposed, to material risks due to changes in interest rates. However, our future interest income may be lower than expected due to changes in market interest rates.

Foreign exchange risk

Substantially all of our net revenues and expenses are denominated in Renminbi. We do not believe that we currently have any significant direct foreign exchange risk and have not used any derivative financial instruments to hedge exposure to such risk. Although our exposure to foreign exchange risks should be limited in general, the value of your investment in the ADSs will be affected by the exchange rate between U.S. dollar and Renminbi because the value of our business is effectively denominated in RMB, while the ADSs representing our ordinary shares will be traded in U.S. dollars.

The value of the Renminbi against the U.S. dollar and other currencies is affected by changes in China's political and economic conditions and by China's foreign exchange policies, among other things. In July 2005, the PRC government changed its decades-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation subsided and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. While appreciating approximately by 7% against the U.S. dollar in 2017, the Renminbi in 2018 depreciated approximately by 5% against the U.S. dollar. Since October 1, 2016, the RMB has joined the International Monetary Fund (IMF)'s basket of currencies that make up the Special Drawing Right (SDR), along with the U.S. dollar, the Euro, the Japanese yen and the British pound. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system and there is no guarantee that the RMB will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

To the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of Renminbi against the U.S. dollar would reduce the Renminbi amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, servicing our outstanding debt, or for other business purposes, appreciation of the U.S. dollar against the Renminbi would reduce the U.S. dollar amounts available to us.

Inflation risk

Since our inception, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the year-over-year percent change in the consumer price index for 2018, 2019 and 2020 were increases of 2.1%, 2.9% and 2.5%, respectively. Although we have not in the past been materially affected by inflation since our inception, we can provide no assurance that we will not be affected in the future by higher rates of inflation in China.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

12.A. Debt Securities

Not applicable.

12.B. Warrants and Rights

Not applicable.

12.C. Other Securities

Not applicable.

12.D. American Depositary Shares

Fees and Expenses

<i>Persons depositing or withdrawing shares or ADS holders must pay:</i>	<i>For:</i>
<ul style="list-style-type: none"> • \$5.00 (or less) per 100 ADSs (or portion of 100 ADSs) 	<ul style="list-style-type: none"> • Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property
<ul style="list-style-type: none"> • \$.05 (or less) per ADS 	<ul style="list-style-type: none"> • Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
<ul style="list-style-type: none"> • A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs 	<ul style="list-style-type: none"> • Any cash distribution to ADS holders
<ul style="list-style-type: none"> • \$.05 (or less) per ADS per calendar year 	<ul style="list-style-type: none"> • Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
<ul style="list-style-type: none"> • Registration or transfer fees 	<ul style="list-style-type: none"> • Depositary services
<ul style="list-style-type: none"> • Expenses of the depositary 	<ul style="list-style-type: none"> • Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
	<ul style="list-style-type: none"> • Cable (including SWIFT) and facsimile transmissions (when expressly provided in the deposit agreement)

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<i>Persons depositing or withdrawing shares or ADS holders must pay:</i>	<i>For:</i>
<ul style="list-style-type: none">• Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes• Any charges incurred by the depositary or its agents for servicing the deposited securities	<ul style="list-style-type: none">• Converting foreign currency to U.S. dollars• As necessary• As necessary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

Payments by Depositary

In 2020, excluding withholding tax, we received US\$3.4 million cash payment from The Bank of New York Mellon, the depositary bank for our ADR program.

PART II

ITEM 13. ITEM DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

14.A. – 14.D. Material Modifications to the Rights of Security Holders

See “Item 10. Additional Information” for a description of the rights of shareholders, which remain unchanged.

14.E. Use of Proceeds

The following “Use of Proceeds” information relates to the registration statement on Form F-1, as amended (File No. 333-234805) in relation to our initial public offering, which was declared effective by the SEC on June 18, 2020. In June 2020, we completed our initial public offering in which we issued and sold an aggregate of 16,000,000 ADSs, representing 80,000,000 ordinary shares, resulting in net proceeds to us of approximately US\$234.0 million, net of the underwriting discounts and commissions and other fees paid or payable by us in connection with the offering.

For the period from the effective date of the registration statement on Form F-1 to December 31, 2020, we used US\$79.7 million of the net proceeds received from our initial public offering primarily for general corporate and working capital purposes. We still intend to use the remainder of the proceeds from our initial public offering as disclosed in our registration statements on Form F-1.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report, as required by Rule 13a-15(b) under the Exchange Act.

Based upon that evaluation, our management has concluded that, due to the material weaknesses identified below, as of December 31, 2020, our disclosure controls and procedures were not effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

Management’s Annual Report on Internal Control over Financial Reporting

This annual report on Form 20-F does not include a report of management’s assessment regarding internal control over financial reporting due to a transition period established by rules of the SEC for newly public companies.

Attestation Report of the Registered Public Accounting Firm

This annual report on Form 20-F does not include an attestation report of our registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

Internal Control Over Financial Reporting

In connection with the audit of our consolidated financial statements as of December 31, 2020 and 2019 and for each of the three years in the period ended December 31, 2020, our independent registered public accounting firm identified two material weaknesses in our internal control over financial reporting as at December 31, 2020. As defined in standards established by the PCAOB, a “material weakness” is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

The two material weaknesses that has been identified related to:

- Our lack of sufficient and competent financial reporting and accounting personnel with appropriate knowledge of IFRS and reporting requirements set forth by the SEC to address complex IFRS technical accounting issues, and to prepare and review the consolidated financial statements and related disclosures in accordance with IFRS and SEC reporting requirements; and
- Our lack of formal and effective period-end financial closing policies and procedures.

Such material weaknesses, if not timely remedied, may lead to significant misstatements in our consolidated financial statements in the future.

To remediate our identified material weaknesses, we have implemented and plan to continue to implement several measures to improve our internal control over financial reporting, including (i) hiring more qualified accounting personnel, with relevant IFRS and SEC reporting experience and qualifications to strengthen the financial reporting function and setting up a financial and system control framework; (ii) implementing regular and continuous IFRS accounting and financial reporting training programs for our accounting and financial reporting personnel; (iii) setting up an internal audit function as well as engaging an external consulting firm to assist us with assessment of Sarbanes-Oxley compliance requirements and improvement of overall internal controls; and (iv) preparing comprehensive accounting policies, manuals and closing procedures to improve the quality and accuracy of our period-end financial closing process.

We intend to remediate these material weaknesses in multiple phases and expect that we will incur certain costs for implementing our remediation measures. However, we cannot assure you that all these measures will be sufficient to remediate our material weaknesses in time, or at all. See “Item 3. Key Information—D. Risk factors—Risks Relating to Our Operations—If we fail to implement and maintain an effective system of internal controls, we may be unable to accurately or timely report our results of operations or prevent fraud, and investor confidence and the market price of our ADSs may be materially and adversely affected.”

Changes in Internal Control over Financial Reporting

Other than as described above, there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the period covered by this annual report on Form 20-F that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16.A. AUDIT COMMITTEE FINANCIAL EXPERT

Our Board of Directors has determined that Mr. Wing Kee Lau, an independent director and the chairperson of our audit committee, qualifies as an “audit committee financial expert” within the meaning of the SEC rules and in accordance with applicable Nasdaq Global Market standards. Mr. Wing Kee Lau satisfies the “independence” requirements of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, and the applicable Nasdaq Global Market standards.

16.B. Code of Ethics

Our Board of Directors has adopted a code of business conduct and ethics that applies to all of our directors, officers, employees, including certain provisions that specifically apply to our principal executive officer, principal financial officer, principal accounting officer or controller and any other persons who perform similar functions for us. We have filed our code of business conduct and ethics as Exhibit 99.1 of our registration statement on Form F-1 (file No. 333-234805), as amended, filed with the SEC on November 21, 2019 and posted a copy of our code of business conduct and ethics on our website at <https://ir.genetronhealth.com/>. We hereby undertake to provide to any person without charge, a copy of our code of business conduct and ethics within ten working days after we receive such person’s written request.

16.C. Principal Accountant Fees and Services

Auditor Fees

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, for the periods indicated.

	Year Ended December 31,	
	2019	2020
	RMB	RMB
	(in thousands)	
Services		
Audit Fees(1)	8,497	8,809
Audit-Related Fees(2)	—	—
Tax Fees(3)	—	—
Other Fees(4)	—	—
Total	8,497	8,809

- (1) *Audit Fees.* Audit fees mean the aggregate fees billed in each of the fiscal periods listed for professional services rendered by our principal auditors for the audit of our annual consolidated financial statements and assistance with and review of documents filed with the SEC.
- (2) *Audit-related Fees.* Audit-related fees mean the aggregate fees billed for professional services rendered by our principal auditors for the assurance and related services, which were not included under Audit Fees above.
- (3) *Tax Fees.* Tax fees mean fees incurred from professional services related to tax compliance.
- (4) *Other Fees.* Other fees mean fees incurred from professional services related to training, advisory and assurance for corporate and social responsibility reporting and professional services related to tax advice.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, including audit services and audit-related services as described above, other than those for de minimis services which are approved by the audit committee prior to the completion of the audit.

16.D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

16.E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Neither we nor any “affiliated purchaser,” as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any of our equity securities during the period covered by this annual report.

16.F. Change in Registrant’s Certifying Accountant

Not applicable.

16.G. Corporate Governance

Rule 5635(c) of the Nasdaq Rules requires a Nasdaq-listed company to obtain its shareholders’ approval of all equity compensation plans, including stock plans, and any material amendments to such plans. Rule 5615 of the Nasdaq Rules permits a foreign private issuer like our company to follow home country practice in certain corporate governance matters. Currently, we do not plan to rely on home country practice with respect to our corporate governance matters. However, if we choose to follow home country practice in the future, our shareholders may be afforded less protection than they otherwise would under the Nasdaq Global Market corporate governance listing standards applicable to U.S. domestic issuers. Specifically, we do not plan to have a majority of independent directors serving on our board of directors or to establish a nominating committee and a compensation committee composed entirely of independent directors. See “Item 3. Key Information—D. Risk Factors—Risks Relating to the ADSs—As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq Stock Market corporate governance listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the Nasdaq Stock Market corporate governance listing standards.”

16.H. Mine Safety Disclosure

Not applicable.

PART III**ITEM 17. FINANCIAL STATEMENTS**

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

Our consolidated financial statements are included at the end of this annual report.

ITEM 19. EXHIBITS

Exhibit Number	Description of Document
1.1	Fourth Amended and Restated Memorandum and Articles of Association (incorporated by reference to Exhibit 3.2 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019))
2.1	Form of American Depositary Receipt (incorporated by reference to Exhibit 4.1 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.2	Form of Registrant's Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.2 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.3	Form of Deposit Agreement between the Registrant, the depository and holders of the American Depositary Shares (incorporated by reference to Exhibit 4.3 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.4	Amended and Restated Shareholders Agreement by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, certain investors of Genetron Holdings Limited and other parties named therein dated November 19, 2019 (incorporated by reference to Exhibit 4.4 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.5	Amendment to Amended and Restated Shareholders Agreement dated November 19, 2019 by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, certain investors of Genetron Holdings Limited and other parties named therein dated January 14, 2020 (incorporated by reference to Exhibit 4.5 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.6	Amendment to Amended and Restated Shareholders Agreement dated November 19, 2019 by and Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, certain investors of Genetron Holdings Limited and other parties named therein dated May 28, 2020 (incorporated by reference to Exhibit 4.6 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)
2.7*	Description of Securities
4.1	2019 Genetron Health Share Incentive Plan (incorporated by reference to Exhibit 10.1 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)

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<u>Exhibit Number</u>	<u>Description of Document</u>
4.2	<u>2019 Genetron Health Share Incentive Scheme (incorporated by reference to Exhibit 10.2 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.3	<u>Form of Indemnification Agreement with the Registrant's directors (incorporated by reference to Exhibit 10.3 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.4	<u>Form of Employment Agreement between the Registrant and an executive officer of the Registrant (incorporated by reference to Exhibit 10.4 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.5	<u>Shares Purchase Agreement by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd., Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, certain investors of Genetron Holdings Limited and other parties named therein dated July 2, 2019 (incorporated by reference to Exhibit 10.5 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.6	<u>Share Repurchase Agreement by and between Genetron Holdings Limited and EASY BENEFIT INVESTMENT LIMITED dated October 1, 2019 (incorporated by reference to Exhibit 10.6 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.7	<u>Share Repurchase Agreement by and between Genetron Holdings Limited and Parkland Medtech Limited dated October 1, 2019 (incorporated by reference to Exhibit 10.7 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.8	<u>Share Repurchase Agreement by and between Genetron Holdings Limited and CrowdBees Holdings Limited dated October 1, 2019 (incorporated by reference to Exhibit 10.8 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.9	<u>Share Repurchase Agreement by and among Genetron Holdings Limited, FHP Holdings Limited, Hai Yan, Weiwu He, Genetron Voyage Holdings Limited and Genetron United Holdings Limited dated October 1, 2019 (incorporated by reference to Exhibit 10.9 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.10	<u>Series C-2 Preferred Shares Purchase Agreement by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd., Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, and Vivo Capital Fund IX, L.P. dated October 1, 2019 (incorporated by reference to Exhibit 10.10 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.11	<u>Amendment Agreement to Series C-2 Preferred Shares Purchase Agreement by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd., Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, and Vivo Capital Fund IX, L.P. dated November 19, 2019 (incorporated by reference to Exhibit 10.11 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>

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<u>Exhibit Number</u>	<u>Description of Document</u>
4.12	<u>Series D Preferred Shares Purchase Agreement by and among Genetron Holdings Limited, Genetron Health (Hong Kong) Company Limited, Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd., Sizhen Wang, Hai Yan, Weiwu He, FHP Holdings Limited, certain investors of Genetron Holdings Limited and other parties named therein dated November 19, 2019 (incorporated by reference to Exhibit 10.12 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.13	<u>Exclusive Business Cooperation Agreement dated July 2, 2019 by and between Genetron (Tianjin) Co., Ltd and Genetron Health (Beijing) Co., Ltd. (incorporated by reference to Exhibit 10.13 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.14	<u>Shareholder Voting Rights Entrustment Agreement dated July 30, 2019 by and among Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd. and the shareholders of Genetron Health (Beijing) Co., Ltd. (incorporated by reference to Exhibit 10.14 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.15	<u>Equity Interest Pledge Agreement dated July 30, 2019 by and among Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd. and the shareholders of Genetron Health (Beijing) Co., Ltd (incorporated by reference to Exhibit 10.15 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.16	<u>Exclusive Option Agreement dated July 30, 2019 by and among Genetron (Tianjin) Co., Ltd, Genetron Health (Beijing) Co., Ltd. and the shareholders of Genetron Health (Beijing) Co., Ltd. (incorporated by reference to Exhibit 10.16 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.17	<u>Spousal Consent granted by the spouse of Mr. Sizhen Wang dated July 30, 2019 (incorporated by reference to Exhibit 10.17 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.18	<u>Spousal Consent granted by the spouse of Ms. Xiaoge Wang dated July 30, 2019 (incorporated by reference to Exhibit 10.18 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.19	<u>Spousal Consent granted by the spouse of Ms. Shuyan Wei dated July 30, 2019 (incorporated by reference to Exhibit 10.19 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.20	<u>License and Supply Agreement dated January 1, 2018 by and between Life Technologies Corporation and Genetron Health (Beijing) Company, Ltd. (incorporated by reference to Exhibit 10.20 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.21	<u>Small Business Loan Agreement dated March 25, 2020 by and between Industrial and Commercial Bank of China Limited, Beijing Changping Sub-branch and Genetron Health (Beijing) Company, Ltd. (incorporated by reference to Exhibit 10.21 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.22	<u>RMB Working Capital Loan Agreement dated March 16, 2020 by and between China Construction Bank, Beijing Chaoyang Sub-branch and Genetron Health (Beijing) Company, Ltd. (incorporated by reference to Exhibit 10.22 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.23	<u>Credit Agreement by and between China Merchants Bank, Beijing Branch and Genetron Health (Beijing) Company, Ltd. (incorporated by reference to Exhibit 10.23 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>

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Exhibit Number	Description of Document
4.24	<u>Technical Service Contract dated January 20, 2020 by and between Beijing Innocare Pharma Tech Co., Ltd. and Genetron Health (Beijing) Company, Ltd. (incorporated by reference to Exhibit 10.24 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.25	<u>Collaboration Agreement dated October 30, 2019 by and among iKang Guobin Healthcare Group, Inc., Chongqing Genetron Biotechnology Co., Ltd. and Chongqing Genetron Medical Laboratory Co., Ltd. (incorporated by reference to Exhibit 10.25 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
4.26*	<u>Investment Agreement dated November 27, 2020 with respect to Genetron Health's Project of Precision Medicine Platform for Cancer Early Screening between Management Committee of Jiangsu Wuxi Huishan Economic Development Zone and Genetron Health (Hong Kong) Company Limited</u>
4.27*	<u>Strategic Cooperation Agreement dated January 6, 2021 with respect to Early Screening Product for Liver Cancer between Genetron Health (Beijing) Co. Ltd. and Chia Tai Tianqing Pharmaceutical Group Co. Ltd.</u>
4.28*	<u>Exclusive Business Cooperation Agreement dated December 7, 2020 by and between Genetron (Wuxi) Business Management Co., Ltd. and Genetron (Wuxi) Biotech Co., Ltd.</u>
4.29*	<u>Shareholder Voting Rights Entrustment Agreement dated December 7, 2020 by and among Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and the shareholders of Genetron (Wuxi) Biotech Co., Ltd.</u>
4.30*	<u>Equity Interest Pledge Agreement dated December 7, 2020 by and among Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and the shareholders of Genetron (Wuxi) Biotech Co., Ltd.</u>
4.31*	<u>Exclusive Option Agreement dated December 7, 2020 by and among Genetron (Wuxi) Business Management Co., Ltd., Genetron (Wuxi) Biotech Co., Ltd. and the shareholders of Genetron (Wuxi) Biotech Co., Ltd.</u>
4.32*	<u>Spousal Consent granted by the spouse of Mr. Sizhen Wang dated December 7, 2020</u>
4.33*	<u>Spousal Consent granted by the spouse of Mr. Yuchen Jiao dated December 7, 2020</u>
8.1*	<u>Principal Subsidiaries and the VIEs of the Registrant and Subsidiaries of the VIEs</u>
11.1	<u>Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 99.1 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
12.1*	<u>Certification by Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
12.2*	<u>Certification by Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
13.1**	<u>Certification by Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
13.2**	<u>Certification by Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
15.1*	<u>Consent of PricewaterhouseCoopers Zhong Tian LLP, Independent Registered Public Accounting Firm</u>
15.2*	<u>Consent of Walkers (Hong Kong)</u>
15.3*	<u>Consent of Shihui Partners</u>
15.4	<u>Consent of Frost & Sullivan (incorporated by reference to Exhibit 99.3 from our registration statement on Form F-1 (File No. 333-234805), as amended, initially filed publicly with the SEC on November 21, 2019)</u>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith

** Furnished herewith

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing its annual report on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: April 9, 2021

Genetron Holdings Limited

By: /s/ Sizhen Wang

Name: Sizhen Wang

Title: Chief Executive Officer

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GENETRON HOLDINGS LIMITED

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Genetron Holdings Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Genetron Holdings Limited and its subsidiaries (the “Company”) as of December 31, 2020 and 2019, and the related consolidated statements of loss, comprehensive loss, changes in shareholders’ equity/(deficit) and cash flows for each of the three years in the period ended December 31, 2020, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Changes in Accounting Principle

As discussed in Note 2.29 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers Zhong Tian LLP
Beijing, the People’s Republic of China
April 9, 2021

We have served as the Company’s auditor since 2018.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF LOSS

	Notes	Year ended December 31,			
		2018 RMB'000	2019 RMB'000	2020 RMB'000	2020 US\$'000 Note 2.5(d)
Revenue	6	225,176	323,425	424,485	65,055
Cost of revenue		(132,450)	(178,435)	(164,268)	(25,175)
Gross profit		92,726	144,990	260,217	39,880
Selling expenses		(182,474)	(253,558)	(246,959)	(37,848)
Administrative expenses		(88,233)	(117,169)	(126,318)	(19,359)
Research and development expenses		(71,411)	(91,697)	(148,999)	(22,835)
Net impairment losses on financial and contract assets		(658)	(2,733)	(14,843)	(2,275)
Other income and gains - net	9	17,074	13,297	8,526	1,307
Operating expenses		(325,702)	(451,860)	(528,593)	(81,010)
Operating loss		(232,976)	(306,870)	(268,376)	(41,130)
Finance income	10	1,615	2,483	28,330	4,341
Finance costs	10	—	(11,704)	(5,627)	(862)
Finance income/(costs) - net	10	1,615	(9,221)	22,703	3,479
Financial instruments with preferred rights					
- loss on fair value changes	30	(233,632)	(333,401)	(2,823,370)	(432,700)
- other loss		—	(26,542)	—	—
Loss before income tax		(464,993)	(676,034)	(3,069,043)	(470,351)
Income tax expense	11	—	—	—	—
Loss for the year		(464,993)	(676,034)	(3,069,043)	(470,351)
Loss attributable to:					
Owners of the Company		(464,993)	(676,034)	(3,069,043)	(470,351)
Loss per share		RMB	RMB	RMB	US\$
-Basic and diluted	12	(4.09)	(5.41)	(10.18)	(1.56)
Loss per ADS					
-Basic and diluted	12			(50.92)	(7.80)

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

		Year ended December 31,			
	Notes	2018 RMB'000	2019 RMB'000	2020 RMB'000	2020 US\$'000 Note 2.5(d)
Loss for the year		(464,993)	(676,034)	(3,069,043)	(470,351)
Other comprehensive income/(loss)					
<i>Items that may be reclassified to profit or loss</i>					
Exchange differences on translation of foreign operations of the Company's subsidiaries		141	(1,824)	10,325	1,582
<i>Items that will not be reclassified to profit or loss</i>					
Changes in fair value of financial instruments with preferred rights due to own credit risk	30	(9,061)	(17,299)	(72)	(11)
Exchange differences on translation of foreign operations of the Company		—	—	(161,467)	(24,746)
Other comprehensive loss for the year, net of tax		(8,920)	(19,123)	(151,214)	(23,175)
Total comprehensive loss for the year		<u>(473,913)</u>	<u>(695,157)</u>	<u>(3,220,257)</u>	<u>(493,526)</u>
Total comprehensive loss attributable to:					
Owners of the Company		<u>(473,913)</u>	<u>(695,157)</u>	<u>(3,220,257)</u>	<u>(493,526)</u>

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED BALANCE SHEETS

	Notes	As at December 31,		
		2019 RMB'000	2020 RMB'000	2020 US\$'000 Note 2.5(d)
ASSETS				
Non-current assets				
Property, plant and equipment	13	83,013	76,891	11,784
Right-of-use assets	14(a)(i)	43,182	59,706	9,150
Intangible assets	15	5,482	12,265	1,880
Financial assets at fair value through profit or loss	21	—	19,609	3,005
Prepayments		12,679	15,362	2,354
Total non-current assets		144,356	183,833	28,173
Current assets				
Inventories	17	17,896	24,971	3,827
Contract assets	6	1,020	1,112	170
Other current assets	18	43,711	36,500	5,594
Trade receivables	19	83,757	164,592	25,225
Other receivables and prepayments	20	19,526	42,420	6,501
Amounts due from related parties	33(c)(i)	1,064	214	33
Financial assets at fair value through profit or loss	21	122,224	140,294	21,501
Derivative financial instruments	22	—	196	30
Cash and cash equivalents	23	139,954	1,375,766	210,845
Total current assets		429,152	1,786,065	273,726
Total assets		573,508	1,969,898	301,899
LIABILITIES				
Non-current liabilities				
Financial instruments with preferred rights	30	2,106,334	—	—
Borrowings	28	3,643	5,493	842
Lease liabilities	14(a)(ii)	29,124	43,016	6,592
Total non-current liabilities		2,139,101	48,509	7,434
Current liabilities				
Trade payables		49,955	34,071	5,222
Contract liabilities	6	18,189	8,417	1,290
Other payables and accruals	29	109,683	111,164	17,036
Amounts due to a related party	33(c)(ii)	34	24	4
Borrowings	28	19,514	58,583	8,978
Lease liabilities	14(a)(ii)	15,363	16,585	2,542
Total current liabilities		212,738	228,844	35,072
Total liabilities		2,351,839	277,353	42,506
Net (liabilities)/assets		(1,778,331)	1,692,545	259,393
SHAREHOLDERS' (DEFICIT)/EQUITY				
(Deficit)/equity attributable to owners of the Company				
Share capital	24	17	59	9
Share premium	24	—	6,657,562	1,020,316
Treasury shares	25	(3,578)	—	—
Capital reserve	26(a)	—	—	—
Other reserves	26(b),(c),(d)	69,207	(24,701)	(3,786)
Accumulated losses		(1,843,977)	(4,940,375)	(757,146)
Total shareholders' (deficit)/equity		(1,778,331)	1,692,545	259,393

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY/(DEFICIT)

	Notes	Share capital (Note 24) RMB'000	Treasury shares (Note 25) RMB'000	Capital reserve (Note 26(a)) RMB'000	Share-based compensation reserve (Note 26(b)) RMB'000	Other reserve (Note 26(c)) RMB'000	Other comprehensive losses (Note 26(d)) RMB'000	Accumulated losses RMB'000	Total shareholders' deficit RMB'000
Balance at January 1, 2018		—	(10,772)	37,550	22,938	32,141	(1,093)	(702,950)	(622,186)
Comprehensive income/(loss)									
Loss for the year		—	—	—	—	—	—	(464,993)	(464,993)
Exchange differences		—	—	—	—	—	141	—	141
Changes in fair value of financial instruments with preferred rights due to own credit risk	30	—	—	—	—	—	(9,061)	—	(9,061)
		—	—	—	—	—	(8,920)	(464,993)	(473,913)
Transactions with owners									
Vesting of restricted shares		—	2,409	—	(7,513)	7,513	—	—	2,409
Share-based compensations	27(d)	—	—	—	29,644	—	—	—	29,644
		—	2,409	—	22,131	7,513	—	—	32,053
Balance at December 31, 2018		—	(8,363)	37,550	45,069	39,654	(10,013)	(1,167,943)	(1,064,046)

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY/(DEFICIT) (Continued)

	Notes	Share capital (Note 24) RMB'000	Treasury shares (Note 25) RMB'000	Capital reserve (Note 26(a)) RMB'000	Share-based compensation reserve (Note 26(b)) RMB'000	Other reserve (Note 26(c)) RMB'000	Other comprehensive losses (Note 26(d)) RMB'000	Accumulated losses RMB'000	Total shareholders' deficit RMB'000
Balance at January 1, 2019		—	(8,363)	37,550	45,069	39,654	(10,013)	(1,167,943)	(1,064,046)
Comprehensive loss									
Loss for the year		—	—	—	—	—	—	(676,034)	(676,034)
Exchange differences		—	—	—	—	—	(1,824)	—	(1,824)
Changes in fair value of financial instruments with preferred rights due to own credit risk	30	—	—	—	—	—	(17,299)	—	(17,299)
		—	—	—	—	—	(19,123)	(676,034)	(695,157)
Transactions with owners									
Issuance of ordinary shares	24(iv)	18	—	—	—	—	—	—	18
Repurchase of ordinary shares	24(v)	(1)	—	(35,174)	—	(22,264)	—	—	(57,439)
Re-designation of treasury shares		—	2,376	(2,376)	—	—	—	—	—
Vesting of restricted shares		—	2,409	—	(7,513)	7,513	—	—	2,409
Share-based compensations	27(d)	—	—	—	35,884	—	—	—	35,884
		17	4,785	(37,550)	28,371	(14,751)	—	—	(19,128)
Balance at December 31, 2019		17	(3,578)	—	73,440	24,903	(29,136)	(1,843,977)	(1,778,331)

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY/(DEFICIT) (Continued)

	Notes	Share capital (Note 24) RMB'000	Share premium (Note 24) RMB'000	Treasury shares (Note 25) RMB'000	Share-based compensation reserve (Note 26(b)) RMB'000	Other reserve (Note 26(c)) RMB'000	Other comprehensive losses (Note 26(d)) RMB'000	Accumulated losses RMB'000	Total shareholders' (deficit)/ equity RMB'000
Balance at January 1, 2020		17	—	(3,578)	73,440	24,903	(29,136)	(1,843,977)	(1,778,331)
Comprehensive loss									
Loss for the year		—	—	—	—	—	—	(3,069,043)	(3,069,043)
Exchange differences		—	—	—	—	—	(151,142)	—	(151,142)
Changes in fair value of financial instruments with preferred rights due to own credit risk	30	—	—	—	—	—	(72)	—	(72)
		—	—	—	—	—	(151,214)	(3,069,043)	(3,220,257)
Transfer of accumulated fair value change due to own credit risk of financial instruments with preferred rights upon conversion	30	—	—	—	—	—	27,355	(27,355)	—
Transactions with owners									
Issuance of ordinary shares upon IPO	24(viii)	11	1,657,782	—	—	—	—	—	1,657,793
Conversion of financial instruments with preferred rights into ordinary shares	24(viii)	31	4,999,780	—	—	—	—	—	4,999,811
Vesting of restricted shares		—	—	3,578	(8,283)	8,283	—	—	3,578
Share-based compensations	27(d)	—	—	—	29,951	—	—	—	29,951
		42	6,657,562	3,578	21,668	8,283	—	—	6,691,133
Balance at December 31, 2020		59	6,657,562	—	95,108	33,186	(152,995)	(4,940,375)	1,692,545

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED
CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year ended December 31,			
	Notes	2018 RMB'000	2019 RMB'000	2020 RMB'000	2020 US\$'000 Note 2.5(d)
Cash flows from operating activities					
Cash used in operations	31(a)	(201,016)	(196,957)	(300,897)	(46,115)
Net cash used in operating activities		(201,016)	(196,957)	(300,897)	(46,115)
Cash flows from investing activities					
Purchase of property, plant and equipment		(43,910)	(21,323)	(36,655)	(5,618)
Proceeds from sale of property, plant and equipment		—	4,940	—	—
Purchase of intangible assets		(3,515)	(4,261)	(13,371)	(2,049)
Purchase of wealth management products	3.3	(895,140)	(479,100)	(1,628,558)	(249,587)
Redemption of wealth management products		1,109,675	395,697	1,620,924	248,417
Investment income from wealth management products		6,929	723	4,476	686
Purchase of equity security	21(iii)	—	—	(13,721)	(2,103)
Purchase of other investment	21(i)	—	—	(19,000)	(2,912)
Purchase of derivative financial instruments		—	—	(68,078)	(10,433)
Redemption of derivative financial instruments		—	—	69,628	10,671
Loans to a related party	33(b)(ii)	(43,550)	(5,000)	—	—
Repayments of loans to a related party	33(b)(ii)	41,000	11,517	—	—
Others		—	—	(294)	(45)
Net cash generated from/(used in) investing activities		171,489	(96,807)	(84,649)	(12,973)
Cash flows from financing activities					
Proceeds from issuance of ordinary shares	24(iv), 24(viii)	—	18	1,676,816	256,983
Proceeds from ADS depository	29(b)	—	—	23,069	3,535
Proceeds from issuance of financial instruments with preferred rights	31(b), 30	60,000	456,568	70,026	10,732
Issuance costs of financial instruments with preferred rights		(10,600)	(6,303)	—	—
Repurchase of ordinary shares		—	(54,479)	(4,102)	(629)
Repurchase of financial instruments with preferred rights	31(b)	—	(43,279)	—	—
Proceeds from investors upon reorganization	31(b), 29(a)	—	15,000	299,051	45,832
Repayments to investors upon reorganization	31(b), 29(a)	—	—	(314,388)	(48,182)
Proceeds from borrowings	31(b)	—	32,955	61,213	9,381
Repayments of borrowings	31(b)	—	(9,798)	(20,703)	(3,173)
Proceeds from loans from a related party	31(b), 33(b)(ii)	—	35,000	—	—
Repayments of loans from a related party	31(b), 33(b)(ii)	—	(35,000)	—	—
Principal elements of lease payments		—	(12,286)	(19,577)	(3,000)
Interests paid		—	(5,396)	(4,942)	(757)
Payments in relation to listing expenses		—	(1,269)	(21,691)	(3,324)
Others		—	—	(260)	(40)
Net cash generated from financing activities		49,400	371,731	1,744,512	267,358
Net increase in cash and cash equivalents		19,873	77,967	1,358,966	208,270
Cash and cash equivalents at beginning of year		42,030	62,126	139,954	21,449
Exchange differences on cash and cash equivalents		223	(139)	(123,154)	(18,874)
Cash and cash equivalents at end of year	23	62,126	139,954	1,375,766	210,845

The accompanying notes are an integral part of these consolidated financial statements.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. General information, reorganization and basis of presentation

1.1 General information

Genetron Holdings Limited (the “Company”) was incorporated in the Cayman Islands on April 9, 2018 as an exempted company with limited liability under the Companies Law (2020 Revision) of the Cayman Islands. The address of the Company’s registered office is at the office of Walkers Corporate Limited, Cayman Corporate Centre, 27 Hospital Road, George Town, Grand Cayman KY1-9008, Cayman Islands. The Company completed its initial public offering (“IPO”) on June 19, 2020 and the Company’s American Depositary Shares (“ADSs”) have been listed on the Nasdaq Global Market (“NASDAQ”) since then. Each ADS of the Company represents five ordinary shares.

The Company, its subsidiaries, its controlled structured entities (“variable interest entities” or “VIEs”) and its subsidiaries (“subsidiaries of VIEs”) are collectively referred to as the “Group”. The Group is principally engaged in precision oncology testing and development services (the “Listing Business”) in the People’s Republic of China (“PRC” or “China”).

1.2 Reorganization

Prior to the incorporation of the Company and the completion of the reorganization as described below, the Listing Business was carried out by Genetron Health (Beijing) Co., Ltd. (“Genetron Health”) and its subsidiaries (collectively the “Operating Companies”). Genetron Health was incorporated in the PRC on May 7, 2015 with Mr. Weiwu He, Mr. Sizhen Wang and Mr. Hai Yan considered as founding individuals (collectively the “Founders”).

Incorporation of overseas companies and their subsidiary in the PRC

For the purpose of preparation for the listing of the shares of the Company, the Group underwent a group reorganization (the “Reorganization”) to establish the Company as the ultimate holding company. The Reorganization mainly involved the following:

- (i) On April 9, 2018, the Company was incorporated in the Cayman Islands.
- (ii) On June 6, 2018, Genetron Health (Hong Kong) Company Limited (“Genetron HK”) was incorporated in Hong Kong (“HK”) as a direct wholly-owned subsidiary of the Company.
- (iii) On March 8, 2019, Genetron (Tianjin) Co., Ltd. (“Genetron TJ”) was established in the PRC with Genetron HK being its sole equity holder.
- (iv) Pursuant to a series of contractual arrangements in July 2019 (collectively referred to as the “Contractual Arrangements”) between Genetron TJ, Genetron Health and its respective equity holders, Genetron TJ is able to effectively control and receive substantially all the economic benefits of the business and operations of Genetron Health and its subsidiaries. Accordingly Genetron Health and its subsidiaries are treated as VIE and subsidiaries of VIE respectively which became controlled entities of the Company.

Upon completion of the Reorganization, each of the equity holders of Genetron Health became the shareholders of the Company with substantially the same rights and shareholding percentages in Genetron Health before and after the Reorganization, and the Company became the holding company of the companies now comprising the Group.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
1. General information, reorganization and basis of presentation (Continued)
1.2 Reorganization (Continued)

As of December 31, 2020, the Group has direct or indirect interests in the following principal subsidiaries, VIEs and subsidiaries of VIEs:

Company name	Place and date of incorporation	Registered capital	Effective equity interest held	Principal activities
Directly held:				
Genetron HK	Hong Kong, June 6, 2018	HK\$ 10,000	100%	Investment holding
Genetron Health, Inc.	Delaware, United States of America August 23, 2019	US\$ 1	100%	Molecular diagnostic services
Indirectly held:				
Genetron TJ	Tianjin, PRC March 8, 2019	RMB500,000,000	100%	Biotechnology development and technical services
Shanghai Junran Bio-Technology Co., Ltd.	Shanghai, PRC July 1, 2019	RMB 1,000,000	100%	Biotechnology development and technical services
Genetron (Wuxi) Business Management Co., Ltd.	Wuxi, PRC December 3, 2020	US\$ 50,000,000	100% (Note)	Investment holding
VIEs:				
Genetron Health	Beijing, PRC May 7, 2015	RMB 70,958,900	100%	Gene-related detection services
Genetron (Wuxi) Biotech Co., Ltd.	Wuxi, PRC October 14, 2020	RMB 20,000,000	100%	Gene-related detection services
Subsidiaries of VIEs:				
Shanghai Genetron Bio-Technology Co., Ltd.	Shanghai, PRC July 8, 2015	RMB 20,000,000	100%	Investment holding
Hangzhou Genetron Bio-Technology Co., Ltd.	Hangzhou, PRC October 8, 2015	RMB 10,000,000	100%	Investment holding
Chongqing Genetron Bio-Technology Co., Ltd.	Chongqing, PRC March 1, 2016	RMB 20,000,000	100%	Investment holding and IVD products sales
Beijing Genetron Biotechnology Co., Ltd.	Beijing, PRC March 11, 2016	RMB 20,000,000	100%	Investment holding
Guangzhou Genetron Biotechnology Co., Ltd.	Guangzhou, PRC July 4, 2019	RMB 10,000,000	100%	Investment holding
Hangzhou Genetron Medical Laboratory Co., Ltd.	Hangzhou, PRC April 24, 2014	RMB 10,000,000	100%	Gene-related detection services
Beijing Genetron Medical Laboratory Co., Ltd.	Beijing, PRC November 5, 2015	RMB 8,510,000	100%	Gene-related detection services
Shanghai Genetron Medical Laboratory Co., Ltd.	Shanghai, PRC December 14, 2015	RMB 30,000,000	100%	Gene-related detection services
Chongqing Genetron Medical Laboratory Co., Ltd.	Chongqing, PRC August 11, 2016	RMB 20,000,000	100%	Gene-related detection services
Guangzhou Genetron Medical Laboratory Co., Ltd.	Guangzhou, PRC July 8, 2019	RMB 10,000,000	100%	Gene-related detection services
Genetron Health Technologies, Inc.	Delaware, United States of America April 28, 2015	US\$ 10,000,000	100%	Research services

Note: Legal ownership of 90% with the remaining 10% interests ("other investors") redeemable upon occurrence of certain events not solely within control of the Group and thereby accounted for as financial liabilities at fair value through profit or loss by the Group. Investing funds of US\$1,670,000 from the other investors were received in January 2021.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. General information, reorganization and basis of presentation (Continued)

1.2 Reorganization (Continued)

Except for the VIEs and subsidiaries of VIEs which are controlled by the Company through Contractual Arrangements (Note 2.4.1(a)), other subsidiaries (including Genetron TJ and Genetron (Wuxi) Business Management Co., Ltd. which are collectively referred as “PRC Subsidiaries”) are controlled by the Company through direct or indirect equity ownerships.

1.3 Basis of presentation

Immediately prior to and after the Reorganization, the Listing Business was operated by Genetron Health and its subsidiaries. Pursuant to the Reorganization, the Listing Business was transferred to and held by the Company through the Operating Companies. The Company had not been involved in any other business prior to the Reorganization and did not meet the definition of a business. The Reorganization was merely a reorganization of the Listing Business with no change in management of such business. Accordingly, the Group resulting from the Reorganization was regarded as a recapitalization of the Listing Business under the Operating Companies for the purpose of these financial statements. The financial statements of the Group have been prepared on a consolidated basis as if the Reorganization had occurred historically and are presented using the carrying values of the assets, liabilities and operating results of the Listing Business under the Operating Companies.

2. Summary of significant accounting policies

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

2.1 Basis of preparation

These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”). The financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets at fair value through profit or loss, derivative financial instruments and financial instruments with preferred rights.

The financial statements were authorized for issue by the board of directors of the Company on April 9, 2021.

2.2 New standards, amendments to standards and interpretations adopted by the Group

The Group has applied the following for the first time for their annual reporting period commencing January 1, 2020:

- | | |
|--|-----------------------------------|
| • Amendments to IAS 1 and IAS 8 | Definition of Material |
| • Amendments to IFRS 3 | Definition of a Business |
| • Amendments to IFRS 7, IFRS 9 and IAS 39 | Interest Rate Benchmark Reform |
| • Amendments to IFRS 16 | COVID-19-related Rent Concessions |
| • Revised Conceptual Framework for Financial Reporting | |

The above amendments do not have any material impact on the amounts recognized in prior periods and are not expected to significantly affect the current or future periods.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.3 New standards, amendments to standards and interpretations not yet adopted**

		Effective for annual periods beginning on or after
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	Interest Rate Benchmark Reform — Phase 2	January 1, 2021
Amendments to IAS 16	Property, Plant and Equipment: Proceeds before intended use	January 1, 2022
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract	January 1, 2022
Amendments to IFRS 3	Reference to the Conceptual Framework	January 1, 2022
Annual Improvements 2018–2020 cycle		January 1, 2022
IFRS 17	Insurance Contracts	January 1, 2023
Amendments to IAS 1	Classification of Liabilities as Current or Non- current	January 1, 2023
There are no new standards, amendments to existing standards or interpretations that are not yet effective and would be expected to have a material impact to the Group.		

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.4 Subsidiaries

2.4.1 Consolidation

A subsidiary is an entity (including VIE, as stated in Note 1 above) over which the Group has control. The Group controls an entity where the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intra-group transactions, balances and unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. When necessary, amounts reported by subsidiaries have been adjusted to conform with the Group's accounting policies.

(a) Subsidiaries controlled through Contractual Arrangements

The PRC Subsidiaries have entered into Contractual Arrangements, including the Shareholder Voting Rights Entrustment Agreements, Spousal Consent Letters, Equity Interest Pledge Agreements, Exclusive Business Cooperation Agreements and Exclusive Option Agreements, with the VIEs and their equity holders.

(i) Agreements that provide the Company with effective control over the VIEs

Shareholder Voting Rights Entrustment Agreements

Pursuant to the agreements among the PRC Subsidiaries, VIEs and the equity holders of VIEs, these equity holders irrevocably authorize the PRC Subsidiaries or any person(s) designated by the PRC Subsidiaries to act as his or her attorney-in-fact to exercise all of his or her rights as an equity holder of the VIEs, including, but not limited to, the right to call and attend shareholders' meetings, execute and deliver any and all written resolutions and meeting minutes as a shareholder, vote by itself or by proxy on any matters discussed on shareholders' meetings, sell, transfer, pledge or dispose of any or all of the shares, nominate, appoint or remove the directors, supervisors and senior management, and other shareholders rights conferred by the articles of association of the VIEs and the relevant laws and regulations.

Spousal Consent Letters

The spouse of each of Mr. Sizhen Wang and certain other individuals has signed spousal consent letters. Under the spousal consent letter, the spouse unconditionally and irrevocably waives any rights or entitlements whatsoever to such shares that may be granted to his/her pursuant to applicable laws and undertakes not to make any assertion of rights to such shares. The spouse agrees and undertakes that he/she will take all necessary actions to ensure the proper performance of the Contractual Arrangements, and will be bound by the Contractual Arrangements in case he/she obtains any equity of the VIEs due to any reason.

Equity Interest Pledge Agreements

Pursuant to the agreements among the PRC Subsidiaries and the equity holders of VIEs, the equity holders of VIEs have pledged 100% equity interest in the VIEs in favor of the PRC Subsidiaries to guarantee the performance by the VIEs and their equity holders of their obligations under the Exclusive Business Cooperation Agreements, the Exclusive Option Agreements and any other agreement to be executed among the PRC Subsidiaries, VIEs and the equity holders from time to time. If the VIEs or their equity holders breach their contractual obligations under the agreements, the PRC Subsidiaries, as pledgees, will have the right to dispose of the pledged shares entirely or partially. The equity holders of the VIEs also agreed, without the PRC Subsidiaries' prior written consents, not to transfer the pledged shares, establish or permit the existence of any security interest or other encumbrance on the pledged shares, or dispose of the pledged shares by any other means, except by the performance of the Exclusive Option Agreements.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.4 Subsidiaries (Continued)****2.4.1 Consolidation (Continued)****(a) Subsidiaries controlled through Contractual Arrangements (Continued)****(ii) Agreements that allow the Company to receive economic benefits from the VIEs****Exclusive Business Cooperation Agreements**

Pursuant to the agreements between the PRC Subsidiaries and VIEs, the PRC Subsidiaries or their designated entities affiliated have the exclusive right to provide the VIEs with technical support, business support and consulting services in return for fees equal to 100% of the consolidated net profits of the VIEs. Without the PRC Subsidiaries' prior written consents, the VIEs shall not, directly and indirectly, obtain the same or similar services as provided under the agreements from any third party, or enter into any similar agreement with any third party. The PRC Subsidiaries have the right to determine the service fee charged to the VIEs under the agreements by considering, among other things, the complexity of the services, the time spent by employees of the PRC Subsidiaries to provide the services, contents and commercial value of the service provided, as well as the benchmark price of similar services in the market. The PRC Subsidiaries will have the exclusive ownership of all intellectual property rights developed by performance of the agreements.

(iii) Agreements that provide the Company with the option to purchase the equity interests in the VIEs**Exclusive Option Agreements**

Pursuant to the agreements among the PRC Subsidiaries, VIEs and their equity holders, the equity holders of VIEs irrevocably granted the PRC Subsidiaries or any third party designated by the PRC Subsidiaries an exclusive option to purchase all or part of their equity interests in the VIEs at the lowest price permitted by applicable PRC laws. Those equity holders further undertake that they will neither allow the encumbrance of any security interest in the VIEs, except for the pledge created pursuant to the Equity Interest Pledge Agreements, nor transfer, mortgage or otherwise dispose of their legal or beneficial interests in the VIEs without the prior written consents of the PRC Subsidiaries, and will cause the shareholders' meeting and/or the board of directors and/or the executive directors of the VIEs not to approve such proposal.

In the opinion of the Company's management, the Contractual Arrangements enable the PRC Subsidiaries and the Group to:

- exercise effective control over the VIEs;
- receive substantially all of the economic benefits of the VIEs; and
- have an exclusive option to purchase all or part of the equity interest in and/or assets of the VIEs when and to the extent permitted by laws.

The Group does not have any equity interests in the VIEs. As a result of the Contractual Arrangements, the Group has rights to variable returns from its involvement in the VIEs and has the ability to affect those returns through its power over the VIEs, and is thereby considered to control the VIEs. Consequently, the Company regards the VIEs as indirect subsidiaries under IFRS. The Group has included the financial position and results of the VIEs and their subsidiaries in the consolidated financial statements. There is currently no contractual arrangement that requires the Company to provide additional financial support to the VIEs.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.4 Subsidiaries (Continued)****2.4.1 Consolidation (Continued)****(b) Risks in relation to VIEs and subsidiaries of VIEs**

After completion of the Reorganization, a significant part of the Group's business is conducted through VIEs and subsidiaries of VIEs. The Company becomes the primary beneficiary through the Contractual Arrangements. In the opinion of management, the Contractual Arrangements are in compliance with PRC laws and are legally enforceable. However, uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules could limit the Company's ability to enforce the Contractual Arrangements.

In March 2019, the National People's Congress of the PRC adopted the PRC Foreign Investment Law, which became effective on January 1, 2020. Among other things, the PRC Foreign Investment Law defines the "foreign investment" as investment activities in China by foreign investors in a direct or indirect manner, including those circumstances explicitly listed above as establishing new projects or foreign invested enterprises or acquiring shares of enterprises in China, and other approaches of investment as stipulated by laws, administrative regulations or otherwise regulated by the State Council. The PRC Foreign Investment Law leaves uncertainty as to whether foreign investors' controlling PRC onshore variable interest entities via contractual arrangements will be recognized as "foreign investment" and thus be subject to the restrictions/prohibitions on foreign investments.

Current PRC laws and regulations impose certain restrictions or prohibitions on foreign ownership of companies that engage in the development and application of technologies for diagnosis and treatment of human stem cells and genes ("genomics business"), to which the precision oncology service of the Group relates. Pursuant to the Special Administrative Measures (Negative List) issued by the National Development and Reform Committee and Ministry of Commerce of the PRC on June 30, 2019, which came into force on July 30, 2019, certain industries are specifically prohibited for foreign investment, including genomics business. To comply with PRC laws and regulations, the Group conducts related business in China through VIEs.

If the corporate structure of the Group or the Contractual Arrangements between the VIEs and subsidiaries of VIEs and their respective equity holders were found to be in violation of the current or future PRC laws and regulations, the PRC government could:

- revoke the Group's business and operating licenses;
- require the Group to discontinue or restrict its operations;
- restrict the Group's right to collect revenues;
- require the Group to restructure the operations, re-apply for the necessary licenses or relocate its businesses, staff and assets;
- impose additional conditions or requirements with which the Group may not be able to comply; or
- take other regulatory or enforcement actions against the Group that could be harmful to the Group's business.

The Company's ability to conduct its business may be negatively affected if the PRC government carries out any of the aforementioned actions. As a result, the Company may not be able to consolidate its VIEs and subsidiaries of VIEs in its consolidated financial statements as it may lose the ability to exert effective control over them or it may lose the ability to receive economic benefits from them.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
2. Summary of significant accounting policies (Continued)
2.4 Subsidiaries (Continued)
2.4.1 Consolidation (Continued)
(b) Risks in relation to VIEs and subsidiaries of VIEs (Continued)

For the year ended December 31, 2018 (and the period from January 1, 2019 to completion of the Reorganization in July 2019), the financial statements of VIEs and subsidiaries of VIEs were substantially the same stated with the financial statements of the Group since the Company and most other entities within the Group did not conduct any business until the Reorganization completion.

Summarized financial information of the Group's VIEs and subsidiaries of VIEs for the years ended December 31, 2019 and 2020:

	As at December 31,		
	2019	2020	2020
	RMB'000	RMB'000	US\$'000
			Note 2.5(d)
Non-current assets	138,033	169,152	25,924
Current assets	298,815	335,772	51,459
Total assets	436,848	504,924	77,383
Non-current liabilities	265,353	780,519	119,620
Current liabilities	169,522	229,062	35,105
Total liabilities	434,875	1,009,581	154,725

	Year ended December 31,		
	2019	2020	2020
	RMB'000	RMB'000	US\$'000
			Note 2.5(d)
Revenue	323,425	424,485	65,055
Loss for the year	(406,239)	(236,102)	(36,184)
Net cash used in operating activities	(192,068)	(196,594)	(30,129)
Net cash used in from investing activities	(96,807)	(9,223)	(1,414)
Net cash generated from financing activities	238,061	200,767	30,769
Net decrease in cash and cash equivalents	(50,814)	(5,050)	(774)

The above includes intercompany balances and transactions which have been eliminated on the Company's consolidated financial statements.

As of December 31, 2019 and 2020, the total assets of the Group's VIEs and subsidiaries of VIEs mainly include cash and cash equivalents, financial assets at fair value through profit or loss, trade receivables, other receivables and prepayments, inventories, property, plant and equipment as well as right-of-use assets; and the total liabilities of the Group's VIEs and subsidiaries of VIEs mainly include trade payables, other payables and accruals, borrowings as well as lease liabilities.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.4 Subsidiaries (Continued)****2.4.1 Consolidation (Continued)****(c) Business combination**

The Group applies the acquisition method to account for business combinations except for business combinations under common control. For acquisition method, the consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

The Group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets.

Acquisition-related costs are expensed as incurred.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognized and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognized directly in profit or loss.

There is no business combination or non-controlling interest during the reported periods.

2.5 Foreign currency translation**(a) Functional and presentation currency**

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("functional currency"). The financial statements are presented in Renminbi ("RMB"), which is the functional currency of most entities within the Group, unless otherwise stated.

(b) Transactions and balances

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

Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the statements of loss within finance income/(costs). All other foreign exchange gains and losses are presented in the statements of loss within other income and gains/(losses).

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.5 Foreign currency translation (Continued)****(c) Group companies**

The results and financial position of all the Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

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

(d) Convenience translation

Translations of the consolidated balance sheets, the consolidated statements of loss, comprehensive loss and cash flows from RMB into United States dollars ("US\$") as of and for the year ended December 31, 2020 are solely for the convenience of the readers and calculated at the rate of US\$1.00=RMB6.5250 representing the exchange rate as of December 31, 2020 set forth in the H.10 statistical release of the U.S. Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be, converted, realized or settled into US\$ at that rate, or at any other rate, on December 31, 2020.

2.6 Property, plant and equipment

Property, plant and equipment are stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

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

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

Instruments and equipment	3-5 years
Office equipment and furniture	3-5 years
Transporting equipment	4 years
Leasehold improvements	shorter of lease period or 3-5 years

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

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.8).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized within other income and gains/(losses) in the statements of loss.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.7 Intangible assets

(a) Software

Acquired software licenses are capitalized on the basis of the costs incurred to acquire and bring the specific software into usage. These costs are amortized using the straight-line method over their estimated useful lives of about 5-10 years. Costs associated with maintaining software programs are recognized as expense as incurred.

(b) Patented technologies

Separately acquired patent technologies are shown at historical cost. Patent technologies acquired in a business combination are recognized at fair value at the acquisition date. They have finite useful lives based on the terms of patents and are subsequently carried at cost less accumulated amortization and impairment losses.

(c) Other intangible assets

Other intangible assets were recognized upon a historical acquisition of a subsidiary. It is amortized using the straight-line method over the estimated useful life of the intangible assets of 4 years.

(d) Research and development

The Group incurs costs and efforts on research and development activities. Research expenditures are charged to the profit or loss as an expense in the period the expenditure is incurred. Development costs are recognized as assets if they can be directly attributable to a newly developed service or product and all the following can be demonstrated:

- the technical feasibility to complete the development project so that it will be available for use or sale;
- the intention to complete the development project to use or sell the service or product;
- the ability to use or sell the service or product;
- the manner in which the development project will generate probable future economic benefits for the Group;
- the availability of adequate technical, financial and other resources to complete the development project and use or sell the service or product; and
- the expenditure attributable to the asset during its development can be reliably measured.

The development cost of an internally generated intangible asset is the sum of the expenditure incurred from the date the asset meets the recognition criteria above to the date when it is available for use. The development costs capitalized in connection with the intangible asset include costs of materials and services used or consumed, employee costs incurred in the creation of the asset and an appropriate portion of relevant overheads.

Capitalized development costs are amortized using the straight-line method over the life of the related service or product. Amortization shall begin when the asset is available for use.

Development expenditures not satisfying the above criteria are recognized in the profit or loss as incurred.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.8 Impairment of non-financial assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. No goodwill or intangible assets with an indefinite useful life were recognized during the reported periods.

Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.9 Financial assets

(a) Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income ("OCI") or through profit or loss), and
- those to be measured at amortized cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through OCI ("FVOCI").

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

(b) Recognition and derecognition

Regular way purchases and sales of financial assets are recognized on trade date, being the date on which the Group commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.9 Financial assets (Continued)****(c) Measurement**

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss ("FVPL"), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

(i) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- **Amortized cost:** Assets that are held for collection of contractual cash flows, where those cash flows represent solely payments of principal and interest, are measured at amortized cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in other income and gains/(losses). Impairment losses are presented as separate line item in the statements of loss.
- **FVOCI:** Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in other income and gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Impairment losses are presented as separate line item in the statements of loss.
- **FVPL:** Assets that do not meet the criteria for amortized cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented within other income and gains/(losses) in the period in which it arises.

(ii) Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognized in profit or loss as other income and gains when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognized in other income and gains/(losses) in the statements of loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.9 Financial assets (Continued)****(d) Impairment**

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables and contract assets with no significant financing component, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

2.10 Derivatives

Derivatives are initially recognized at fair value on the date a derivative contract is entered into, and they are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. Trading derivatives are classified as a current asset or liability.

The Group's derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss and are included in other income and gains/(losses).

2.11 Inventories

Raw materials, work in progress and finished goods are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct costs and related production overheads (based on normal operating capacity). Costs of purchased inventories are determined after deducting rebates and discounts. Cost is determined using the weighted average method. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

2.12 Trade and other receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. The Group holds the trade and other receivables with the objective of collecting the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method. See Note 3.1(b) for a description of the Group's impairment policies.

2.13 Cash and cash equivalents

For the purpose of presentation in the statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities in the balance sheets.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.14 Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or awards are shown in equity as a deduction, net of tax, from the proceeds.

2.15 Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid. Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting period. They are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method. Trade payables are unsecured with usual payment terms of 30 days.

2.16 Borrowings

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method.

Borrowings are removed from the balance sheets when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

2.17 Borrowing costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other borrowing costs are expensed in the period in which they are incurred.

2.18 Financial instruments with preferred rights

Financial instruments with preferred rights issued by the Group are convertible into ordinary shares upon the closing of a qualified IPO or at the option of the holders and redeemable upon occurrence of certain future events.

The Group designates the financial instruments with preferred rights as financial liabilities at fair value through profit or loss. They are initially recognized at fair value. Any directly attributable transaction costs are expensed in the consolidated statements of loss.

Subsequent to initial recognition, the amount of change in the fair value of the financial instruments with preferred rights that is attributable to changes in the credit risk of that liability shall be presented in OCI with the remaining changes in fair value recognized in profit or loss.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.18 Financial instruments with preferred rights (Continued)

As at December 31, 2019, management believed that there were no triggering events resulting in redemption in 12 months from each end of the reporting period and so the financial instruments with preferred rights were classified as non-current liabilities unless the Group had an obligation to settle the liabilities within 12 months after the end of the reporting period. As at December 31, 2020, all financial instruments with preferred rights were converted into ordinary shares upon completion of IPO on June 19, 2020.

2.19 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income, based on the applicable income tax rate for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions, where appropriate, on the basis of amounts expected to be paid to the tax authorities.

Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Group is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and where the deferred tax balances relate to the same taxation authority.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.20 Employee benefits****(a) Short-term obligations**

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheets.

(b) Pension obligations

The Group incorporated in the PRC contributes based on certain percentage of the salaries of the employees to a defined contribution retirement benefit plan organized by relevant government authorities in the PRC on a monthly basis. The government authorities undertake to assume the retirement benefit obligations payable to all existing and further retired employees under these plans and the Group has no further obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred. Assets of the plans are held and managed by government authorities and are separate from those of the Group.

(c) Housing funds and medical insurance

The PRC employees of the Group are entitled to participate in various government-supervised housing funds and medical insurance. The Group contributes on a monthly basis to these funds based on certain percentage of the salaries of the employees, subject to certain ceiling. The Group's liability in respect of these funds is limited to the contribution payable in each period and recognized as employee benefit expense when they are due.

2.21 Share-based payment

Share-based compensation benefits (including restricted ordinary shares, share options and restricted share units ("RSU"), collectively the "awards") are provided to employees and consultants via the Share Incentive Plan and Share Incentive Scheme with information being set out in Note 27(a).

The fair value of awards granted is recognized as an employee benefits expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the awards granted:

- including any market performance conditions (e.g. the entity's share price)
- excluding the impact of any service and non-market performance vesting conditions (e.g. profitability, sales growth targets and remaining an employee of the entity over a specified time period), and
- including the impact of any non-vesting conditions (e.g. the requirement for employees to save or hold shares for a specific period of time).

The total expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the Group revises its estimates of the vesting period and the number of awards that are expected to vest based on the service and non-market performance vesting conditions. It recognizes the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity. The Group applies prospective treatment in respect of accounting for modifications of equity-settled awards that reduce the vesting period, if any.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.22 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable.

Revenues are recognized when, or as, the control of the goods or services is transferred to the customer. Depending on the terms of the contract and the laws applicable, control of the goods and services may be transferred over time or at a point in time. Control of the goods and services is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates and enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If control of the goods and services transfers over time, revenue is recognized over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods and services.

The progress towards complete satisfaction of performance obligation, depending on the nature of the goods and services to be transferred, is measured based on one of the following methods that best depicts the Group's performance in satisfying the performance obligation:

- direct measurements of the value of individual services transferred by the Group to the customer; or
- the Group's efforts or inputs to the satisfaction of the performance obligation.

When determining the transaction price to be allocated to different performance obligations, the Group first determines the fees that the Group entitles in the contract period. The Group includes in the transaction price some or all of an amount of variable considerations only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

If contracts involve the sale of multiple goods, goods followed by related services, or multiple services, the transaction price will be allocated to each performance obligation based on their relative stand-alone selling prices. If the stand-alone selling prices are not directly observable, they are estimated based on expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information.

The Group has two main revenue streams which are (a) diagnosis and monitoring; and (b) development services.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.22 Revenue recognition (Continued)

(a) Diagnosis and monitoring

Diagnosis and monitoring as well as early screening (collectively “precision oncology testing”) refer to those performed in the form of laboratory developed tests (“LDT”) services and in-vitro diagnostic (“IVD”) products. The service period of each testing is generally around 1 to 2 weeks. Customers of the Group include individuals and enterprises, distributors and hospitals. Revenue is recognized when the performance obligations are satisfied.

The testing is designed for each individual. The Group recognizes revenue over time when it has an enforceable right to payment for performance completed to date. The progress of precision oncology recognized over time is measured based on the Group’s input to the satisfaction of related performance obligation.

Revenue from the testing is recognized at a point in time when the Group does not have enforceable right to payment for performance completed to date. For those arrangements, the Group recognizes revenue when the report is delivered.

Revenue from sales of IVD products is recognized when control of IVD products is transferred upon that hospitals and institutional customers have received and accepted the products.

(b) Development services

Revenue from development services refers to the research services and sequencing services. Research services are recognized over time when it has an enforceable right to payment for performance completed to date. The progress of research services is measured based on the Group’s inputs or outputs to the satisfaction of related performance obligation of research services. Sequencing services are recognized at a point in time when the Group does not have enforceable right to payment for performance completed to date. For those arrangements, the Group recognizes revenue when the report is delivered.

(c) Principal-agent consideration

The Group performs the underlying precision oncology testing and development services. When another party is involved in providing the service to an end customer, the Group will determine whether the other party is the principal or the agent to the end customer. The Group reports the revenue on a gross or net basis depending on whether the other party is acting as a principal or an agent to the end customer in a transaction. This determination is based on an evaluation of various factors including but not limited to whether the other party (i) is the primary obligor in the arrangement; (ii) has latitude in establishing the selling price; and (iii) has inventory risk before the specified good or service is transferred to a customer or after transfer of control to the customer. When the other party is acting as a principal to the end customer, the Group considers the other party as its customer and records the net amount from the other party as revenue. When the other party is acting as an agent, the Group considers the end customer as its customer and records the gross amount from the end customer as revenue.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of significant accounting policies (Continued)

2.22 Revenue recognition (Continued)

(d) Financing components

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeding one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

(e) Contract assets and liabilities

When either party to a contract has performed, the Group presents the contracts in balance sheets as a contract asset or a contract liability, depending on the relationship between the Group's performance and customers' payment.

A contract asset is the Group's right to consideration in exchange for goods or services which the Group has transferred to customers. Contract asset is subject to the impairment of expected credit losses model under IFRS 9.

Incremental costs incurred to obtain a contract, if recoverable, are capitalized and presented as contract assets and subsequently amortized when the related revenue is recognized. For those costs with amortization periods of less than 1 year, they are expensed as incurred.

If a customer pays consideration or the Group has a right to an amount of consideration that is unconditional, before the Group transfers a good or service to the customer, the Group presents the contract as a contract liability when the payment is made or the receivable is recorded (whichever is earlier). A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A receivable is recorded when the Group has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due.

2.23 Cost of revenue

Cost of revenue is principally related to costs of services. Costs of services primarily consist of costs of raw materials consumed during the process of revenue-generating services, salaries and benefits for production personnel (including related share-based compensations), rental and depreciation expenses as well as maintenance of equipment, and other related costs of operations.

2.24 Selling expenses

Selling expenses primarily include promotion and marketing expenses as well as employee benefits related to sales personnel including share-based compensations.

2.25 Administrative expenses

Administrative expenses primarily include payroll and related expenses for employees involved in general corporate functions including finance, legal and human resources, rental and depreciation expenses related to facilities and equipment used by these functions, professional service expenses and other general corporate related expenses.

2.26 Research and development expenses

As stated in Note 2.7(d), all expenditure related to research and development is recorded in expenses when it could not meet the criteria of capitalization.

2.27 Interest income

Interest income is recognized using the effective interest method.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.28 Government grants**

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Where the grants relates to an expense item, it is recognized as income on a systematic basis over the period that the costs, which it is intended to compensate, are expensed. Where the grants relates to an asset, the fair value is credited to a deferred income account and is released to profit or loss over the expected useful life of the relevant asset on straight-line basis or deducted from the carrying amount of the asset and released to the profit or loss by way of a reduced depreciation charge.

2.29 Leases

The Group leases various properties and office equipment. Rental contracts are typically made for fixed periods of approximately 2 to 5 years but may have extension options as described below.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Until December 31, 2018, leases in which a significant portion of the risks and rewards of ownership were not transferred to the Group as lessee were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

The Group has adopted IFRS 16 from January 1, 2019, by which leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. The Group has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules were therefore recognized in the opening balance sheet on January 1, 2019 when right-of-use assets and lease liabilities were both recognized at approximately RMB42 million with no impact on accumulated losses. The net loss and loss per share of the Group increased by approximately RMB2 million and RMB0.01 per share respectively for the year ended December 31, 2019 as a result of the adoption of IFRS 16.

Under IFRS 16, assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

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

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****2. Summary of significant accounting policies (Continued)****2.29 Leases (Continued)**

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability,
- any lease payments made at or before the commencement date less any lease incentives received,
- any initial direct costs, and
- restoration costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

In the statement of cash flows, cash flows related to leases are classified as the followings:

- cash payments for the principal and interest elements of the lease liabilities are classified within financing activities;
- short-term lease payments, payments for leases of low-value assets and variable lease payments not included in the measurement of the lease liabilities are classified within operating activities.

2.30 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker ("CODM"). The CODM has been identified as the Chief Executive Officer ("CEO") of the Company who makes strategic decisions, monitors daily operation of the Group, allocates resources and assesses performance of the operating segments.

2.31 Loss per share**(a) Basic loss per share**

Basic loss per share is calculated by dividing:

- the loss attributable to owners of the Company, excluding any costs of servicing equity other than ordinary shares
- by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year and excluding treasury shares

(b) Diluted loss per share

Diluted loss per share adjusts the figures used in the determination of basic loss per share to take into account:

- the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and
- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial risk management

3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including interest rate risk and exchange risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance. Risk management is carried out by the senior management of the Group.

(a) Market risk

(i) Interest rate risk

The Group's interest rate risk primarily arises from wealth management products (Note 21(ii)), bank deposits (Note 23), borrowings (Note 28) and loans to/from related parties (Note 33(b)(ii)). Those carried at variable rates expose the Group to cash flow interest rate risk whereas those at fixed rates expose the Group to fair value interest rate risk. Interest amounts continue to be insignificant during the reported periods.

(ii) Exchange risk

The Group is exposed to exchange risk arising from foreign currency exposures, primarily with respect to US\$. Foreign exchange risk arises when future commercial transactions or recognized assets or liabilities are denominated in a currency that is not the functional currency of the Group entity. The Group's net result is not significantly impacted since transactions, assets and liabilities of each Group entity are mostly denominated in the functional currency of the respective entity.

(b) Credit risk

Credit risk primarily arises from wealth management products, cash and cash equivalents, trade and other receivables, amounts due from related parties and contract assets. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheets.

The credit risk of wealth management products and cash and cash equivalents is limited because the counterparties are mainly state-owned or reputable commercial institutions located in the PRC and Hong Kong.

For trade and other receivables, amounts due from related parties and contract assets, management makes periodic as well as individual assessments on the recoverability based on historical settlement records and past experience and adjusts for forward looking information on macroeconomic factors affecting the ability of the debtors to settle the receivables.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
3. Financial risk management (Continued)
3.1 Financial risk factors (Continued)
(b) Credit risk (Continued)

The Group applies the simplified approach for the Group's trade receivables and contract assets without significant financial component by using a lifetime expected loss provision.

The trade receivables and contract assets relating to customers with known financial difficulties or with significant doubt on collection of receivables are assessed individually for provision for impairment allowance. As at December 31, 2020, the balance of loss allowance in respect of these individually assessed receivables was RMB2,036,000 (2019: RMB356,000).

Management has assessed that, on the basis of lifetime expected credit loss approach, the expected credit loss % for trade receivables and contract assets with different groupings based on shared credit risk characteristics as follows:

	<u>Within 2 months RMB'000</u>	<u>Between 2 months to 1 year RMB'000</u>	<u>Between 1 to 2 years RMB'000</u>	<u>Between 2 to 3 years RMB'000</u>	<u>After 3 years RMB'000</u>	<u>Total RMB'000</u>
As at December 31, 2019						
Expected loss rate	1%	1%	20%	60%	100%	
Trade receivables and contract assets, gross	40,834	39,837	5,484	1,300	556	88,011
Loss allowance	392	398	1,107	781	556	3,234
	<u>Within 6 months RMB'000</u>	<u>Between 6 months to 1 year RMB'000</u>	<u>Between 1 to 2 years RMB'000</u>	<u>Between 2 to 3 years RMB'000</u>	<u>After 3 years RMB'000</u>	<u>Total RMB'000</u>
As at December 31, 2020						
Expected loss rate	5%	11%	20%	65%	100%	
Trade receivables and contract assets, gross	118,104	41,047	21,304	1,562	83	182,100
Loss allowance	6,304	4,692	4,300	1,017	83	16,396

The contribution of sales of IVD products to the overall revenue mix increased in 2020. The expected loss rates are thereby adjusted to reflect the different credit risk characteristics, timing of settlements, etc. related to those customers (Note 19).

In view of the history of cooperation with debtors and the sound collection history of other receivables and amounts due from related parties, management believes that the credit risk inherent in these outstanding receivables is not significant. There are no significant increases in credit risk of the receivables comparing with initial recognition and so the 12-month expected credit loss approach is adopted.

Loss allowance provisions for trade and other receivables and contract assets were disclosed in Note 19, Note 20 and Note 6 respectively.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
3. Financial risk management (Continued)
3.1 Financial risk factors (Continued)
(c) Liquidity risk

The Group aims to maintain sufficient cash to meet obligations falling due as well as operating and capital requirements.

The table below analyzes the Group's financial liabilities into relevant maturity groupings based on the remaining period at each year-end date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows except for financial instruments with preferred rights, which are presented on a fair value basis.

	Less than 1 year RMB'000	Between 1 and 2 years RMB'000	Between 2 and 5 years RMB'000	Over 5 years RMB'000	Total RMB'000
As at December 31, 2019					
Financial instruments with preferred rights	—	2,106,334	—	—	2,106,334
Borrowings	21,009	3,293	607	—	24,909
Lease liabilities	16,788	13,308	19,439	—	49,535
Trade payables	49,955	—	—	—	49,955
Other payables	79,923	—	—	—	79,923
Amounts due to a related party	34	—	—	—	34
Total	<u>167,709</u>	<u>2,122,935</u>	<u>20,046</u>	<u>—</u>	<u>2,310,690</u>
As at December 31, 2020					
Borrowings	60,689	5,779	—	—	66,468
Lease liabilities	19,094	16,833	28,705	3,004	67,636
Trade payables	34,071	—	—	—	34,071
Other payables	56,206	—	—	—	56,206
Amounts due to a related party	24	—	—	—	24
Total	<u>170,084</u>	<u>22,612</u>	<u>28,705</u>	<u>3,004</u>	<u>224,405</u>

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial risk management (Continued)

3.2 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group monitors capital by regularly reviewing the capital structure. The Group may adjust the amount of dividends paid to shareholders, provide returns for shareholders, issue new shares or sell assets to repay borrowings.

The Group monitors capital on the basis of the debt-to-adjusted capital ratio. This ratio is calculated as net debt divided by adjusted capital. Net debt is calculated as total borrowings and lease liabilities less cash and cash equivalents. Adjusted capital comprises all components of equity as shown in the consolidated balance sheets and financial instruments with preferred rights, if any, on an as-if-converted basis. As at December 31, 2019 and 2020, the Group has no net debt outstanding.

3.3 Fair value estimation

The table below analyzes the Group's financial instruments carried at fair value as at December 31, 2019 and 2020 by level of the inputs to valuation techniques used to measure fair value. Such inputs are categorized into three levels within a fair value hierarchy as follows:

- (i) Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- (ii) Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).
- (iii) Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

	Notes	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
As at December 31, 2019					
Assets					
Financial assets at fair value through profit or loss					
- wealth management products	21(ii)	—	—	122,224	122,224
Liabilities					
Financial instruments with preferred rights	30	—	—	2,106,334	2,106,334
As at December 31, 2020					
Assets					
Financial assets at fair value through profit or loss					
- other investment	21(i)	—	—	19,609	19,609
- wealth management products	21(ii)	—	—	130,002	130,002
- equity security	21(iii)	10,292	—	—	10,292
Derivative financial instruments					
- foreign currency forwards	22	—	196	—	196
Total		<u>10,292</u>	<u>196</u>	<u>149,611</u>	<u>160,099</u>

There were no transfers between levels 1, 2 and 3 during the reported periods.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
3. Financial risk management (Continued)
3.3 Fair value estimation (Continued)
Financial instruments in Level 3

If one or more of the significant inputs are not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments;
- Discounted cash flow model and unobservable inputs mainly including assumptions of expected future cash flows and discount rate; and
- A combination of observable and unobservable inputs, including risk-free rate, expected volatility, discount rate for lack of marketability, market multiples, etc.

Level 3 instruments of the Group's assets and liabilities include wealth management products, other investment measured at FVPL and financial instruments with preferred rights, respectively.

The following table presents the movements in level 3 instruments for the reported periods, except for those of financial instruments with preferred rights which are presented in Note 30.

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Wealth management products			
Opening balance	252,915	38,597	122,224
Additions	895,140	479,100	1,628,558
Settlements	(1,116,604)	(396,420)	(1,625,106)
Investment income credited to profit or loss (Note 9)	7,146	947	4,652
Exchange differences	—	—	(326)
Closing balance	<u>38,597</u>	<u>122,224</u>	<u>130,002</u>
Other investment			
Opening balance	—	—	—
Additions	—	—	19,000
Fair value change recognized in profit or loss (Note 9)	—	—	609
Closing balance	<u>—</u>	<u>—</u>	<u>19,609</u>

The valuations of Level 3 instruments of wealth management products, other investment and financial instruments with preferred rights are set out in Note 21(ii), Note 21(i) and Note 4(a), respectively.

The carrying amounts of the Group's other financial assets and liabilities, including cash and cash equivalents, trade and other receivables, trade and other payables, amounts due from/to related parties and borrowings, approximate their fair values.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical accounting estimates and judgments

The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgment in applying the Group's accounting policies.

Estimates and judgments are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the Group and that are believed to be reasonable under the circumstances.

(a) Fair value of financial instruments with preferred rights

The Group adopted the quoted market price of the Company's ordinary shares upon IPO on June 19, 2020 to measure the fair value of financial instruments with preferred rights immediately before their conversion into ordinary shares.

Prior to the IPO, the fair value of financial instruments with preferred rights that were not traded in an active market was determined using valuation techniques. The Group used the discounted cash flow method to determine the equity value of the Group and adopted equity allocation model to determine the fair value of the financial instruments with preferred rights. Key assumptions such as discount rate, risk-free interest rate and discount for lack of marketability ("DLOM") involved the use of significant accounting estimates and judgements.

(b) Impairment of receivables

The Group applies the IFRS 9 simplified approach to measure expected credit losses which use a lifetime expected loss allowance and makes impairment loss based on assessments of the recoverability of the trade receivables and contract assets, including the current creditworthiness, the past collection history of each debtor and forward looking information. A considerable amount of judgment is required to estimate the expected loss rates. Where the actual result is different from the original estimate, such difference will impact the carrying value of the trade receivables and contract assets and loss allowances in the year in which such estimate is changed.

(c) Recognition of share-based compensation expenses

As mentioned in Note 27, equity-settled share-based compensation plans have been granted to employees and consultants. The Group has used Binomial model to determine the total fair value of the awards, which is to be expensed over the vesting period. Significant estimate on assumptions, such as the fair value of underlying shares, risk-free interest rate, expected volatility, vesting period and dividend yield, is required to be made by the management.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical accounting estimates and judgments (Continued)

(d) Current and deferred income taxes

(i) Deferred income tax

The Group recognizes deferred tax assets based on estimates that it is probable to generate sufficient taxable profits in the foreseeable future against which the deductible losses will be utilized. The recognition of deferred tax assets mainly involves management's judgments and estimations about the timing and the amount of taxable profits of the companies which have tax losses.

(ii) Uncertain tax positions

There are many transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgment is required from the Group in determining the provision for income taxes. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

In determining the amount of current and deferred income tax, the Group takes into account the impact of uncertain tax positions and whether preferential tax rates, additional taxes, interest or penalties may be due and whether future taxable profits will be available to enable deferred tax assets resulting from deductible temporary differences and tax losses to be recognized. This assessment relies on estimates and assumptions and may involve a series of judgments about future events. New information may become available that causes the Group to change its judgment regarding the adequacy of existing tax liabilities. Such changes to tax liabilities will impact tax expense in the period that such a determination is made.

(e) Consolidation of VIEs

The Group exercises control over the VIEs and has the right to recognize and receive substantially all the economic benefits through the Contractual Arrangements. The Group considers that it controls the VIEs notwithstanding the fact that it does not hold direct equity interests in the VIEs, as it has power over the VIEs and receives substantially all the economic benefits from the business activities of the VIEs through the Contractual Arrangements. Accordingly, the VIEs and subsidiaries of VIEs are accounted for as controlled structured entities and their financial statements have also been consolidated by the Company.

5. Segment reporting

Management reviews the operating results of the business based on operating segments to make decisions about resources to be allocated. Management presents the following segments by which the CODM makes strategic decisions (Note 6):

- Diagnosis and monitoring – provision for LDT services
- Diagnosis and monitoring – sale of IVD products
- Development services

The major operating entities of the Group are domiciled in the PRC. Accordingly, substantially all of the Group's operating results were derived from the PRC during the reported periods. As at December 31, 2019 and 2020, substantially all of the Group's non-current assets were located in the PRC.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
6. Revenue and segment information

	Diagnosis and monitoring – provision of LDT services RMB'000	Diagnosis and monitoring – sale of IVD products RMB'000	Development services RMB'000	Total RMB'000
Year ended December 31, 2018				
Revenue	168,579	4,714	51,883	225,176
Segment profit/(loss)	93,545	1,491	(2,310)	92,726
Year ended December 31, 2019				
Revenue	234,569	34,915	53,941	323,425
Segment profit/(loss)	141,542	11,966	(8,518)	144,990
Year ended December 31, 2020				
Revenue	291,702	93,982	38,801	424,485
Segment profit	198,170	60,266	1,781	260,217

Reconciliation of segment profits to loss for the year:

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Total segment profits	92,726	144,990	260,217
Unallocated expenses			
- operating expenses	(325,702)	(451,860)	(528,593)
- finance income/(costs) – net	1,615	(9,221)	22,703
- losses from financial instruments with preferred rights	(233,632)	(359,943)	(2,823,370)
Loss for the year	(464,993)	(676,034)	(3,069,043)

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
6. Revenue and segment information (continued)

	Year ended December 31,		
	2018	2019	2020
	RMB'000	RMB'000	RMB'000
Timing of revenue recognition			
- over time	149,906	204,406	265,137
- at a point in time	75,270	119,019	159,348
	<u>225,176</u>	<u>323,425</u>	<u>424,485</u>

The Group has recognized the following assets and liabilities related to contracts with customers:

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Contract assets	1,131	1,181
Less: provision for impairment	(111)	(69)
	<u>1,020</u>	<u>1,112</u>
Contract liabilities	<u>18,189</u>	<u>8,417</u>
Revenue recognized that was included in the contract liabilities balance at the beginning of the year	<u>8,469</u>	<u>16,026</u>

Note:

Contract assets arise from provision of services ahead of the agreed payment schedules for fixed-price contracts. The contract assets were aged within one year with insignificant credit risk.

Contract liabilities mainly arise from the advance payments made by customers while the underlying services are yet to be provided. Most of these remaining obligations under such agreement are expected to be fulfilled within one year based on the estimation from management.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
7. Expenses by nature

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Cost of inventories and consumables used (Note 17)	110,970	144,644	148,988
Employee benefit expenses (Note 8)	176,507	236,476	268,986
Depreciation on property, plant and equipment (Note 13)	26,752	30,458	33,466
Depreciation on right-of-use assets (Note 14)	—	14,784	18,277
Amortization on intangible assets (Note 15)	1,106	1,344	1,452
Provision for impairment of trade and other receivables and contract assets	658	2,733	14,843
Promotion expenses	92,811	130,599	131,209
Rental, utilities and office expenses	17,670	9,663	16,347
Listing expenses	9,392	27,064	986

8. Employee benefit expenses

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Wages, salaries and bonuses	111,794	153,815	195,462
Welfare expenses	7,500	8,866	8,637
Housing funds	7,996	11,465	14,799
Contributions to pension plans (Note)	19,573	26,446	20,137
Share-based compensation expenses (Note 27(d))	29,644	35,884	29,951
	176,507	236,476	268,986

Note:

The employees of the Group in the PRC are members of a state-managed pension scheme operated by the PRC Government. The Group is required to contribute a specified percentage of payroll costs as determined by local government authority to the pension obligations to fund the benefits. The only obligation of the Group with respect to the retirement benefits scheme is to make the specified contribution under the scheme.

Employee benefit expenses were charged in the following categories in the consolidated statements of loss:

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Cost of revenue	21,737	27,375	27,108
Selling expenses	75,303	101,378	101,379
Administrative expenses	48,529	60,084	64,610
Research and development expenses	30,938	47,639	75,889
	176,507	236,476	268,986

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
9. Other income and gains – net

	Year ended December 31,		
	2018	2019	2020
	RMB'000	RMB'000	RMB'000
Investment income from wealth management products	7,146	947	4,652
Fair value (loss)/gain on:			
- equity security	—	—	(3,153)
- other investment	—	—	609
- derivative financial instruments	—	—	196
Gain on:			
- redemption of derivative financial instruments	—	—	1,550
- disposal of property, plant and equipment	—	1,505	—
Government grants (Note)	10,695	11,695	3,869
Amortization on deferred income from ADS depository (Note 29(b))	—	—	2,405
Others	(767)	(850)	(1,602)
	<u>17,074</u>	<u>13,297</u>	<u>8,526</u>

Note:

Government grants are subsidies received for compensating the Group's research and development expenses incurred for certain projects and other operating activities.

10. Finance income/(costs) – net

	Year ended December 31,		
	2018	2019	2020
	RMB'000	RMB'000	RMB'000
Finance income			
Interests from:			
- bank deposits	798	198	433
- loans to a related party	749	243	—
Net exchange gains	68	2,042	27,897
	<u>1,615</u>	<u>2,483</u>	<u>28,330</u>
Finance costs			
Issuance costs of financial instruments with preferred rights	—	(6,303)	—
Interests on:			
- lease liabilities	—	(2,076)	(2,069)
- borrowings	—	(2,133)	(3,298)
- loans from a related party	—	(1,192)	—
Others	—	—	(260)
	<u>—</u>	<u>(11,704)</u>	<u>(5,627)</u>
Finance income/(costs) – net	<u>1,615</u>	<u>(9,221)</u>	<u>22,703</u>

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

11. Income tax expense

Income tax expense is recognized based on the income tax rates in the following main tax jurisdictions where the Group operates for the reported periods.

(a) Cayman Islands

The Company is incorporated in the Cayman Islands as an exempted company with limited liabilities under the Companies Law of Cayman Islands and accordingly, is exempted from Cayman Islands income tax.

(b) Hong Kong

No Hong Kong profit tax was provided for as there was no estimated assessable profit that was subject to Hong Kong profits tax during the reported periods.

(c) PRC

Provision for PRC corporate income tax is calculated based on the statutory income tax rate of 25% on the assessable income of respective PRC Group entities during the reported periods in accordance with relevant PRC enterprise income tax rules and regulations (“EIT Law”) except for certain Group entities in PRC with preferential tax rates as detailed below.

No provision for PRC corporate income tax has been made for the reported periods as the Group has no such assessable profit for the years.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
11. Income tax expense (Continued)

The reconciliation between the Group's actual tax charge and the amount that is calculated based on the statutory income tax rate of 25% in the PRC is as follows:

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Loss before income tax	(464,993)	(676,034)	(3,069,043)
Tax credits calculated at statutory tax rate of 25%	(116,248)	(169,009)	(767,261)
Effects of preferential tax rates (Note (i))	44,728	37,139	18,900
Expenses not deductible for income tax purpose (Note (ii))	44,926	101,536	722,458
Super deduction of research and development expenses	(4,279)	(6,273)	(8,390)
Tax losses and deductible temporary differences for which no deferred income tax assets were recognized	30,873	36,607	34,293
Income tax expense	—	—	—

Note:

- (i) Certain Group entities in PRC have been eligible as High/New Technology Enterprises ("HNTEs") with preferential tax rate of 15% as set out in PRC EIT Law.
- (ii) These mainly include fair value loss of financial instruments with preferred rights.

The Group did not recognize deferred income tax assets amounting to approximately RMB106 million and RMB140 million as at December 31, 2019 and 2020 respectively in respect of tax losses and deductible temporary differences that can be carried forward against future taxable income.

Pursuant to the notice on extension for expiries of unused tax losses of HNTEs and Small and Medium- sized Technological Enterprises (Caishui [2018] No. 76) issued in July 2018, which retrospectively effected from January 1, 2018, the accumulated tax losses which did not expire from 2018 would have expiries extending from 5 years to 10 years from then on. The unrecognized tax losses of approximately RMB660 million and RMB840 million as at December 31, 2019 and 2020 will progressively expire until 2029 and 2030 respectively as a result.

As of December 31, 2019 and 2020 the Group did not have any significant unrecognized uncertain tax positions.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
12. Loss per share

Basic and diluted loss per share reflecting the effect of the issuance of ordinary shares by the Company are presented as follows.

To calculate loss per share, the capital structure in July 2019 when the Reorganization completed is pushed back assuming it had been in effect historically as stated in Note 1.3. Basic loss per share is calculated by dividing the loss attributable to owners of the Company by the weighted average number of ordinary shares outstanding, excluding treasury shares which are detailed in Note 25. Restricted ordinary shares have been considered in the calculation when they vested on monthly basis.

	Year ended December 31,		
	2018	2019	2020
Loss attributable to owners of the Company (RMB'000)	(464,993)	(676,034)	(3,069,043)
Weighted average number of ordinary shares outstanding (in thousands) (Note)	113,757	124,895	301,380
Basic loss per share (RMB)	(4.09)	(5.41)	(10.18)
Basic loss per ADS (RMB)			(50.92)

Awards granted under share-based compensation plans and Preferred Shares are considered as potential dilutive shares throughout the reporting periods. However, due to the Group's negative financial results for the reported periods, the potential dilutive shares have anti-dilutive effect on loss per share if they are converted to ordinary shares. Thus diluted loss per share/ADS is equivalent to basic loss per share/ADS.

Note:

Movement of number of ordinary shares outstanding (excluding treasury shares) for the reported periods are shown as follows.

	Year ended December 31,		
	2018 in thousands	2019 in thousands	2020 in thousands
At beginning of the year	107,768	119,812	123,584
Ordinary shares			
- repurchased	—	(8,272)	—
- issued upon IPO	—	—	80,000
- converted from Preferred Shares upon IPO	—	—	220,332
*Restricted shares vested	12,044	12,044	17,894
**Awards vested	—	—	14,897
At end of the year	119,812	123,584	456,707

* considered in the calculation when they vested on monthly basis

** represent awards with nominal subscription prices which have been vested but not yet exercised at end of the year

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
13. Property, plant and equipment

	Instruments and equipment RMB'000	Office equipment and furniture RMB'000	Transporting equipment RMB'000	Leasehold improvements RMB'000	Total RMB'000
As at January 1, 2018					
Cost	81,297	2,622	—	16,246	100,165
Accumulated depreciation	(28,677)	(622)	—	(5,563)	(34,862)
Net book value	52,620	2,000	—	10,683	65,303
Year ended December 31, 2018					
Opening net book value	52,620	2,000	—	10,683	65,303
Additions	40,610	345	445	2,625	44,025
Depreciation	(21,010)	(521)	(53)	(5,168)	(26,752)
Exchange differences	(25)	—	—	—	(25)
Closing net book value	72,195	1,824	392	8,140	82,551
As at December 31, 2018					
Cost	121,895	2,967	445	18,871	144,178
Accumulated depreciation	(49,700)	(1,143)	(53)	(10,731)	(61,627)
Net book value	72,195	1,824	392	8,140	82,551
Year ended December 31, 2019					
Opening net book value	72,195	1,824	392	8,140	82,551
Additions	27,766	986	24	2,210	30,986
Disposals	(173)	—	—	—	(173)
Depreciation	(25,332)	(611)	(113)	(4,402)	(30,458)
Exchange differences	107	—	—	—	107
Closing net book value	74,563	2,199	303	5,948	83,013
As at December 31, 2019					
Cost	147,658	3,953	469	21,081	173,161
Accumulated depreciation	(73,095)	(1,754)	(166)	(15,133)	(90,148)
Net book value	74,563	2,199	303	5,948	83,013
Year ended December 31, 2020					
Opening net book value	74,563	2,199	303	5,948	83,013
Additions	19,573	908	—	6,896	27,377
Depreciation	(28,038)	(784)	(112)	(4,532)	(33,466)
Exchange differences	(33)	—	—	—	(33)
Closing net book value	66,065	2,323	191	8,312	76,891
As at December 31, 2020					
Cost	167,085	4,861	469	27,977	200,392
Accumulated depreciation	(101,020)	(2,538)	(278)	(19,665)	(123,501)
Net book value	66,065	2,323	191	8,312	76,891

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
14. Leases

(a) Amounts recognized in the consolidated balance sheets are as follows:

(i) Right-of-use assets

	Properties RMB'000	Office equipment RMB'000	Total RMB'000
As at January 1, 2019			
Cost	42,561	50	42,611
Year ended December 31, 2019			
Opening net book amount	42,561	50	42,611
Additions	15,355	—	15,355
Depreciation	(14,766)	(18)	(14,784)
Closing net book amount	43,150	32	43,182
As at December 31, 2019			
Cost	57,916	50	57,966
Accumulated depreciation	(14,766)	(18)	(14,784)
Net book value	43,150	32	43,182
Year ended December 31, 2020			
Opening net book amount	43,150	32	43,182
Additions	34,801	—	34,801
Depreciation	(18,259)	(18)	(18,277)
Closing net book amount	59,692	14	59,706
As at December 31, 2020			
Cost	92,717	50	92,767
Accumulated depreciation	(33,025)	(36)	(33,061)
Net book value	59,692	14	59,706

(ii) Lease liabilities

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Non-current	29,124	43,016
Current	15,363	16,585
	<u>44,487</u>	<u>59,601</u>

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****14. Leases (Continued)**

(b) Amounts recognized in the consolidated statements of loss in addition to depreciation shown above are as follows:

	Year ended December 31,	
	2019	2020
	RMB'000	RMB'000
Interest expense (included in finance costs) (Note 10)	2,076	2,069
Expense relating to short-term leases (included in cost of revenue, selling expenses, administrative expenses and research and development expenses)	621	530
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in cost of revenue, administrative expenses and research and development expenses)	<u>403</u>	<u>521</u>

(c) The total cash outflow for leases in 2019 and 2020 was RMB15,234,000 and RMB22,726,000, respectively.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
15. Intangible assets

	Software RMB'000	Patented technology RMB'000	Others RMB'000	Total RMB'000
As at January 1, 2018				
Cost	3,563	230	2,030	5,823
Accumulated amortization and impairment	(696)	(230)	(1,015)	(1,941)
Net book value	<u>2,867</u>	<u>—</u>	<u>1,015</u>	<u>3,882</u>
Year ended December 31, 2018				
Opening net book value	2,867	—	1,015	3,882
Additions	608	—	—	608
Amortization	(599)	—	(507)	(1,106)
Exchange differences	11	—	—	11
Closing net book value	<u>2,887</u>	<u>—</u>	<u>508</u>	<u>3,395</u>
As at December 31, 2018				
Cost	4,200	230	2,030	6,460
Accumulated amortization and impairment	(1,313)	(230)	(1,522)	(3,065)
Net book value	<u>2,887</u>	<u>—</u>	<u>508</u>	<u>3,395</u>
Year ended December 31, 2019				
Opening net book value	2,887	—	508	3,395
Additions	3,376	—	—	3,376
Amortization	(836)	—	(508)	(1,344)
Exchange differences	55	—	—	55
Closing net book value	<u>5,482</u>	<u>—</u>	<u>—</u>	<u>5,482</u>
As at December 31, 2019				
Cost	7,679	230	2,030	9,939
Accumulated amortization and impairment	(2,197)	(230)	(2,030)	(4,457)
Net book value	<u>5,482</u>	<u>—</u>	<u>—</u>	<u>5,482</u>
Year ended December 31, 2020				
Opening net book value	5,482	—	—	5,482
Additions	8,253	—	—	8,253
Amortization	(1,452)	—	—	(1,452)
Exchange differences	(18)	—	—	(18)
Closing net book value	<u>12,265</u>	<u>—</u>	<u>—</u>	<u>12,265</u>
As at December 31, 2020				
Cost	15,798	230	2,030	18,058
Accumulated amortization and impairment	(3,533)	(230)	(2,030)	(5,793)
Net book value	<u>12,265</u>	<u>—</u>	<u>—</u>	<u>12,265</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
16. Financial instruments by category

	Financial assets at FVPL RMB'000	Financial assets at amortized cost RMB'000	Total RMB'000
Financial assets			
As at December 31, 2019			
Trade receivables	—	83,757	83,757
Other receivables	—	4,273	4,273
Amounts due from related parties	—	1,064	1,064
Financial assets at fair value through profit or loss	122,224	—	122,224
Cash and cash equivalents	—	139,954	139,954
	<u>122,224</u>	<u>229,048</u>	<u>351,272</u>
As at December 31, 2020			
Trade receivables	—	164,592	164,592
Other receivables	—	11,968	11,968
Amounts due from related parties	—	214	214
Financial assets at fair value through profit or loss	159,903	—	159,903
Derivative financial instruments	196	—	196
Cash and cash equivalents	—	1,375,766	1,375,766
	<u>160,099</u>	<u>1,552,540</u>	<u>1,712,639</u>
Financial liabilities			
As at December 31, 2019			
Financial instruments with preferred rights	2,106,334	—	2,106,334
Borrowings	—	23,157	23,157
Lease liabilities	—	44,487	44,487
Trade payables	—	49,955	49,955
Other payables	—	79,923	79,923
Amounts due to a related party	—	34	34
	<u>2,106,334</u>	<u>197,556</u>	<u>2,303,890</u>
As at December 31, 2020			
Borrowings	—	64,076	64,076
Lease liabilities	—	59,601	59,601
Trade payables	—	34,071	34,071
Other payables	—	56,206	56,206
Amounts due to a related party	—	24	24
	<u>—</u>	<u>213,978</u>	<u>213,978</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
17. Inventories

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Raw materials	14,824	14,078
Work-in-progress	1,325	5,265
Finished goods	1,747	5,628
	<u>17,896</u>	<u>24,971</u>

Inventories recognized as expenses and included in cost of revenue during the years ended December 31, 2018, 2019 and 2020 amounted to RMB110,970,000, RMB144,644,000 and RMB148,988,000 respectively.

18. Other current assets

These include deductible value-added tax ("VAT") balances which can offset against future VAT payables.

19. Trade receivables

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Trade receivables	87,236	182,955
Less: provision for impairment	(3,479)	(18,363)
	<u>83,757</u>	<u>164,592</u>

Trade receivables are generally due for settlement within 30 days, except for those of IVD product sales up to 180 days. As at December 31, 2019 and 2020 majority of the trade receivables are aged within one year. The amounts of trade receivables that were past due but not impaired were insignificant to the Group. The expected credit losses of trade receivables and the Group's exposure to credit risk are disclosed in Note 3.1(b).

20. Other receivables and prepayments

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Deposits	4,273	7,603
Prepayment for goods and service	10,694	27,568
Prepayment for rental expenses	1,216	694
Others	3,820	7,032
	<u>20,003</u>	<u>42,897</u>
Less: provision for impairment	(477)	(477)
	<u>19,526</u>	<u>42,420</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
21. Financial assets at fair value through profit or loss

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Non-current		
Other investment (Note (i))	—	19,609
Current		
Wealth management products (Note (ii))	122,224	130,002
Equity security (Note (iii))	—	10,292
	<u>122,224</u>	<u>140,294</u>

Note:

- (i) In 2020 the Group invested RMB19 million in a biotechnology company and thereby obtained 30% of its equity interests with certain preferred rights in redemption, liquidation and anti-dilution. As such it is deemed as a debt instrument and classified as financial asset at FVPL with fair value measured based on discounted cash flow method.
- (ii) Wealth management products held by the Group with various maturities bear floating interest rates at ranges of 2.78% and 2.30%-2.40% per annum as at December 31, 2019 and 2020 respectively. The underlying investments were mostly debt instruments with low to moderate risk levels. The fair values of wealth management products are based on discounted cash flows using their expected returns.
- (iii) This is investment of an equity security listed in Hong Kong held for trading with purchase cost of approximately RMB14 million. Its fair value at end of reporting period is determined by closing price quoted in an active stock market.

Changes in fair values of these financial assets are recorded in other income and gains/(losses) - net in the consolidated statements of loss.

22. Derivative financial instruments

The Group has entered into foreign currency forwards to sell US\$ and buy RMB with maturities within one year.

The fair values of these foreign currency forwards are based on the present value of the estimated future cash flows by reference to forward exchange rates and other factors at the balance sheet date.

23. Cash and cash equivalents

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Cash at bank		
-RMB deposits	9,339	20,433
-US\$ deposits	130,545	1,355,276
-HK\$ deposits	70	57
Cash on hand	—	—
	<u>139,954</u>	<u>1,375,766</u>

Cash at banks earns interest at floating rates based on daily bank deposit rates.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
23. Cash and cash equivalents (Continued)

Cash at banks denominated in RMB are deposited with banks in the PRC. The conversion of these RMB-denominated balances into foreign currencies and the remittance of funds out of China are subject to the rules and regulations of foreign exchange control promulgated by the Government of the PRC.

24. Share capital and share premium

	Note	Number of ordinary shares	Nominal value of ordinary shares US\$'000	Number of preferred shares	Nominal value of preferred shares US\$'000
Authorized:					
Upon incorporation	(i)	500,000,000	50	—	—
As at December 31, 2018		<u>500,000,000</u>	<u>50</u>	<u>—</u>	<u>—</u>
As at January 1, 2019		500,000,000	50	—	—
Share sub-division	(ii)	2,000,000,000	—	—	—
Re-designation upon issuance of then preferred shares at share conversion	(iii)	(171,083,000)	(3)	171,083,000	3
Shares repurchase and issuance					
- repurchase	(v)	(8,272,000)	—	(6,933,000)	—
- issuance	(v)	—	—	15,205,000	—
Re-designation upon issuance of Series D preferred shares	(vi)	(34,147,600)	(1)	34,147,600	1
As at December 31, 2019		<u>2,286,497,400</u>	<u>46</u>	<u>213,502,600</u>	<u>4</u>
As at January 1, 2020		2,286,497,400	46	213,502,600	4
Re-designation upon issuance of Series D-2 preferred shares	(vii)	(6,829,500)	—	6,829,500	—
Conversion of preferred shares into ordinary shares	(viii)	220,332,100	4	(220,332,100)	(4)
As at December 31, 2020		<u>2,500,000,000</u>	<u>50</u>	<u>—</u>	<u>—</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
24. Share capital and share premium (Continued)

	Note	Number of ordinary shares	Nominal value of ordinary shares (Share capital)		Share premium
			US\$'000	RMB'000	RMB'000
Issued:					
Upon incorporation	(i)	3	—	—	—
As at December 31, 2018		<u>3</u>	<u>—</u>	<u>—</u>	<u>—</u>
As at January 1, 2019		3	—	—	—
Share repurchase	(ii)	(2)	—	—	—
Share sub-division	(ii)	4	—	—	—
Issuance of ordinary shares	(iv)	149,749,995	3	18	—
Repurchase of ordinary shares	(v)	(8,272,000)	—	(1)	—
As at December 31, 2019		<u>141,478,000</u>	<u>3</u>	<u>17</u>	<u>—</u>
As at January 1, 2020		141,478,000	3	17	—
Issuance of ordinary shares upon IPO	(viii)	80,000,000	2	11	1,657,782
Conversion of preferred shares into ordinary shares	(viii)	220,332,100	4	31	4,999,780
As at December 31, 2020		<u>441,810,100</u>	<u>9</u>	<u>59</u>	<u>6,657,562</u>

Note:

- (i) On April 9, 2018, the Company was incorporated in the Cayman Islands with an authorized share capital of US\$50,000 divided into 500,000,000 ordinary shares with a par value of US\$0.0001 each and 3 ordinary shares were issued.
- (ii) On July 2, 2019, the Company repurchased 2 ordinary shares and conducted a 1:5 share sub-division to amend its authorized share capital to 2,500,000,000 ordinary shares with a par value of US\$0.00002 each in accordance with the resolution of the shareholders of the Company.
- (iii) On July 2, 2019, the Company issued 171,083,000 preferred shares (equivalent to then 34,216,600 preferred shares of Genetron Health with each share having been converted to five shares of the Company) at par value of US\$0.00002 per share.
- (iv) On July 2, 2019, the Company further issued 149,749,995 ordinary shares to each of the then equity holders of Genetron Health with substantially the same rights and shareholding percentages in Genetron Health upon the Reorganization. Together with the 5 ordinary shares of the Company resulted from (i) and (ii) above, this totalled 149,750,000 ordinary shares of the Company, with each share of Genetron Health having been converted to five shares of the Company.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

24. Share capital and share premium (Continued)

Note (Continued):

- (v) In November 2019 the Group repurchased 8,272,000 ordinary shares and 6,933,000 preferred shares from certain then shareholders including the Founders for an aggregate consideration of US\$15 million, and issued 15,205,000 Series C-2 preferred shares to a new investor (“C-2 investor”) for the same amount of consideration.

Consequently the total nominal value of ordinary shares repurchased of US\$165 (equivalent to approximately RMB1,000) was deducted from share capital, and the excess of the relevant portion of consideration paid over the total nominal value of repurchased ordinary shares of US\$8,160,000 (equivalent to approximately RMB57,438,000) was debited to (a) the balance standing to then capital reserve of RMB35,174,000 and (b) other reserve of RMB22,264,000.

- (vi) In November 2019 the Company further issued 34,147,600 Series D preferred shares for an aggregate consideration of US\$50 million to certain investors including the C-2 investor.
- (vii) In February 2020 the Company further issued 6,829,500 Series D-2 preferred shares for a cash consideration of US\$10 million.
- (viii) On June 19, 2020, 16,000,000 ADSs (representing 80,000,000 ordinary shares) were offered by the Company upon their listing on NASDAQ. Simultaneously all the 220,332,100 then preferred shares of the Company were converted into ordinary shares.

25. Treasury shares

A total of 93,506,000 ordinary shares of the Company held by the Founders were put in escrow with service conditions and vested on monthly basis or by one tranche which are detailed in Note 27(b) and Note 27(c) respectively. As at December 31, 2019, 17,894,000 ordinary shares of the Company were still in escrow and considered as treasury shares. As at December 31, 2020, all the ordinary shares in escrow were vested and released.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Reserves

(a) Capital reserve

Capital reserve mainly included historical cash contributions to Genetron Health by its equity holders.

On August 28, 2017, a Founder invested RMB2,173,600 to Genetron Health in cash to subscribe for 2,173,600 ordinary shares of Genetron Health, details of which are set out in Note 27(c).

In November 2019 the Group repurchased certain ordinary shares with the excess of consideration paid over their nominal value being debited to the balances standing to then capital reserve and other reserve of the Group as detailed in Note 24(v).

(b) Share-based compensation reserve

The share-based compensation reserve represents the fair value of the actual or estimated number of unvested restricted shares and unexercised awards granted to employees recognized in accordance with the accounting policy adopted for equity-settled share-based payments in Note 2.21 to the financial statements.

(c) Other reserve

Other reserve includes the reserve transferred from share-based compensation reserve upon vesting of restricted shares and exercise of awards.

(d) Other comprehensive losses

Other comprehensive losses comprise the exchange translation reserve which represents the foreign exchange differences arising from the translation of the financial statements of foreign operations in accordance with the accounting policy set out in Note 2.5(c) to the financial statements, and changes in the fair value of the financial instruments with preferred rights which are attributable to changes in the credit risk of that liability set out in Note 2.18.

(e) Statutory reserves

In accordance with the PRC regulations and the articles of association of the PRC companies now comprising the Group, before annual profit distribution companies registered in the PRC are required to set aside 10% of its net profit for the year after offsetting any prior year losses as determined under relevant PRC accounting standards to the statutory surplus reserve fund. When the balance of such reserve reaches 50% of the company's registered capital, any further appropriation is optional. No profit appropriation to the reserve fund was made for those Group entities for the reported periods as they were in accumulated loss positions.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

27. Share-based payment

(a) Share Incentive Plan and Share Incentive Scheme

Genetron Health had two previous employee share incentive plans for its key employees, key management and consultants, which were approved by its board of directors and became effective in January 2017 and June 2018, respectively. The purpose is to provide incentives and rewards to eligible participants for their contribution or potential contribution to the Group and to recruit and retain high calibre persons who are valuable to the Group. The incentive shares had included 6,792,300 shares of Genetron Health (equivalent to 33,961,500 shares of the Company with each share of Genetron Health having been converted to five shares of the Company in July 2019).

In July 2019, the Group adopted the 2019 Genetron Health Share Incentive Plan (the “2019 Plan”) under which the awards completely replaced all options granted under previous similar share incentive plans. In October 2019, the Group further adopted the 2019 Genetron Health Share Incentive Scheme (the “2019 Scheme”) with substantially the same terms. The 2019 Plan and 2019 Scheme provide for the issuance of up to an aggregate of 33,961,500 and 20,830,100 of the Company’s ordinary shares respectively, out of which 22,555,620 ordinary shares have been issued but deemed not outstanding as at December 31, 2020.

Pursuant to the plans, a grantee has the right to subscribe for the ordinary shares at a price determined by the board of directors of the Company. The awards granted can only vest if the performance conditions (including certain annual performance rating and sales or development performance indicator, which have been defined on grant date) and service conditions are met. The service condition of the awards granted to employees and key management is usually four years since the grant date and 25% of the granted awards are progressively vested on each anniversary of the grant date. The service condition for consultants is one to three years. The grantees are entitled to subscribe for underlying shares only if an IPO is achieved, provided that the service condition is also met. As of each grant date before IPO on June 19, 2020, management believed achievement of the IPO was probable. Grantees who leave the Group before the exercisable date will lose their entitlement to the vested awards. Awards granted typically expire in ten years from the grant date as stated in grant agreements.

Participation in the plans is at the discretion of the board of directors of the Company and no individual has contractual right to participate in the plans or receive any guaranteed benefits.

Set out below are movements of awards during the reported periods.

	Year ended December 31,					
	2018		2019		2020	
	Exercise price	Number of awards	Exercise price	Number of awards	Exercise price (Note (iii))	Number of awards
Outstanding at beginning of the year	RMB 1.00	1,624,456	RMB 1.00	4,578,933	US\$0.03	23,481,970
Granted during the year	RMB 1.00	3,205,000	RMB 1.00	713,840	US\$0.88	3,035,000
Forfeited before Reorganization (Note (i))	RMB 1.00	(250,523)	RMB 1.00	(47,507)	—	—
Share sub-division upon Reorganization (Note 24(ii))	—	—	US\$ 0.03	18,321,704	—	—
Forfeited after Reorganization (Note (i))	—	—	US\$ 0.03	(85,000)	US\$0.03	(300,702)
Outstanding at end of the year	<u>RMB 1.00</u>	<u>4,578,933</u>	<u>US\$ 0.03</u>	<u>23,481,970</u>	<u>US\$0.13</u>	<u>26,216,268</u>
Exercisable at end of the year (Note (ii))	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>US\$0.03</u>	<u>14,897,089</u>

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

27. Share-based payment (Continued)

(a) Share Incentive Plan and Share Incentive Scheme (Continued)

Note:

- (i) The shares are forfeited if the employment terminates or the performance condition is not met.
- (ii) Awards are only exercisable upon completion of IPO or after other vesting periods.
- (iii) Exercise prices are shown as weighted average as applicable.

The weighted average remaining contractual lives of awards outstanding as at the years ended December 31, 2019 and 2020 are 8.0 years and 7.3 years, respectively.

Fair value of awards granted

The Group used the discounted cash flow method to determine the underlying equity fair value and adopted equity allocation model to determine the fair value of the underlying ordinary shares prior to IPO, subsequent to which the fair value of the shares is calculated based on the quoted market price of the Company's shares at the respective grant date.

Based on the fair value of underlying ordinary shares, the Group used Binominal option-pricing model to determine the fair value of awards as at each of the grant dates. Key assumptions for the awards granted are set as below:

Year of grant	2017	2018	Before July 2019	After July 2019	2020
Fair values at grant date					
- (RMB per share of Genetron Health) (Note)	10.83	28.19	36.32	—	—
- (US\$ per share of the Company) (Note)	—	—	—	1.25	1.76 - 2.38
Exercise prices					
- (RMB per share of Genetron Health) (Note)	1.00	1.00	1.00	—	—
- (US\$ per share of the Company) (Note)	—	—	—	0.03	0.03 - 0.99
Risk-free interest rates	2.51%	2.94%	2.09%	1.69%	0.64% - 0.67%
Dividend yield	nil	nil	nil	nil	nil
Expected volatilities	55.08%	53.48%	50.20%	48.80%	54.90% - 55.10%
Expected term	10 years	10 years	10 years	10 years	10 years

Note:

Each share of Genetron Health was converted to five shares of the Company upon the Reorganization in July 2019 when the exercise price of all then existing awards was modified from RMB1.00 per share of Genetron Health to US\$0.03 per share of the Company without impact on their values.

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

27. Share-based payment (Continued)

(b) Restriction of ordinary shares held by Founders

On May 7, 2015, an aggregate of 16,527,600 ordinary shares of Genetron Health at par value of RMB1.00 per share were issued to three directors, who are also Founders of Genetron Health. In accordance with Series A financing agreement on July 17, 2015, all the 16,527,600 ordinary shares held by the individual Founders were put in escrow since that date with a five-year service condition (which was subsequently fulfilled during 2020). Such restriction was deemed as a compensatory arrangement for services to be provided by the Founders and therefore accounted for as a share-based compensation arrangement.

The Group applied Binomial model to determine the fair value of this share-based payment as RMB3.12 per share on the grant date. Key assumptions included risk-free interest rate of 1.70%, expected volatility of 50.00%, dividend yield of nil and expected terms of 5 years based on best estimates.

As modified since Series B financing in September 2016, one sixtieth of the award became vested on a monthly basis over five years provided that the Founders remained employment relationship with Genetron Health. Under the Series C financing in October 2017, the shares owned by one of the Founders were no longer subject to the five-year service condition and his then 2,540,650 restricted shares were vested immediately on the modification date. Accordingly, the unrecognized grant date fair value of those shares were accelerated and recognized as share-based compensation expenses on the modified date.

If the Founders terminated service, the Group had to repurchase the shares put in escrow at RMB1.00 per share, which was considered a leaver provision and recorded in other payables and accruals to be released proportionally as the restricted shares were progressively released from escrow.

The movement of the restricted shares for the years ended December 31, 2018, 2019 and 2020 are summarized as below:

	Number of restricted shares (in thousands)
Outstanding at January 1, 2018	6,222
Vested and released	(2,409)
Outstanding at December 31, 2018	3,813
Outstanding at January 1, 2019	3,813
Vested and released before Reorganization	(1,204)
Share sub-division upon Reorganization (Note 24(ii))	10,439
Vested and released after Reorganization	(6,024)
Outstanding at December 31, 2019	7,024
Outstanding at January 1, 2020	7,024
Vested and released	(7,024)
Outstanding at December 31, 2020	—

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
27. Share-based payment (Continued)
(c) Share-based payment to a Founder

Pursuant to the Series A preferred shares agreement in July 2015, a Founder was granted the right to subscribe for shares of Genetron Health amounted to 3% to 5% of its total shares outstanding at par value of RMB1.00 per share if the appraised value of Genetron Health reached RMB590 million before Series B preferred shares financing. The shares had a five-year service condition (which was subsequently fulfilled during 2020).

The market condition of target appraised value was met in 2016 and the Founder was allowed to subscribe for 2,173,600 shares (representing 5% of the total number of ordinary and preferred shares then outstanding) of Genetron Health at RMB1.00 per share. The shares were paid up in 2017 and the funds received represent a leaver provision being recorded in other payables and accruals as Genetron Health had to pay such amount to repurchase the shares if the service condition was not met.

The Group applied Binomial model to determine the fair value of this share-based payment as RMB1.79 per share on the grant date. Key assumptions included probability of achieving the market condition, risk-free interest rate of 0.51%, expected volatility of 55.80%, dividend yield of nil and expected terms of 1.5 years based on best estimates.

(d) Share-based compensation expenses were charged in the following categories in the consolidated statements of loss:

	Year ended December 31,		
	2018	2019	2020
	RMB'000	RMB'000	RMB'000
Cost of revenue	234	446	300
Selling expenses	1,186	2,720	3,906
Administrative expenses	22,259	25,940	15,013
Research and development expenses	5,965	6,778	10,732
	<u>29,644</u>	<u>35,884</u>	<u>29,951</u>

28. Borrowings

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Non-current		
Other borrowings (Note (i))	3,643	5,493
Current		
Bank borrowings (Note (ii))	5,000	50,000
Current portion of other borrowings (Note (i))	14,514	8,583
	<u>19,514</u>	<u>58,583</u>
Total	<u>23,157</u>	<u>64,076</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
28. Borrowings (Continued)

Notes:

- (i) The Group entered into sale and leaseback agreements with independent parties, to which the Group transferred the ownership of certain instruments and thereby obtained cash proceeds (“consideration”) with the following details:

Date	Term	Consideration RMB'000	Guarantee/pledge
March 2019	2 year	25,000	(a)
June 2019	3 year	6,960	(b)
July 2020	2 year	12,800	(c)

- (a) guarantee provided by a director of the Group and pledge of all equity interest of Beijing Genetron Medical Laboratory Co., Ltd., a subsidiary of the Company
(b) corporate guarantee provided by Genetron Health
(c) guarantee provided by a director of the Group

The Group continues to have control over the assets which make the above ownership transfers not qualify as sales transactions as a result. The proceeds received by the Group are thus in substance borrowings with the assets not being derecognized.

The interest rates of these borrowings are approximately 6%-8% per annum and subject to adjustments in accordance with the benchmark lending interest rate promulgated by the People's Bank of China. The principals and interests are repaid in quarterly or monthly instalments based on respective agreements.

- (ii) The Group obtained bank facilities by which loan amounts were drawn with following details:

Date of obtaining facility	Facility term	Facility amount RMB'000	Loan amount drawn RMB'000	Loan period	Guarantee /pledge	Interest rate (per annum)
June 2019	2 year	5,000	5,000	June 2019 – June 2020	(a)	5.0%
March 2020	1 year	10,000	10,000	March 2020 – March 2021	(b)	3.7%
March 2020	1 year	30,000	30,000	March 2020 – March 2021	(c)	2.0%
May 2020	2 year	25,000	10,000	October 2020 – October 2021	(d)	3.5%

- (a) guaranteed by an independent party (the “guarantor”), to which each of Mr. Sizhen Wang (a director of the Group) and Genetron Health have provided counter-guarantees, in addition to a facility fee of RMB110,000 paid by the Group. To provide the counter-guarantee Genetron Health has to pledge not less than RMB10 million of certain of its receivables to the guarantor.
(b) guaranteed by an independent party, to which Mr. Sizhen Wang has provided counter-guarantee, in addition to a facility fee of RMB130,000 paid by the Group.
(c) guaranteed by Mr. Sizhen Wang.
(d) guaranteed by an independent party (the “guarantor”), to which each of Mr. Sizhen Wang, Genetron Health and certain of its subsidiaries have provided counter-guarantees, in addition to a facility fee of RMB138,000 paid by the Group. To provide the counter-guarantees Genetron Health and certain of its subsidiaries have to pledge a patented technology and not less than RMB20 million of certain of Genetron Health's receivables to the guarantor (net book balance pledged as of December 31, 2020 approximated RMB29 million).

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
29. Other payables and accruals

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Payroll and welfare payables	19,205	30,625
Accrued professional service fees and listing expenses	27,375	10,437
Accrued taxes other than income tax	4,633	1,668
Amount due to an investor (Note (a))	15,000	—
Payable to investors for shares repurchase	3,539	3,283
Leaver provisions related to restricted shares (Note 27(b), (c))	3,578	—
Deferred income from ADS depository (Note (b))	—	19,766
Others	36,353	45,385
	<u>109,683</u>	<u>111,164</u>

Note:

- (a) Upon the Reorganization certain original preferred shareholders of Genetron Health (i) subscribed preferred shares of the Company to replace their historical investment in Genetron Health; and (ii) would thereby be repaid an equivalent amount for their historical investment in Genetron Health.

As at December 31, 2019, a cash consideration of RMB15 million for the subscription of one of those investors had been received by the Company while the historical investment in Genetron Health had not yet been repaid to the investor. This balance to be repaid was non-interest bearing and settled in cash during 2020.

Similarly during 2020, certain investors subscribed for approximately RMB299 million of investment in the Company and received repayment of the same amount of their historical investment in Genetron Health in the same year.

- (b) After listing in 2020 the Company entered into an agreement with a bank to deposit its ADSs for 5 years (the “deposit period”) and received a fee of US\$3.4 million (equivalent to approximately RMB23 million) which is to be amortized over the deposit period.

30. Financial instruments with preferred rights

The Group had completed a series of financing by issuing shares with preferred rights including conversion feature, liquidation preferences and redemption rights (“Preferred Shares”), of which the preferred shares issued by Genetron Health before July 2019 were converted to shares of the Company on one-for-five basis upon the Reorganization, with following details:

Date of subscription	Round	Note	Number of Preferred Shares of the Company (in thousands)	Subscription/ (repurchase) consideration RMB'000
July 17, 2015	Series A-1		39,200	70,000
August 6, 2015	Series A-1		8,400	15,000
September 24, 2015	Series A-2		19,760	50,000
September 18, 2016	Series B		25,358	100,000
November 2, 2016	Series B		18,005	71,000
October 10, 2017	Series C		51,525	350,000
December 29, 2017	Series C		8,835	60,000
November 18, 2019	Series A-1, A-2, B	24(v)	(6,933)	(48,105)
November 19, 2019	Series C-2	24(v)	15,205	105,325
November 19, 2019	Series D	24(vi)	34,148	351,243
February 19, 2020	Series D-2	24(vii)	6,829	70,026
			<u>220,332</u>	

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
30. Financial instruments with preferred rights (Continued)

The Group designated the entire instruments as financial liabilities at FVPL with the changes in the fair value recorded in the consolidated statements of loss, except for the changes in fair value due to own credit risk, which were recorded in other comprehensive losses. The accumulated fair value change due to own credit risk amounting to RMB27,355,000 was reclassified to accumulated losses upon conversion of these financial instruments with preferred rights into ordinary shares.

Movements of financial instruments with preferred rights during the years ended December 31, 2018, 2019 and 2020 are:

	RMB'000
Year ended December 31, 2018	
At January 1, 2018	1,018,019
Issuance of Series C preferred shares	60,000
Changes in fair value recognized in profit or loss	233,632
Changes in fair value due to own credit risk recognized in OCI	9,061
At December 31, 2018	<u>1,320,712</u>
Year ended December 31, 2019	
At January 1, 2019	1,320,712
Repurchase of Series A-1, A-2, B preferred shares	(48,105)
Issuance of Series C-2 preferred shares	105,325
Issuance of Series D preferred shares	351,243
Changes in fair value recognized in profit or loss	333,401
Changes in fair value due to own credit risk recognized in OCI	17,299
Other loss	26,542
Exchange differences	(83)
At December 31, 2019	<u>2,106,334</u>
Year ended December 31, 2020	
At January 1, 2020	2,106,334
Issuance of Series D-2 preferred shares	70,026
Changes in fair value recognized in profit or loss	2,823,370
Changes in fair value due to own credit risk recognized in OCI	72
Conversion into ordinary shares	(4,999,811)
Others	9
At December 31, 2020	<u>—</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
31. Cash flow information

(a) Reconciliation from loss before income tax to cash used in operations

	Year ended December 31,		
	2018	2019	2020
	RMB'000	RMB'000	RMB'000
Loss before income tax	(464,993)	(676,034)	(3,069,043)
Adjustments for:			
Depreciation on			
- property, plant and equipment	26,752	30,458	33,466
- right-of-use assets	—	14,784	18,277
Amortization on intangible assets	1,106	1,344	1,452
Provision for impairment of trade and other receivables and contract assets	658	2,733	14,843
Investment income from wealth management products	(7,146)	(947)	(4,652)
Fair value loss – net on other financial assets at FVPL	—	—	2,348
Gain on			
- redemption of derivative financial instruments	—	—	(1,550)
- disposal of property, plant and equipment	—	(1,505)	—
Amortization on deferred income of ADS depository	—	—	(2,405)
Finance (income)/costs - net	(68)	9,419	(22,270)
Share-based compensation expenses	29,644	35,884	29,951
Losses related to financial instruments with preferred rights	233,632	359,943	2,823,370
Others	—	—	(110)
Changes in working capital:			
- Inventories	(8,846)	3,719	(7,075)
- Contract assets	444	1,234	(50)
- Other current assets	(11,689)	(6,687)	7,211
- Trade receivables	(27,410)	(48,151)	(95,719)
- Other receivables and prepayments	(4,468)	(33)	(22,894)
- Amounts due from related parties	(3,674)	(634)	850
- Trade payables	2,938	26,633	(9,073)
- Contract liabilities	5,468	9,322	(9,772)
- Other payables and accruals	26,636	41,561	11,948
Cash used in operations	<u>(201,016)</u>	<u>(196,957)</u>	<u>(300,897)</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
31. Cash flow information (Continued)
(b) Reconciliation of liabilities arising from financing activities

	Financial instruments with preferred rights (Note 30) RMB'000	Amounts due to investors (Note 29) RMB'000	Borrowings (Note 28) RMB'000	Loans from a related party RMB'000	Lease liabilities (Note 14(a)(ii)) RMB'000	Total RMB'000
At January 1, 2018	1,018,019	—	—	—	—	1,018,019
Cash received	60,000	—	—	—	—	60,000
Non-cash movements	242,693	—	—	—	—	242,693
At December 31, 2018	1,320,712	—	—	—	—	1,320,712
At January 1, 2019	1,320,712	—	—	—	41,418	1,362,130
Cash received	456,568	15,000	32,955	35,000	—	539,523
Cash repaid	(43,279)	—	(9,798)	(35,000)	(14,362)	(102,439)
Non-cash movements	372,333	—	—	—	17,431	389,764
At December 31, 2019	2,106,334	15,000	23,157	—	44,487	2,188,978
At January 1, 2020	2,106,334	15,000	23,157	—	44,487	2,188,978
Cash received	70,026	299,051	61,213	—	—	430,290
Cash repaid	—	(314,388)	(20,703)	—	(19,577)	(354,668)
Non-cash movements	(2,176,360)	337	409	—	34,691	(2,140,923)
At December 31, 2020	—	—	64,076	—	59,601	123,677

32. Commitments
(a) Capital commitments

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
Equipment and intangible assets		
- Contracted but not provided for	1,790	14,578

(b) Lease commitments

The Group leases certain office buildings under non-cancellable lease agreements.

From January 1, 2019, the Group has recognized right-of-use assets for these leases, except for short-term and low-value leases (Note 14). The future minimum lease payables under such non-cancellable leases not recognized in the financial statements at each year-end date are as follows:

	As at December 31,	
	2019	2020
	RMB'000	RMB'000
No later than 1 year	615	300
Later than 1 year but no later than 3 years	15	—
	630	300

GENETRON HOLDINGS LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

32. Commitments (Continued)

(b) Lease commitments (Continued)

As at December 31, 2020, undiscounted future lease payments amounted to RMB5,963,000 (2019: nil) are committed by the Group with lease commencement dates subsequent to the balance sheet date. They will be recognised as right-of-use assets and corresponding lease liabilities after December 31, 2020.

33. Related party transactions

Parties are considered to be related if one party has the ability, directly or indirectly, to control or exercise significant influence over the other party. Parties are also considered to be related if they are subject to common control. Members of key management of the Group and their close family members are also considered as related parties.

<u>Names of related parties</u>	<u>Nature of relationship</u>
Mr. Sizhen Wang	A director of the Group
Mr. Weiwu He	A director of the Group
Vcanbio Gene Technology Corp., Ltd.	An investor of the Group
Edigene (Beijing) Inc.	A director of this entity is also a director of the Company
Juventas Cell Therapy Ltd.	Certain directors of this entity are also directors of the Group
TCRCure Biopharma (Beijing) Ltd.	Certain directors of this entity are also directors of the Group
TCRCure Biopharma (Chongqing) Ltd.	Certain directors of this entity are also directors of the Group
FHP Holdings Ltd.	An entity controlled by a director of the Company

In addition to other related party transactions and balances disclosed elsewhere in these financial statements, the following is a summary of significant transactions and balances with related parties during the reported periods and at each year-ends.

- (a) Interests in subsidiaries of the Company are set out in Note 1.2.
- (b) Significant transactions with related parties
- (i) Provision of services

	<u>Year ended December 31,</u>		
	<u>2018</u>	<u>2019</u>	<u>2020</u>
	<u>RMB'000</u>	<u>RMB'000</u>	<u>RMB'000</u>
Edigene (Beijing) Inc.	97	1,071	623
Vcanbio Gene Technology Corp., Ltd.	1,236	—	—
TCRCure Biopharma (Beijing) Ltd.	—	588	—
TCRCure Biopharma (Chongqing) Ltd.	—	—	898
	<u>1,333</u>	<u>1,659</u>	<u>1,521</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
33. Related party transactions (Continued)

(b) Significant transactions with related parties (Continued)

(ii) Loans to/from related parties

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Loans to Mr. Sizhen Wang:			
- Loans advanced	43,550	5,000	—
- Loans repaid	(41,000)	(10,525)	—
- Interest charged	749	243	—
- Interest paid	—	(992)	—

Loans to Mr. Sizhen Wang were unsecured, interest-bearing at 0%-4.35% per annum and repaid in 2019.

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Loans from Juventas Cell Therapy Ltd.:			
- Loans advanced	—	35,000	—
- Loans repaid	—	(35,000)	—
- Interest charged	—	1,192	—
- Interest paid	—	(1,192)	—

Loans from Juventas Cell Therapy Ltd. were guaranteed by Mr. Sizhen Wang, interest-bearing at 12% per annum and repaid in 2019.

(c) Balances with related parties

(i) Trade receivables

	As at December 31,	
	2019 RMB'000	2020 RMB'000
Edigene (Beijing) Inc.	456	214
TCRCure Biopharma (Beijing) Ltd.	608	—
	<u>1,064</u>	<u>214</u>

(ii) Other payables

	As at December 31,	
	2019 RMB'000	2020 RMB'000
FHP Holdings Ltd.	<u>34</u>	<u>24</u>

GENETRON HOLDINGS LIMITED**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****33. Related party transactions (Continued)****(d) Key management compensation**

Key management includes directors, supervisors and senior management personnel. The compensations paid or payable to key management for employee services are shown below:

	Year ended December 31,		
	2018 RMB'000	2019 RMB'000	2020 RMB'000
Salaries and other short-term employee benefits	5,250	5,034	8,112
Contributions to pension plans	50	125	107
Share-based compensation expenses	19,952	17,454	15,679
	<u>25,252</u>	<u>22,613</u>	<u>23,898</u>

34. Restricted net assets and parent company only condensed financial information

The Company's ability to pay dividends is primarily dependent on the Company receiving distributions of funds from its subsidiaries. Relevant PRC statutory laws and regulations permit payments of dividends by the Company's subsidiaries and VIEs incorporated in the PRC only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations.

In accordance with the PRC laws and regulations, statutory reserve funds shall be made and can only be used for specific purposes and are not distributable as cash dividends. As a result of these PRC laws and regulations that require annual appropriation of 10% of net after-tax profits to be set aside prior to payment of dividends as statutory surplus fund, unless such reserve fund reaches 50% of the entity's registered capital, VIEs and PRC subsidiaries of VIEs are restricted in their ability to transfer a portion of their net assets to the Company.

The Company performs a test on the restricted net assets of its consolidated subsidiaries, VIEs and subsidiaries of VIEs (the "restricted net assets") in accordance with Securities and Exchange Commission Regulation S-X Rule 4-08 (e) (3) "General Notes to Financial Statements" and concludes that the condensed financial information for the parent company is required to be presented as at December 31, 2019 and 2020 and for the years ended December 31, 2018, 2019 and 2020.

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
34. Restricted net assets and parent company only condensed financial information (Continued)
(a) Balance sheets

	As at December 31,		
	2019 RMB'000	2020 RMB'000	2020 US\$'000 Note 2.5(d)
ASSETS			
Non-current assets			
Interests in subsidiaries	1,839,044	2,859,204	438,192
Prepayments	4,172	—	—
Total non-current assets	<u>1,843,216</u>	<u>2,859,204</u>	<u>438,192</u>
Current assets			
Other receivables and prepayments	645	12,116	1,857
Amounts due from related parties	4,674	6,982	1,070
Financial assets at fair value through profit or loss	—	31,953	4,897
Derivative financial instruments	—	196	30
Cash and cash equivalents	122,104	941,541	144,297
Total current assets	<u>127,423</u>	<u>992,788</u>	<u>152,151</u>
Total assets	<u>1,970,639</u>	<u>3,851,992</u>	<u>590,343</u>
LIABILITIES			
Non-current liabilities			
Financial instruments with preferred rights	2,106,334	—	—
Total non-current liabilities	<u>2,106,334</u>	<u>—</u>	<u>—</u>
Current liabilities			
Other payables and accruals	26,492	27,838	4,266
Amounts due to related parties	564	557	86
Total current liabilities	<u>27,056</u>	<u>28,395</u>	<u>4,352</u>
Total liabilities	<u>2,133,390</u>	<u>28,395</u>	<u>4,352</u>
Net (liabilities)/assets	<u>(162,751)</u>	<u>3,823,597</u>	<u>585,991</u>
SHAREHOLDERS' (DEFICIT)/EQUITY			
Share capital	17	59	9
Share premium	—	6,657,562	1,020,316
Treasury shares	(3,578)	—	—
Other reserves	100,723	279,479	42,831
Accumulated losses	(259,913)	(3,113,503)	(477,165)
Total shareholders' (deficit)/equity	<u>(162,751)</u>	<u>3,823,597</u>	<u>585,991</u>

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
34. Restricted net assets and parent company only condensed financial information (Continued)
(b) Statements of loss

	Year ended December 31,			
	2018	2019	2020	2020
	RMB'000	RMB'000	RMB'000	US\$'000
				Note 2.5(d)
Administrative expenses	—	(18,199)	(19,480)	(2,986)
Other income and gains - net	—	—	833	128
Finance costs - net	—	(6,303)	(1,230)	(189)
Financial instruments with preferred rights				
- loss on fair value changes	—	(208,869)	(2,823,370)	(432,700)
- other loss	—	(26,542)	—	—
Loss before income tax	—	(259,913)	(2,843,247)	(435,747)
Income tax expense	—	—	—	—
Loss for the year	—	(259,913)	(2,843,247)	(435,747)

GENETRON HOLDINGS LIMITED
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
34. Restricted net assets and parent company only condensed financial information (Continued)
(c) Statements of cash flows

	Year ended December 31,			
	2018	2019	2020	2020
	RMB'000	RMB'000	RMB'000	US\$'000
				Note 2.5(d)
Cash flows from operating activities				
Cash used in operations	—	(10,805)	(36,241)	(5,554)
Net cash used in operating activities	—	(10,805)	(36,241)	(5,554)
Cash flows from investing activities				
Investment in subsidiaries	—	(231,062)	(1,006,010)	(154,178)
Purchase of wealth management products	—	—	(21,858)	(3,350)
Purchase of equity security	—	—	(13,721)	(2,103)
Purchase of derivative financial instruments	—	—	(68,078)	(10,433)
Redemption of derivative financial instruments	—	—	69,628	10,671
Others	—	—	(294)	(45)
Net cash used in investing activities	—	(231,062)	(1,040,333)	(159,438)
Cash flows from financing activities				
Proceeds from issuance of ordinary shares	—	18	1,676,816	256,983
Proceeds from ADS depository	—	—	23,069	3,535
Proceeds from issuance of financial instruments with preferred rights	—	456,568	70,026	10,732
Issuance costs of financial instruments with preferred rights	—	(6,303)	—	—
Repurchase of ordinary shares	—	(54,479)	(4,102)	(629)
Repurchase of financial instruments with preferred rights	—	(43,279)	—	—
Proceeds from an investor upon reorganization	—	15,000	299,051	45,832
Payments in relation to listing expenses	—	(1,081)	(21,691)	(3,324)
Net cash generated from financing activities	—	366,444	2,043,169	313,129
Net increase in cash and cash equivalents	—	124,577	966,595	148,137
Cash and cash equivalents at beginning of year	—	—	122,104	18,713
Exchange differences of cash and cash equivalents	—	(2,473)	(147,158)	(22,553)
Cash and cash equivalents at end of year	—	122,104	941,541	144,297

- (d) The Company did not have any significant guarantees, capital or other commitments as of December 31, 2019 and 2020. The VIEs and subsidiaries of VIEs did not pay any dividends to the Company for the reported periods.

Description of rights of each class of securities registered under Section 12 of the Securities Exchange Act of 1934 (the “Exchange Act”)

American Depositary Shares (“ADSs”) each representing five ordinary shares of Genetron Holdings Limited (“we,” “our,” “our company,” or “us”) are listed and traded on The Nasdaq Global Market (“Nasdaq”) and, in connection therewith, the ordinary shares are registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). This exhibit contains a description of the rights of (i) the holders of ordinary shares and (ii) the holders of the ADSs. Ordinary shares underlying the ADSs are held by The Bank of New York Mellon, as depositary, and holders of ADSs will not be treated as holders of ordinary shares.

Description of Ordinary Shares

The following is a summary of material provisions of our currently effective fourth amended and restated memorandum and articles of association (the “Memorandum and Articles of Association”), as well as the Companies Law (as amended) of the Cayman Islands (the “Companies Law”) insofar as they relate to the material terms of the ordinary shares. Notwithstanding this, because it is a summary, it may not contain all the information that you may otherwise deem important. For more complete information, you should read the entire Memorandum and Articles of Association, which has been initially filed with the Securities and Exchange Commission (the “SEC”) as an exhibit to our Registration Statement on Form F-1 (File No. 333-234805), as amended, on June 15, 2020.

Type and Class of Securities (Item 9.A.5 of Form 20-F)

Each ordinary share has US\$0.00002 par value. The number of ordinary shares that have been issued as of the last day of the financial year ended December 31, 2020 is provided on the cover of our annual report on Form 20-F filed on April 9, 2021 (the “2020 Form 20-F”). Our ordinary shares may be held in either certificated or uncertificated form.

Preemptive Rights (Item 9.A.3 of Form 20-F)

Our shareholders do not have preemptive rights.

Limitations or Qualifications (Item 9.A.6 of Form 20-F)

Not applicable.

Rights of Other Types of Securities (Item 9.A.7 of Form 20-F)

Not applicable.

Rights of Ordinary Shares (Item 10.B.3 of Form 20-F)

General

Holders of ordinary shares will have the same rights except for voting and conversion rights. All of our issued and outstanding ordinary shares are fully paid, and non-assessable. Certificates representing the ordinary shares are issued in registered form. We may not issue share to bearer. Our shareholders who are nonresidents of the Cayman Islands may freely hold and transfer their ordinary shares.

Dividends

The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors subject to our Memorandum and Articles of Association and the Companies Law. In addition, our shareholders may, subject to the provisions of our articles of association, by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Our Memorandum and Articles of Association provide that dividends may be declared and paid out of our profits, realized or unrealized, or from any reserve set aside from profits which our board of directors determine is no longer needed. Dividends may also be declared and paid out of share premium account or any other fund or account which can be authorized for this purpose in accordance with the Companies Law. No dividend may be declared and paid unless our directors determine that, immediately after the payment, we will be able to pay our debts as they become due in the ordinary course of business and we have funds lawfully available for such purpose.

Voting Rights

In respect of all matters subject to a shareholders' vote, each ordinary share is entitled to one vote for each ordinary share registered in his or her name on our register of members. Voting at any meeting of shareholders is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any one shareholder.

A quorum required for a meeting of shareholders consists of the holders of ordinary shares being not less than one-half of the votes attaching to the issued and outstanding shares entitled to vote at general meetings present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative. As a Cayman Islands exempted company, we are not obliged by the Companies Law to call shareholders' annual general meetings. Our Memorandum and Articles of Association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we will specify the meeting as such in the notices calling it, and the annual general meeting will be held at such time and place as may be determined by our board of directors. We, however, will hold an annual shareholders' meeting during each fiscal year, as required by the Listing Rules of the Nasdaq Global Market. Each general meeting, other than an annual general meeting, shall be an extraordinary general meeting. Shareholders' annual general meetings and any other general meetings of our shareholders may be called by a majority of our board of directors or our chairman or upon a requisition of shareholders holding at the date of deposit of the requisition not less than one-third of the votes attaching to the issued and outstanding shares entitled to vote at general meetings, in which case the directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting; however, our Memorandum and Articles of Association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders. Advance notice of at least seven (7) days is required for the convening of our annual general meeting and other general meetings unless such notice is waived in accordance with our Memorandum and Articles of Association.

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast by those shareholders entitled to vote who are present in person or by proxy at a general meeting, while a special resolution also requires the affirmative vote of no less than two-thirds of the votes attaching to the ordinary shares cast by those shareholders entitled to vote who are present in person or by proxy at a general meeting. A special resolution will be required for important matters such as a change of name or making changes to our Memorandum and Articles of Association.

Transfer of Ordinary Shares

Subject to the restrictions in our Memorandum and Articles of Association as set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of shares;

- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four;
- the shares are free from any lien in favor of the Company; and
- a fee of such maximum sum as the Nasdaq may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, after compliance with any notice required of the Nasdaq, be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine, *provided, however*, that the registration of transfers shall not be suspended nor the register closed for more than 30 days in any year as our board may determine.

Liquidation

On a return of capital on winding up or otherwise (other than on conversion, redemption or purchase of ordinary shares), if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed amongst our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders in proportion to the par value of the shares held by them. Any distribution of assets or capital to a holder of ordinary share will be the same in any liquidation event.

Calls on Ordinary Shares and Forfeiture of Ordinary Shares

Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their ordinary shares in a notice served to such shareholders at least 14 clear days prior to the specified time of payment. The ordinary shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Ordinary Shares

We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders thereof, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by an ordinary resolution of our shareholders. Our company may also repurchase any of our shares provided that the manner and terms of such purchase have been approved by our board of directors or by ordinary resolution of our shareholders, or are otherwise authorized by our Memorandum and Articles of Association. Under the Companies Law, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if the company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Law no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding, or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Requirements to Change the Rights of Holders of Ordinary Shares (Item 10.B.4 of Form 20-F)**Variations of Rights of Shares**

If at any time our share capital is divided into different classes or series of shares, the rights attached to any class or series of shares (unless otherwise provided by the terms of issue of the shares of that class or series), whether or not our company is being wound- up, may be varied with the consent in writing of a majority the holders of the issued shares of that class or series or with the sanction of a special resolution at a separate meeting of the holders of the shares of the class or series. The rights conferred upon the holders of the shares of any class issued shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking *pari passu* with such existing class of shares.

Limitations on the Rights to Own Ordinary Shares (Item 10.B.6 of Form 20-F)

There are no limitations under the laws of the Cayman Islands or under the Memorandum and Articles of Association that limit the right of non-resident or foreign owners to hold or vote ordinary shares.

Provisions Affecting Any Change of Control (Item 10.B.7 of Form 20-F)**Anti-Takeover Provisions**

Some provisions of our Memorandum and Articles of Association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that authorize our board of directors to issue preferred shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preferred shares without any further vote or action by our shareholders.

Ownership Threshold (Item 10.B.8 of Form 20-F)

There are no provisions under the Memorandum and Articles of Association that require our company to disclose shareholder ownership above any particular ownership threshold.

Differences between the Law of Different Jurisdictions (Item 10.B.9 of Form 20-F)

The Companies Law is derived, to a large extent, from the older Companies Acts of England, but does not follow many recent English law statutory enactments. In addition, the Companies Law differs from laws applicable to United States corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Law applicable to us and the laws applicable to companies incorporated in the State of Delaware.

Mergers and Similar Arrangements

The Companies Law permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies. For these purposes, (a) “merger” means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company, and (b) a “consolidation” means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company. In order to effect such a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by (a) a special resolution of the shareholders of each constituent company, and (b) such other authorization, if any, as may be specified in such constituent company’s articles of association. The written plan of merger or consolidation must be filed with the Registrar of Companies of the Cayman Islands together with a declaration as to the solvency of the consolidated or surviving company, a declaration as to the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company and that notification of the merger or consolidation will be published in the Cayman Islands Gazette. Court approval is not required for a merger or consolidation which is effected in compliance with these statutory procedures.

A merger between a Cayman parent company and its Cayman subsidiary or subsidiaries does not require authorization by a resolution of shareholders of that Cayman subsidiary if a copy of the plan of merger is given to every member of that Cayman subsidiary to be merged unless that member agrees otherwise. For this purpose, a company is a “parent” of a subsidiary if it holds issued shares that together represent at least ninety percent (90%) of the votes at a general meeting of the subsidiary.

The consent of each holder of a fixed or floating security interest over a constituent company is required unless this requirement is waived by a court in the Cayman Islands.

Save in certain limited circumstances, a shareholder of a Cayman constituent company who dissents from the merger or consolidation is entitled to payment of the fair value of his shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) upon dissenting to the merger or consolidation, provide the dissenting shareholder complies strictly with the procedures set out in the Companies Law. The exercise of dissenter rights will preclude the exercise by the dissenting shareholder of any other rights to which he or she might otherwise be entitled by virtue of holding shares, save for the right to seek relief on the grounds that the merger or consolidation is void or unlawful.

Separate from the statutory provisions relating to mergers and consolidations, the Companies Law also contains statutory provisions that facilitate the reconstruction and amalgamation of companies by way of schemes of arrangement, *provided* that the arrangement is approved by a majority in number of each class of shareholders and creditors with whom the arrangement is to be made, and who must in addition represent three-fourths in value of each such class of shareholders or creditors, as the case may be, that are present and voting either in person or by proxy at a meeting, or meetings, convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder has the right to express to the court the view that the transaction ought not to be approved, the court can be expected to approve the arrangement if it determines that:

- the statutory provisions as to the required majority vote have been met;
- the shareholders have been fairly represented at the meeting in question and the statutory majority are acting bona fide without coercion of the minority to promote interests adverse to those of the class;
- the arrangement is such that may be reasonably approved by an intelligent and honest man of that class acting in respect of his interest; and
- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Law.

The Companies Law also contains a statutory power of compulsory acquisition which may facilitate the “squeeze out” of a dissenting minority shareholder upon a tender offer. When a tender offer is made and accepted by holders of 90.0% of the shares affected within four months, the offeror may, within a two-month period commencing on the expiration of such four-month period, require the holders of the remaining shares to transfer such shares to the offeror on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed in the case of an offer which has been so approved unless there is evidence of fraud, bad faith or collusion.

If an arrangement and reconstruction is thus approved, or if a tender offer is made and accepted, a dissenting shareholder would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of Delaware corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Shareholders’ Suits

In principle, we will normally be the proper plaintiff to sue for a wrong done to us as a company, and as a general rule a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, the Cayman Islands court can be expected to follow and apply the common law principles (namely the rule in *Foss v. Harbottle* and the exceptions thereto) which permit a minority shareholder to commence a class action against or derivative actions in the name of the company to challenge actions where:

-
- a company acts or proposes to act illegally or ultra vires;
 - the act complained of, although not ultra vires, could only be effected duly if authorized by more than a simple majority vote that has not been obtained; and
 - those who control the company are perpetrating a “fraud on the minority.”

Indemnification of Directors and Executive Officers and Limitation of Liability

Cayman Islands law does not limit the extent to which a company’s memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles of Association provides that we shall indemnify our directors and officers for the time being acting in relation to any of the affairs of our company out of the assets of our company from and against all actions, proceedings, costs, charges, losses, damages and expenses which they or any of them shall or may incur or sustain by reason of any act done or omitted in or about the execution of their duty in their respective offices, except such (if any) as they shall incur or sustain by or through their own willful neglect or default. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

In addition, we have entered into indemnification agreements with our directors and executive officers that provide such persons with additional indemnification beyond that provided in our Memorandum and Articles of Association.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Directors’ Fiduciary Duties

Under Delaware corporate law, a director of a Delaware corporation has a fiduciary duty to the corporation and its shareholders. This duty has two components: the duty of care and the duty of loyalty. The duty of care requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of, and disclose to shareholders, all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director acts in a manner he reasonably believes to be in the best interests of the corporation. He must not use his corporate position for personal gain or advantage. This duty prohibits self-dealing by a director and mandates that the best interest of the corporation and its shareholders take precedence over any interest possessed by a director, officer or controlling shareholder and not shared by the shareholders generally. In general, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Should such evidence be presented concerning a transaction by a director, the director must prove the procedural fairness of the transaction, and that the transaction was of fair value to the corporation.

As a matter of Cayman Islands law, a director of a Cayman Islands company is in the position of a fiduciary with respect to the company and therefore it is considered that he owes the following duties to the company—a duty to act bona fide in the best interests of the company, a duty not to make a profit based on his position as director (unless the company permits him to do so), a duty not to put himself in a position where the interests of the company conflict with his personal interest or his duty to a third party, and a duty to exercise powers for the purpose for which such powers were intended. A director of a Cayman Islands company owes to the company a duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands.

Shareholder Action by Written Consent

Under the Delaware General Corporation Law, a corporation may eliminate the right of shareholders to act by written consent by amendment to its certificate of incorporation. The Companies Law and our Memorandum and Articles of Association provide that our shareholders may approve corporate matters by way of a unanimous written resolution signed by or on behalf of each shareholder who would have been entitled to vote on such matter at a general meeting without a meeting being held.

Shareholder Proposals

Under the Delaware General Corporation Law, a shareholder has the right to put any proposal before the annual meeting of shareholders, provided it complies with the notice provisions in the governing documents. A special meeting may be called by the board of directors or any other person authorized to do so in the governing documents, but shareholders may be precluded from calling special meetings.

The Companies Law provide shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our Memorandum and Articles of Association allow our shareholders holding in aggregate not less than one-third of all votes attaching to the issued and outstanding shares of our company entitled to vote at general meetings to requisition an extraordinary general meeting of our shareholders, in which case our board is obliged to convene an extraordinary general meeting and to put the resolutions so requisitioned to a vote at such meeting. Other than this right to requisition a shareholders' meeting, our Memorandum and Articles of Association do not provide our shareholders with any other right to put proposals before annual general meetings or extraordinary general meetings not called by such shareholders. As an exempted Cayman Islands company, we are not obliged by law to call shareholders' annual general meetings.

Cumulative Voting

Under the Delaware General Corporation Law, cumulative voting for elections of directors is not permitted unless the corporation's certificate of incorporation specifically provides for it. Cumulative voting potentially facilitates the representation of minority shareholders on a board of directors since it permits the minority shareholder to cast all the votes to which the shareholder is entitled on a single director, which increases the shareholder's voting power with respect to electing such director. There are no prohibitions in relation to cumulative voting under the laws of the Cayman Islands but our Memorandum and Articles of Association do not provide for cumulative voting. As a result, our shareholders are not afforded any less protections or rights on this issue than shareholders of a Delaware corporation.

Removal of Directors

Under the Delaware General Corporation Law, a director of a corporation with a classified board may be removed only for cause with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles of Association, subject to any shareholder agreement, directors not appointed by the Founders or Tianjin Kangyue (each as defined in the Memorandum and Articles of Association) may be removed with or without cause, by an ordinary resolution of our shareholders. A director shall hold office until the expiration of his or her term or his or her successor shall have been elected and qualified, or until his or her office is otherwise vacated. In addition, a director's office shall be vacated if the director (i) becomes bankrupt or makes any arrangement or composition with his creditors; (ii) is found to be or becomes of unsound mind or dies; (iii) resigns his office by notice in writing to the company; (iv) without special leave of absence from our board of directors, is absent from three consecutive meetings of the board and the board resolves that his office be vacated; (v) is prohibited by law from being a director; or (vi) is removed from office pursuant to any other provisions of our Memorandum and Articles of Association.

Transactions with Interested Shareholders

The Delaware General Corporation Law contains a business combination statute applicable to Delaware corporations whereby, unless the corporation has specifically elected not to be governed by such statute by amendment to its certificate of incorporation, it is prohibited from engaging in certain business combinations with an "interested shareholder" for three years following the date that such person becomes an interested shareholder. An

interested shareholder generally is a person or a group who or which owns or owned 15% or more of the target's outstanding voting share within the past three years. This has the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the target in which all shareholders would not be treated equally. The statute does not apply if, among other things, prior to the date on which such shareholder becomes an interested shareholder, the board of directors approves either the business combination or the transaction which resulted in the person becoming an interested shareholder. This encourages any potential acquirer of a Delaware corporation to negotiate the terms of any acquisition transaction with the target's board of directors.

Cayman Islands law has no comparable statute. As a result, we cannot avail ourselves of the types of protections afforded by the Delaware business combination statute. However, although Cayman Islands law does not regulate transactions between a company and its significant shareholders, the directors of our company are required to comply with fiduciary duties which they owe to our company under Cayman Islands laws, including the duty to ensure that, in their opinion, any such transactions must be entered into bona fide in the best interests of the company, and are entered into for a proper corporate purpose and not with the effect of constituting a fraud on the minority shareholders.

Dissolution; Winding up

Under the Delaware General Corporation Law, unless the board of directors approves the proposal to dissolve, dissolution must be approved by shareholders holding 100% of the total voting power of the corporation. Only if the dissolution is initiated by the board of directors may it be approved by a simple majority of the corporation's outstanding shares. Delaware law allows a Delaware corporation to include in its certificate of incorporation a supermajority voting requirement in connection with dissolutions initiated by the board.

Under Cayman Islands law, a company may be wound up by either an order of the courts of the Cayman Islands or by a special resolution of its members or, if the company is unable to pay its debts as they fall due, by an ordinary resolution of its members. The court has authority to order winding up in a number of specified circumstances including where it is, in the opinion of the court, just and equitable to do so.

Variation of Rights of Shares

Under the Delaware General Corporation Law, a corporation may vary the rights of a class of shares with the approval of a majority of the outstanding shares of such class, unless the certificate of incorporation provides otherwise. Under Cayman Islands law and our Memorandum and Articles of Association, if our share capital is divided into more than one class of shares, we may vary the rights attached to any class with the written consent of the holders of a majority of the issued shares of that class or with the sanction of a special resolution passed at a general meeting of the holders of the shares of that class.

Amendment of Governing Documents

Under the Delaware General Corporation Law, a corporation's governing documents may be amended with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under the Companies Law and our Memorandum and Articles of Association, our Memorandum and Articles of Association may only be amended by a special resolution of our shareholders.

Rights of Non-resident or Foreign Shareholders

There are no limitations imposed by our Memorandum and Articles of Association on the rights of non-resident or foreign shareholders to hold or exercise voting rights on our shares. In addition, there are no provisions in our Memorandum and Articles of Association that require our company to disclose shareholder ownership above any particular ownership threshold.

Changes in Capital (Item 10.B.10 of Form 20-F)

Subject to the provisions of the Companies Law and Memorandum and Articles of Association, our shareholders may from time to time by ordinary resolutions:

- increase the share capital by such sum, to be divided into shares of such classes and amount, as the resolution shall prescribe and with such rights, priorities and privileges annexed thereto, as our shareholders in general meeting may determine;
- consolidate and divide all or any of our share capital into shares of larger amount than our existing shares;
- subdivide our existing shares, or any of them into shares of a smaller amount provided that in the subdivision the proportion between the amount paid and the amount, if any, unpaid on each reduced share shall be the same as it was in case of the share from which the reduced share is derived; and
- cancel any shares that at the date of the passing of the resolution have not been taken or agreed to be taken by any person and diminish the amount of its share capital by the amount of the shares so cancelled.

We may by special resolution reduce the share capital and any capital redemption reserve in any manner authorized by law.

Debt Securities (Item 12.A of Form 20-F)

Not applicable.

Warrants and Rights (Item 12.B of Form 20-F)

Not applicable.

Other Securities (Item 12.C of Form 20-F)

Not applicable.

Description of American Depositary Shares (Items 12.D.1 and 12.D.2 of Form 20-F)

The Bank of New York Mellon, as depositary, issues and delivers American Depositary Shares, also referred to as ADSs. Each ADS represents five ordinary shares (or a right to receive five ordinary shares) deposited with The Hongkong and Shanghai Banking Corporation Limited, as custodian for the depositary in Hong Kong. Each ADS also represents any other securities, cash or other property that may be held by the depositary. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs will be administered and its principal executive office is located at 240 Greenwich Street, New York, New York 10286.

You may hold ADSs either (A) directly (i) by having an American Depositary Receipt, also referred to as an ADR, which is a certificate evidencing a specific number of ADSs, registered in your name, or (ii) by having uncertificated ADSs registered in your name, or (B) indirectly by holding a security entitlement in ADSs through your broker or other financial institution that is a direct or indirect participant in The Depository Trust Company, also called DTC. If you hold ADSs directly, you are a registered ADS holder, also referred to as an ADS holder. This description assumes you are an ADS holder. If you hold the ADSs indirectly, you must rely on the procedures of your broker or other financial institution to assert the rights of ADS holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

Registered holders of uncertificated ADSs will receive statements from the depositary confirming their holdings.

As an ADS holder, we will not treat you as one of our shareholders and you will not have shareholder rights. Cayman Islands law governs shareholder rights. The depositary will be the holder of the shares underlying your ADSs. As a registered holder of ADSs, you will have ADS holder rights. A deposit agreement among us, the depositary, ADS holders and all other persons indirectly or beneficially holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs.

The following is a summary of what we believe to be the material terms of the deposit agreement. Notwithstanding this, because it is a summary, it may not contain all the information that you may otherwise deem important. For more complete information, you should read the entire deposit agreement and the form of ADR which contains the terms of your ADSs. The form of deposit agreement has been filed with the SEC as an exhibit to a Registration Statement on Form F-6 (File No. 333-235249) for our company on November 25, 2019. The form of ADR has been initially filed with the SEC as an exhibit to our Registration Statement on Form F-1 (File No. 333-234805), as amended, on June 4, 2020.

Dividends and Other Distributions

How will you receive dividends and other distributions on the shares?

The depositary has agreed to pay or distribute to ADS holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, upon payment or deduction of its fees and expenses. You will receive these distributions in proportion to the number of shares your ADSs represent.

Cash

The depositary will convert any cash dividend or other cash distribution we pay on the shares into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If that is not possible or if any government approval is needed and cannot be obtained, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid. It will not invest the foreign currency and it will not be liable for any interest.

Before making a distribution, any withholding taxes, or other governmental charges that must be paid will be deducted. The depositary will distribute only whole U.S. dollars and cents and will round fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, you may lose some of the value of the distribution.*

Shares

The depositary may distribute additional ADSs representing any shares we distribute as a dividend or free distribution. The depositary will only distribute whole ADSs. It will sell shares which would require it to deliver a fraction of an ADS (or ADSs representing those shares) and distribute the net proceeds in the same way as it does with cash. If the depositary does not distribute additional ADSs, the outstanding ADSs will also represent the new shares. The depositary may sell a portion of the distributed shares (or ADSs representing those shares) sufficient to pay its fees and expenses in connection with that distribution.

Rights to purchase additional shares

If we offer holders of our securities any rights to subscribe for additional shares or any other rights, the depositary may (i) exercise those rights on behalf of ADS holders, (ii) distribute those rights to ADS holders or (iii) sell those rights and distribute the net proceeds to ADS holders, in each case after deduction or upon payment of its fees and expenses. To the extent the depositary does not do any of those things, it will allow the rights to lapse. In that case, you will receive no value for them. The depositary will exercise or distribute rights only if we ask it to and provide satisfactory assurances to the depositary that it is legal to do so. If the depositary will exercise rights, it will purchase the securities to which the rights relate and distribute those securities or, in the case of shares, new ADSs representing the new shares, to subscribing ADS holders, but only if ADS holders have paid the exercise price to the depositary. U.S. securities laws may restrict the ability of the depositary to distribute rights or ADSs or other securities issued on exercise of rights to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer.

Other Distributions

The depositary will send to ADS holders anything else we distribute on deposited securities by any means it thinks is legal, fair and practical. If it cannot make the distribution in that way, the depositary has a choice. It may decide to sell what we distributed and distribute the net proceeds, in the same way as it does with cash. Or, it may decide to hold what we distributed, in which case ADSs will also represent the newly distributed property. However, the depositary is not required to distribute any securities (other than ADSs) to ADS holders unless it receives satisfactory evidence from us that it is legal to make that distribution. The depositary may sell a portion of the distributed securities or property sufficient to pay its fees and expenses in connection with that distribution. U.S. securities laws may restrict the ability of the depositary to distribute securities to all or certain ADS holders, and the securities distributed may be subject to restrictions on transfer.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADS holders. *This means that you may not receive the distributions we make on our shares or any value for them if it is illegal or impractical for us to make them available to you.*

Deposit, Withdrawal and Cancellation

How are ADSs issued?

The depositary will deliver ADSs if you or your broker deposits shares or evidence of rights to receive shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names you request and will deliver the ADSs to or upon the order of the person or persons that made the deposit.

How can ADS holders withdraw the deposited securities?

You may surrender your ADSs to the depositary for the purpose of withdrawal. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will deliver the shares and any other deposited securities underlying the ADSs to the ADS holder or a person the ADS holder designates at the office of the custodian. Or, at your request, risk and expense, the depositary will deliver the deposited securities at its office, if feasible. However, the depositary is not required to accept surrender of ADSs to the extent it would require delivery of a fraction of a deposited share or other security. The depositary may charge you a fee and its expenses for instructing the custodian regarding delivery of deposited securities.

How do ADS holders interchange between certificated ADSs and uncertificated ADSs?

You may surrender your ADR to the depositary for the purpose of exchanging your ADR for uncertificated ADSs. The depositary will cancel that ADR and will send to the ADS holder a statement confirming that the ADS holder is the registered holder of uncertificated ADSs. Upon receipt by the depositary of a proper instruction from a registered holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depositary will execute and deliver to the ADS holder an ADR evidencing those ADSs.

Voting Rights

How do you vote?

ADS holders may instruct the depositary how to vote the number of deposited shares their ADSs represent. If we request the depositary to solicit your voting instructions (and we are not required to do so), the depositary will notify you of a shareholders' meeting and send or make voting materials available to you. Those materials will describe the matters to be voted on and explain how ADS holders may instruct the depositary how to vote. For instructions to be valid, they must reach the depositary by a date set by the depositary. The depositary will try, as far as practical, subject to the laws of the Cayman Islands and the provisions of our articles of association or similar documents, to vote or to have its agents vote the shares or other deposited securities as instructed by ADS holders. If we do not request the depositary to solicit your voting instructions, you can still send voting instructions, and, in that case, the depositary may try to vote as you instruct, but it is not required to do so.

Except by instructing the depositary as described above, you won't be able to exercise voting rights unless you surrender your ADSs and withdraw the shares. However, you may not know about the meeting enough in advance to withdraw the shares. In any event, the depositary will not exercise any discretion in voting deposited securities and it will only vote or attempt to vote as instructed.

We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. *This means that you may not be able to exercise voting rights and there may be nothing you can do if your shares are not voted as you requested.*

In order to give you a reasonable opportunity to instruct the depositary as to the exercise of voting rights relating to Deposited Securities, if we request the depositary to act, we agree to give the depositary notice of any such meeting and details concerning the matters to be voted upon at least 30 days in advance of the meeting date.

Tender and Exchange Offers; Redemption, Replacement or Cancellation of Deposited Securities

The depositary will not tender deposited securities in any voluntary tender or exchange offer unless instructed to do so by an ADS holder surrendering ADSs and subject to any conditions or procedures the depositary may establish.

If deposited securities are redeemed for cash in a transaction that is mandatory for the depositary as a holder of deposited securities, the depositary will call for surrender of a corresponding number of ADSs and distribute the net redemption money to the holders of called ADSs upon surrender of those ADSs.

If there is any change in the deposited securities such as a sub-division, combination or other reclassification, or any merger, consolidation, recapitalization or reorganization affecting the issuer of deposited securities in which the depositary receives new securities in exchange for or in lieu of the old deposited securities, the depositary will hold those replacement securities as deposited securities under the deposit agreement. However, if the depositary decides it would not be lawful and practical to hold the replacement securities because those securities could not be distributed to ADS holders or for any other reason, the depositary may instead sell the replacement securities and distribute the net proceeds upon surrender of the ADSs.

If there is a replacement of the deposited securities and the depositary will continue to hold the replacement securities, the depositary may distribute new ADSs representing the new deposited securities or ask you to surrender your outstanding ADRs in exchange for new ADRs identifying the new deposited securities.

If there are no deposited securities underlying ADSs, including if the deposited securities are canceled, or if the deposited securities underlying ADSs have become apparently worthless, the depositary may call for surrender of those ADSs or cancel those ADSs upon notice to the ADS holders.

Amendment and Termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the ADRs without your consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depositary for registration fees, facsimile costs, delivery charges or similar items, or prejudices a substantial right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depositary notifies ADS holders of the amendment. *At the time an amendment becomes effective, you are considered, by continuing to hold your ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended.*

How may the deposit agreement be terminated?

The depositary will initiate termination of the deposit agreement if we instruct it to do so. The depositary may initiate termination of the deposit agreement if:

- 60 days have passed since the depositary told us it wants to resign but a successor depositary has not been appointed and accepted its appointment;
- we delist the ADSs from an exchange in the United States on which they were listed and do not list the ADSs on another exchange in the United States or make arrangements for trading of ADSs on the U.S. over-the-counter market;
- we delist our shares from an exchange outside the United States on which they were listed and do not list the shares on another exchange outside the United States;
- the depositary has reason to believe the ADSs have become, or will become, ineligible for registration on Form F-6 under the Securities Act of 1933;
- we appear to be insolvent or enter insolvency proceedings;
- all or substantially all the value of the deposited securities has been distributed either in cash or in the form of securities;
- there are no deposited securities underlying the ADSs or the underlying deposited securities have become apparently worthless; or
- there has been a replacement of deposited securities.

If the deposit agreement will terminate, the depositary will notify ADS holders at least 90 days before the termination date. At any time after the termination date, the depositary may sell the deposited securities. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement, unsegregated and without liability for interest, for the pro rata benefit of the ADS holders that have not surrendered their ADSs. Normally, the depositary will sell as soon as practicable after the termination date.

After the termination date and before the depositary sells, ADS holders can still surrender their ADSs and receive delivery of deposited securities, except that the depositary may refuse to accept a surrender for the purpose of withdrawing deposited securities or reverse previously accepted surrenders of that kind that have not settled if it would interfere with the selling process. The depositary may refuse to accept a surrender for the purpose of withdrawing sale proceeds until all the deposited securities have been sold. The depositary will continue to collect distributions on deposited securities, but, after the termination date, the depositary is not required to register any transfer of ADSs or distribute any dividends or other distributions on deposited securities to the ADSs holder (until they surrender their ADSs) or give any notices or perform any other duties under the deposit agreement except as described in this paragraph.

Limitations on Obligations and Liability

Limits on our Obligations and the Obligations of the Depositary; Limits on Liability to Holders of ADSs

The deposit agreement expressly limits our obligations and the obligations of the depositary. It also limits our liability and the liability of the depositary. We and the depositary:

- are only obligated to take the actions specifically set forth in the deposit agreement without negligence or bad faith, and the depositary will not be a fiduciary or have any fiduciary duty to holders of ADSs;
- are not liable if we are or it is prevented or delayed by law or by events or circumstances beyond our or its ability to prevent or counteract with reasonable care or effort from performing our or its obligations under the deposit agreement;
- are not liable if we or it exercises discretion permitted under the deposit agreement;

- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement, or for any special, consequential or punitive damages for any breach of the terms of the deposit agreement;
- have no obligation to become involved in a lawsuit or other proceeding related to the ADSs or the deposit agreement on your behalf or on behalf of any other person;
- may rely upon any documents we believe or it believes in good faith to be genuine and to have been signed or presented by the proper person;
- are not liable for the acts or omissions of any securities depository, clearing agency or settlement system; and
- the depository has no duty to make any determination or provide any information as to our tax status, or any liability for any tax consequences that may be incurred by ADS holders as a result of owning or holding ADSs or be liable for the inability or failure of an ADS holder to obtain the benefit of a foreign tax credit, reduced rate of withholding or refund of amounts withheld in respect of tax or any other tax benefit.

In the deposit agreement, we and the depository agree to indemnify each other under certain circumstances.

Requirements for Depositary Actions

Before the depository will deliver or register a transfer of ADSs, make a distribution on ADSs, or permit withdrawal of shares, the depository may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities;
- satisfactory proof of the identity and genuineness of any signature or other information it deems necessary; and
- compliance with regulations it may establish, from time to time, consistent with the deposit agreement, including presentation of transfer documents.

The depository may refuse to deliver ADSs or register transfers of ADSs when the transfer books of the depository or our transfer books are closed or at any time if the depository or we think it advisable to do so.

Your Right to Receive the Shares Underlying your ADSs

ADS holders have the right to cancel their ADSs and withdraw the underlying shares at any time except:

- when temporary delays arise because: (i) the depository has closed its transfer books or we have closed our transfer books; (ii) the transfer of shares is blocked to permit voting at a shareholders' meeting; or (iii) we are paying a dividend on our shares;
- when you owe money to pay fees, taxes and similar charges; or
- when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of shares or other deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Direct Registration System

In the deposit agreement, all parties to the deposit agreement acknowledge that the Direct Registration System, also referred to as DRS, and Profile Modification System, also referred to as Profile, will apply to the ADSs. DRS is a system administered by DTC that facilitates interchange between registered holding of uncertificated ADSs and holding of security entitlements in ADSs through DTC and a DTC participant. Profile is a feature of DRS that allows a DTC participant, claiming to act on behalf of a registered holder of uncertificated ADSs, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register that transfer.

In connection with and in accordance with the arrangements and procedures relating to DRS/Profile, the parties to the deposit agreement understand that the depositary will not determine whether the DTC participant that is claiming to be acting on behalf of an ADS holder in requesting registration of transfer and delivery as described in the paragraph above has the actual authority to act on behalf of the ADS holder (notwithstanding any requirements under the Uniform Commercial Code). In the deposit agreement, the parties agree that the depositary's reliance on and compliance with instructions received by the depositary through the DRS/Profile system and in accordance with the deposit agreement will not constitute negligence or bad faith on the part of the depositary.

Shareholder communications; inspection of register of holders of ADSs

The depositary will make available for your inspection at its office all communications that it receives from us as a holder of deposited securities that we make generally available to holders of deposited securities. The depositary will send you copies of those communications or otherwise make those communications available to you if we ask it to. You have a right to inspect the register of holders of ADSs, but not for the purpose of contacting those holders about a matter unrelated to our business or the ADSs.

Jury Trial Waiver

The deposit agreement provides that, to the extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws. If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable case law. You will not, by agreeing to the terms of the deposit agreement, be deemed to have waived our or the depositary's compliance with U.S. federal securities laws or the rules and regulations promulgated thereunder.

***** CERTAIN MATERIAL (INDICATED BY THREE ASTERISKS IN BRACKETS) HAS BEEN OMITTED FROM THIS DOCUMENT BECAUSE IT IS BOTH (1) NOT MATERIAL AND (2) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.**

Investment Agreement

with respect to

Genetron Health's Project of Precision Medicine Platform for Cancer Early Screening

between

Management Committee of Jiangsu Wuxi Huishan Economic Development Zone

and

Genetron Health (Hong Kong) Company Limited

Wuxi, China

November 2020

This Investment Agreement (hereinafter referred to as this “Agreement”) is entered into on November 27, 2020 in Wuxi City in Jiangsu Province of the People’s Republic of China by and between:

(1) Management Committee of Jiangsu Wuxi Huishan Economic Development Zone (hereinafter referred to as “Party A”) having its legal address at 189 Zhenghe Avenue, Huishan Economic Development Zone, Wuxi City, Jiangsu Province;

(2) Genetron Health (Hong Kong) Company Limited (hereinafter referred to as “Party B”), a company lawfully incorporated and validly existing under the laws of Hong Kong Special Administrative Region of the People’s Republic of China having its registered address at Rm. 19C, Lockhart Ctr., 301-307 Lockhart Rd., Wan Chai, Hong Kong.

(Party A and Party B are hereinafter referred to individually as a “Party” and collectively as the “Parties”).

Whereas:

Party A and its designated local government-managed fund Wuxi Huicheng Ruida Venture Capital Partnership (limited partnership) (hereinafter referred to as “Huicheng Ruida”) wish to cooperate with Party B in constructing a precision medicine platform for cancer early screening and carrying out large population cohort liver cancer screening for the benefit of the people in Wuxi City in Jiangsu Province (hereinafter referred to as the “Project”) and setting up a Genetron Health early screening center in Wuxi for the purpose of the Project.

On the principles of equal-footing, mutual benefit and joint development, the Parties agree as below through amicable consultation depending on the actual situation:

Article 1 Project Content

Party B and the third-party investor introduced by Huicheng Ruida shall jointly invest in and incorporate a sino-foreign joint venture (hereinafter referred to as the “Joint Venture”), and Party B shall select two wholly domestic-funded persons (individuals or other entities) to incorporate the project operating company (temporarily named as Genetron (Wuxi) Biotech Co., Ltd. The real name depends on the verification by and the registration with the industrial and commercial bureau) and its wholly-owned subsidiary (hereinafter referred to collectively as the “Operating Company”) in Jiangsu Wuxi (Huishan) Life Science & Technology Industrial Park. The Operating Company shall be controlled by the Joint Venture through VIE architecture.

The Operating Company shall be mainly responsible for the construction of the precision medicine platform for cancer early screening, implementation of liver screening in a large population cohort for the benefit of the people and the normal operation of gene detection, cancer screening and other processes under the Project in the future.

Article 2 Investment Architecture

The investment in the Project totals USD [***] million. The registered capital of the Joint Venture is USD50 million, wherein Party B contributes USD45 million, accounting for 90% in the equity of the Joint Venture; Huicheng Ruida contributes the equivalent amount of USD3 million in RMB, accounting for 6% in the equity of the Joint Venture; and the third-party investor contributes USD2 million or the equivalent amount in RMB, accounting for 4% in the equity of the Joint Venture. These contributions are all paid in cash.

Article 3 Investment Schedule

3.1 Registered Capital in Phase I

The registered capital in Phase I shall be paid up within 30 natural days upon incorporation of the Joint Venture, wherein Party B shall pay USD [***], Huicheng Ruida shall pay USD [***] the equivalent amount in RMB, and the third-party investor shall pay USD [***] the equivalent amount in RMB.

3.2 Remaining Registered Capital

The remaining registered capital is USD [***] which shall be paid by Party B within 3 years upon incorporation of the Joint Venture depending on the fund demand thereof.

Article 4 Company Governance

4.1 Huicheng Ruida shall assign a supervisor to the Joint Venture.

4.2 The legal representative(s), director(s), other supervisors (if any) except for the supervisor assigned by Huicheng Ruida, general manager and financial officer of the Joint Venture shall be assigned by Party B.

4.3 The legal representative(s), director(s), supervisor(s) and senior manager(s) of the Operating Company shall be appointed by Party B.

Article 5 Project Benefiting the People

Party A shall enroll in total 150,000 subjects in 3 consecutive years for the liver cancer early screening project of the Operating Company. The liver cancer early screening service shall be provided by the Operating Company or any of its affiliates as agreed by the parties. Specifically, [***] subjects are expected to be enrolled and undergo liver cancer early screening in 2020 and in total [***] in 2021 and 2022. The part of the [***] subjects that fails to undergo liver cancer early screening in 2020 will undergo the screening in the following two years.

The early screening service fee is RMB [***] per subject which shall be borne by Party A. As the laboratory construction, equipment procurement, employee recruitment and qualification cannot be completed in a short time, the Operating Company will retain Chongqing Jinchuang Fansheng Medical Laboratory Co. Ltd. to provide the early screening service before it satisfies the qualifications and conditions necessary for early screening, so as to accelerate the implementation of the early screening project that benefits the people. The laboratory constructed by the Operating Company in Wuxi will start to provide the early screening service within 30 days after it is completed and is qualified as a laboratory. Furthermore, Party A will provide support and necessary assistance for the Operating Company to [***] following the date of early screening, to the extent permitted by applicable laws and regulations and specifications.

Article 6 Fiscal Subsidies and Incentives

6.1 Party A waives the rent of the plant leased by the Joint Company and the Operating Company which is no larger than [***] in the first 5 years, provided that such plant is suitable as the registered address thereof and for the provision of early screening service and complies with the requirements of laws and regulations regarding purpose, fire safety, environment protection, security and construction;

6.2 Party A grants to Party B, Joint Venture and/or Operating Company subsidies for decoration and equipment procurement of no more than [***] in total. The subsidy for decoration shall be requested by submitting the applicable contract, invoice and third-party audit report. The subsidy for equipment procurement shall be requested by submitting the applicable contract and invoice. These requests shall be reviewed and the subsidies shall be issued within 3 months upon receipt of the requests;

6.3 Party A grants to the Joint Venture and Operating Company incentives at [***] each year from the first year to the third year, and at [***] each year from the fourth year to the sixth year upon the incorporation thereof, on the value-added tax and enterprise income tax paid thereby that contribute to the local finance. The incentive in each year shall be paid to the Joint Venture and Operating Company within 6 months following the end of that year;

6.4 Party A undertakes to grant to the Operating Company an incentive of RMB[***] if its laboratory is qualified by the National Health Commission for carrying out clinical gene amplification. This incentive shall be paid within 3 months upon such qualification.

Article 7 Undertakings and Warranties of the Parties

7.1 Party B's Undertakings and Warranties

Party B undertakes to urge the Joint Venture and the Operating Company to issue invoices for all transactions conducted thereby and not to issue any invoice in a non-local place;

Party B undertakes to apply for public listing in the name of the Joint Venture upon conformance thereof to the requirements of laws and regulations regarding public listing;

Where Party B breaches Article 10 and Article 11 hereof and fails to provide a reasonable explanation and make rectification within 30 days upon receipt of the written notice of rectification from Party A, Party A shall be entitled to recover the subsidies or incentives granted to the Joint Venture or the Operating Company hereunder within 90 days upon Party B's receipt of the written notice of rectification with a written notice to Party B.

7.2 Party A's Undertakings and Warranties

Party A undertakes to urge and coordinate the relevant government departments so that the Joint Venture and the Operating Company can rapidly finish the registration, reporting and recording formalities necessary for incorporation and operation, and obtain the permits with respect to fire safety and environment protection, as well as the qualifications and license for operating a medical laboratory (including without limitation the practice license of medical institution, the qualifications for a laboratory to carry out clinical gene amplification, etc.).

Article 8 Default

8.1 Default and Indemnification

Where this Agreement cannot be performed or cannot be performed in full due to default of a party, the defaulting party shall be liable; where this Agreement cannot be performed or cannot be performed in full due to default of both Parties, the Parties shall be respectively liable according to the actual situation. Except otherwise agreed herein, the non-defaulting party shall be entitled to claim from the defaulting party indemnity for its losses arising from the default thereof (including without limitation the legal cost, attorney fee, etc.)

8.2 Continue to Perform

If either Party fails to perform any of its obligations hereunder, the other party shall be entitled to request it to continue to perform the obligation, in addition to the rights and remedies available under applicable laws and regulations and this Agreement.

Article 9 Force Majeure

If the performance hereof by either Party is affected or this Agreement cannot be performed as agreed by either Party due to earthquake, typhoon, flood, fire, war and other unpredictable force majeure events the occurrence and consequences of which cannot be prevented or avoided, the party shall notify the other party as soon as reasonably practical, and provide the other party within 30 days upon occurrence of the force majeure event with details of the event and a valid certificate issued by the notary office at the place of the force majeure event to justify its incapability of performance or full performance hereof, or its request for delayed performance hereof. Depending on the effect from the force majeure event on the performance hereof, the Parties may decide through consultation to terminate this Agreement, or partially relieve the affected party from the obligations and responsibilities hereunder, or delay the performance hereof.

Article 10 Confidentiality

10.1 Confidential Information

Either Party shall keep confidential the execution, performance and content hereof and the trade secrets, know-how, customer information and other confidential information of the other party that are learned or received during cooperation due to execution and performance hereof (hereinafter referred collectively as the “Confidential Information”), regardless of termination hereof. Either Party may use the Confidential Information of the other party exclusively for the performance hereof. Neither Party may disclose the Confidential Information of the other party to any third party without the prior written consent of the other party, otherwise the it shall be liable for breach hereof and indemnify for the losses arising from such disclosure.

10.2 Disclosure of Confidential Information

Subject to the prior written consent of the other party, either Party may disclose the Confidential Information of the other party to its employees, affiliates, consultants, agents or contractors only for the performance hereof, provided that it ensures such recipients keep the disclosed information confidential, otherwise it shall indemnify for the losses arising from such disclosure.

10.3 Non-confidential Information

The information in the Confidential Information that (1) is previously known to the receiving party as evidenced by written records; (2) becomes part of the public domain or becomes publicly available other than due to any fault of the receiving party; or (3) is obtained by the receiving party from any other channel, shall not be considered confidential.

Article 11 Dispute Resolution

This Agreement shall be governed by and interpreted in accordance with the laws of the People’s Republic of China.

Any dispute arising from performance hereof shall be resolved through consultation by the Parties, failing which, it shall be submitted to China International Economic and Trade Arbitration Commission to be resolved through arbitration in accordance with the then effective arbitration rules thereof. The seat of arbitration shall be in Beijing. The arbitration tribunal shall comprise three (3) arbitrators. The arbitration fee and the expenses arising from enforcement of the arbitration award (including reasonable attorney fee) shall be assumed by the losing party, unless otherwise specified by the award. The arbitration award shall be final and binding.

When the disputed part hereof, if any, is under arbitration, the remaining part hereof shall continue to be valid and performed by the Parties.

Article 12 Miscellaneous

12.1 Effectiveness and Term

This Agreement shall come into effect upon being signed and affixed with the official seal by the authorized representatives of the Parties. This Agreement benefits and binds on the Parties and their respective successors and permitted assignees. Neither Party may directly or indirectly (via legal or other manner) assign this Agreement or any of its rights or obligations hereunder, without prior written consent of the other party.

12.2. Notice

All notices and other communications hereunder shall be made in writing and be deemed served:

(a) upon delivery (with written acknowledgment of receipt), if it is delivered personally; (b) on the fifth (5) working day upon being dispatched, if it is sent by overnight express (with written acknowledgment of receipt); or (c) when it arrives at the mailing system of the recipient, if it is sent via email, to the following address (or any other address specially designated by the recipient in a notice given in accordance herewith).

If to Party A:

Management Committee of Jiangsu Wuxi Huishan Economic Development Zone

Attn: [***]

Address: [***]

Email: [***]

Tel.: [***]

If to Party B:

Genetron Health (Hong Kong) Company Limited

Attn: [***]

Address: [***]

Email: [***]

Tel.: [***]

12.3 Public Disclosure

Neither Party may make any public representation, announcement or disclosure in connection with this Agreement, the relationship of the Parties and the Project without the prior written consent of the other party, except specified or required by any applicable law, security regulatory authority or security exchange.

12.4 Counterpart

This Agreement is made in quadruplicate with each party holding two (2) counterparts which shall have the same legal effect.

(The remainder of this page is intentionally left blank.)

(The remainder of this page is intentionally left blank. Below is the signature page of the *Investment Agreement with respect to Genetron Health's Project of Precision Medicine Platform for Cancer Early Screening between the Management Committee of Jiangsu Wuxi Huishan Economic Development Zone and Genetron Health (Hong Kong) Company Limited*)

Party A: Management Committee of Jiangsu Wuxi Huishan Economic Development Zone (Seal)

/s/ Management Committee of Jiangsu Wuxi Huishan Economic Development Zone (Seal)

Legal representative (authorized agent):

Date: November 27, 2020

Party B: Genetron Health (Hong Kong) Company Limited

/s/ Genetron Health (Hong Kong) Company Limited (Seal)

Authorized representative:

Date: November 27, 2020

*** CERTAIN MATERIAL (INDICATED BY THREE ASTERISKS IN BRACKETS) HAS BEEN OMITTED FROM THIS DOCUMENT BECAUSE IT IS BOTH (1) NOT MATERIAL AND (2) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

Strategic Cooperation Agreement

with respect to

Early Screening Product for Liver Cancer

between

Genetron Health (Beijing) Co. Ltd.

and

Chia Tai Tianqing Pharmaceutical Group Co. Ltd.

January 6, 2021

Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)

Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

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Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)
Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

This Strategic Cooperation Agreement with respect to Liver Cancer Early Screening Product (hereinafter referred to as this “Agreement”) is entered into on January 6, 2021 (“Effective Date”) by and between:

- (1) **Genetron Health (Beijing) Co. Ltd.**, a limited liability company lawfully established and validly existing under the laws of the People’s Republic of China (for the purpose hereof, excluding Hong Kong, Macao and Taiwan, hereinafter referred to as “China”) having its registered address at Floor 1-Room 101 on Floor 5 (Room 201 on Floor 2), No.11, Floor 1-Room 101 on Floor 5 (Room 301, 303 and 304 on Floor 3) No.10, Zone 1, Building 8, Shengmingyuan Road, Life Schience Park, Changping District, Beijing (hereinafter referred to as “Party A”); and
- (2) **Chia Tai Tianqing Pharmaceutical Group Co. Ltd.**, a company limited by shares lawfully established and validly existing under the laws of China having its registered address at 369 South Yuzhou Road, Lianyungang City, Jiangsu Province (hereinafter referred to as “Party B”).

Party A and Party B hereinafter referred to individually as a “party” and collectively as the “parties”.

Recitals

- (A) Party A is a leading precision cancer medicine company in China and focuses on cancer genomics research and application with products and services covering the whole cancer cycle from early screening to diagnosis and treatment recommendation to monitoring and prognosis management;
- (B) Party B is an innovative pharmaceutical group engaged in medicine innovation and research, development, production and sale of high quality medicines and committed to providing the patients with better health solutions and superior affordable medical resources which is a domestic famous RD and production base for liver disease treatment and anti-cancer drugs;
- (C) The Parties intend to carry out comprehensive strategic cooperation on the liver cancer early screening product (hereinafter referred as this “Product”, as defined in Article 1.1) mainly in the following manner: (i) Party B acts as the exclusive agent of Party A in the Authorized Territory for the promotion and sale of this Product; and (ii) the Parties cooperate in the Authorized Territory on the publicity and popularization of the concept of early cancer screening and on the promotion of the relevant products, and also make best efforts to disseminate the knowledge about early screening and promote this Product.

Therefore, the Parties agree as below with respect to the strategic cooperation stated above:

1 Definition, Interpretation and Effect

1.1 Unless otherwise required by the context, the terms below shall have the following designated meanings herein:

“Confidential Information”	shall have the meaning ascribed thereto in Article 9.2;
“Product”	shall mean Party A’s liver cancer early screening and detection service

“Force Majeure Event”	shall mean such objective situations that cannot be predicted, avoided and overcome by a Party, including without limitation act of war or other military actions, terrorism, riot, act of god and epidemic, provided, however, that where any such situation arises due to failure of a Party to take all reasonable care and measures, it shall not be deemed as a Force Majeure Event of that Party;
“Representative”	shall have the meaning ascribed thereto in Article 9.3.1;
“Third Party”	shall mean any entity except the Parties and their respective Affiliates;
“Management Committee”	shall have the meaning ascribed thereto in Article 4.1;
“Affiliate”	with respect to a Party, shall mean any Entity (directly or indirectly) controlled by, controlling or under common control with that Party. “Control” in this definition shall mean the ownership of fifty percent (50%) of the shares (or other securities or rights) with voting right in an Entity, or the right to appoint most of the directors of an Entity and/or the ability to govern the policies or management of an Entity in any other manner (including via conclusion of an agreement), provided, however, that the Entity is only deemed as an Affiliate when any of the foregoing conditions is satisfied;
“Party A’s Confidential Information”	shall have the meaning ascribed thereto in Article 9.1;
“Party A’s List of Hospitals”	shall have the meaning ascribed thereto in Article 2.3;
“Competitive Product”	shall mean any other detection product or service that adopts the same or similar mechanism of action and has the same or similar functions with this Product;
“CIETAC”	shall have the meaning ascribed thereto in Article 16.2;
“Calendar Year”	shall mean a period of 12 months from January 1 to December 31;
“Effective Date”	shall have the meaning ascribed thereto in the Recitals;
“Entity”	shall mean any natural person, company, partnership, firm, trust, government agency, social organization, foundation, incorporated or unincorporated body;
“Applicable Laws”	with respect to an Entity and a situation, shall mean all effective laws, regulations and/or standards issued by any government or regulatory authority from time to time within the Term hereof that are applicable to the Entity and the situation, and the generally applicable industry or self-discipline standards, codes of conducts and guidelines, or other applicable regulations with similar nature, whether regional, national or international;

“Authorized Territory”	shall have the meaning ascribed thereto in Article 2.1;
“Non-defaulting Party”	shall have the meaning ascribed thereto in Article 12.2;
“Loss”	shall have the meaning ascribed thereto in Article 11.1;
“Promotional Materials”	shall have the meaning ascribed thereto in Article 6.4;
“Defaulting Party”	shall have the meaning ascribed thereto in Article 12.2;
“Relevant Requirements”	shall have the meaning ascribed thereto in Article 10.1.6;
“Party B’s Confidential Information”	shall have the meaning ascribed thereto in Article 9.2;
“Actual Sales Volume Generated by Party B’s Promotion”	shall mean the actual quantity of this Product that is purchased by the subjects through scanning the Promotional QR Code in Hospitals Proposed by Party B (of which the purchase price has been received), less the quantity of this Product of which the purchase price is refunded to the subjects due to any reason attributable to Party B and Force Majeure Events;
“Promotional QR Code in Hospitals Proposed by Party B”	shall have the meaning ascribed thereto in Article 2.1;
“Business Day”	shall mean any day except Saturday, Sunday or the public holidays in China;
“Term”	shall have the meaning ascribed thereto in Article 12.1;
“Dispute”	shall have the meaning ascribed thereto in Article 16.2;
“Intellectual Property Rights”	shall have the meaning ascribed thereto in Article 8.1;
“Promotional Activities in Central Market”	shall mean the various brand positioning, academic promotion and marketing activities that are developed by the Parties at the group level according to the market entry strategy and implemented by the central market team in a bid to enable successful market entry and realization of sales of this Product, including without limitation brand positioning and preparation of publicity materials; endorsement by and cooperation with industry associations and KOL; participation in or holding international and national academic promotion conferences; promotion activities in key regions and hospitals, etc.;
“Promotion Plan for Central Market”	shall have the meaning ascribed thereto in Article 6.5.1.

- 1.2 Unless otherwise stated herein:
- 1.2.1 Any reference to a law, legal document or regulation shall include the law, legal document or regulation, as revised, extended or reenacted from time to time;
 - 1.2.2 Any reference to an article and appendix shall mean the article and appendix hereof;
 - 1.2.3 The headings herein are for convenience only and shall not be considered in the interpretation hereof;
 - 1.2.4 “Other” and “separately” shall not be construed to include only the words followed; and
 - 1.2.5 “Including”, “especially” and “e.g.” or other similar phrases shall be construed as illustrative and not restrictive.
- 2 Authorization**
- 2.1 Party A authorizes Party B to promote this Product in the hospital market across China (including general hospitals and hospitals specialized in liver diseases, except the physical examination centers in hospitals and the hospitals in Party A’s List of Hospitals) (“Authorized Territory”) within the Term hereof.
- 2.2 The Parties agree that, within ten (10) days upon effectiveness hereof:
- (1) Party B shall provide the list of hospitals to which it intends to promote this Product for Party A to create a charging system that differentiates the sales QR codes of the hospitals (“Promotional QR Codes in Hospitals Proposed by Party B”). Party A shall provide Party B with such QR codes. Party B shall provide Party A with a ten (10)-day prior written notice if it intends to promote this Product in any other hospital so that Party A will have enough time to add such hospital into the charging system.
 - (2) Party A shall provide Party B with Party A’s List of Hospitals which shall clearly state, for each region or hospital therein, the reason (selected from Article 2.3 below) for its inclusion in the list. The hospitals in Party A’s List of Hospitals are not covered in the Authorized Territory defined in Article 2.1 in which Party A or its Affiliates will promote and sell this Product (“Party A’s List of Hospitals”).
- 2.3 If any of the following regions or hospitals wishes to cooperate with Party A on this Product, Party A shall negotiate with Party B, and may exclude such region or hospital from the Authorized Territory and add it into Party A’s List of Hospitals upon written consent of Party B (except such circumstances below where the Parties agree that Party B’s written consent is not necessary):
- (1) The hospitals designated for the scientific research cooperation in the major special projects or other important government projects which Party A has confirmed to participate in/of which Party A has won the bidding may be automatically added into Party A’s List of Hospitals without written consent of Party B, subject to provision by Party A of the written certificate proving participation of these hospitals in such projects;
 - (2) Regions covered by the procurement project procured by Party A from a government/hospitals participating in the implementation of a government’s procurement project;

Note: With respect to the regions/hospitals stated in (2), if the government issues clear instructions, these instructions shall be followed and such regions/hospitals shall be automatically added into Party A's List of Hospitals without written consent of Party B; but if no clear instruction is issued by the government, Party A shall clearly present to Party B the regions and hospitals to be excluded and obtain Party B's consent.

- (3) Regions or hospitals that Party A wishes to separately cooperate with depending on its own development in tumor field or other special situations.

Unless consented to by Party B in writing, the exclusion of any region/hospital above from the Authorized Territory by Party A shall be invalid.

3 Non-competition

- 3.1 Unless otherwise agreed herein, Party A shall not (and shall urge its Affiliates not to) engage any Third Party or offer assistance or funds in any form to any Third Party to sell, promote and publicize this Product in the Authorized Territory, except in the activities carried out in cooperation with Party B, or commercialize this Product in the Authorized Territory in any way without cooperating with Party B, within the Term hereof.
- 3.2 Unless otherwise agreed herein, Party B shall not (and shall urge its Affiliates not to) independently or engage any Third Party or offer assistance or funds in any form to any Third Party to develop, sell, promote and publicize any Competitive Product in the Authorized Territory, or commercialize any Competitive Product in the Authorized Territory in any way without cooperating with Party B, within the Term hereof.
- 3.3 Party B agrees to try its best to enable the direct revenue from the Actual Sales Volume Generated by Party B's Promotion (i.e. the sales revenue which is the Actual Sales Volume Generated by Party B's Promotion x Party B's actual sales price of this Product) to exceed the amount ("Minimum Exclusive Sales Revenue") below in the following years:

(1) 2021: [***]

(2) 2022: [***]

Upon failure of Party B to realize the Minimum Exclusive Sales Revenue in either year above, Party A shall be entitled to withdraw the agreed exclusive cooperation with a notice to Party B. Specifically, if Party B fails to realize the Minimum Exclusive Sales Revenue in 2021 or 2022, Party B may commercialize this Product in the Authorized Territory from the next Calendar Year, whether independently or with a Third Party, without subject to the Non-competition article herein.

Note: Party A agrees to take the sum of the direct revenue from the Actual Sales Volume Generated by Party B's Promotion and the direct revenue generated by the hospitals in Party A's List of Hospitals that are stated in Article 2.3(3) in a year as the actual sales revenue of that year compared with the Minimum Exclusive Sales Revenue of that year. Party A shall provide Party B quarterly with the specific amount of the direct revenue generated by the hospitals in Party A's List of Hospitals that are stated in Article 2.3(3). For the avoidance of doubt, the annual actual sales revenue calculated as above shall only be used to compare with the Minimum Exclusive Sales Revenue as stated in this Article 3.3 and shall not be used for settlement and be applied to any other term hereof, unless otherwise agreed herein.

4 Management Committee

- 4.1 Establishment and Purpose. Within ten (10) days upon effectiveness hereof, the Parties shall establish a Management Committee ("Management Committee") which shall be obliged to (a) review, approve or disapprove and review as necessary the Promotion Plan for Central Market; (b) supervise the implementation of the Promotion Plan for Central Market; (c) review and discuss over the sales performance and trend of this Product in the Authorized Territory; (d) discuss over and solve any matter involved in the communication between the Parties; and (e) perform other tasks assigned thereto by other articles, if any.

- 4.2 Members. The Management Committee shall in total comprise four (4) members. The Parties shall respectively appoint two (2) members. Either Party may change any of its representatives in the Management Committee with a prior notice to the other party.
- 4.3 Meeting. The Management Committee shall meet at least once per month. Each member may delegate another person in writing to attend and vote in any meeting on his/her behalf. Upon agreement by the Parties, other employees of either Party may attend any meeting of the Management Committee as nonvoting observers.
- 4.4 Decision. Unless voted for by all members present in a meeting, any decision made by the Management Committee in the meeting shall be invalid. If the members of the Management Committee fails to achievement consensus on a matter, either Party may report the matter to the top managements of both Parties with a written notice to the other party. The top managements shall immediately meet upon receipt of the report to negotiate and settle the divergence in goods faith. For the avoidance of doubt, the decisions of the Management Committee shall not modify or deviate from this Agreement in any way.

5 Provision of this Product

- 5.1 Party B shall arrange for and help the subjects to execute the agreement via mobile terminals and collect blood samples. and deliver the samples to Party A's responsible person as detailed in Appendix II, including without limitation Party A shall designate employees to fill the personal data, clinical diagnosis, doctor submitting the sample and the necessary data thereof of the subject, special requirements and sample collection time in the test application form; organize sample collection; register the test information; and require the terminal customer to collect and process samples, in accordance with Appendix II and as required by Party A from time to time. Trial operation of the project shall last for three (3) months upon effectiveness hereof. Within one (1) month following the end of trial operation, the Parties may adjust and refine the business process stated in Appendix II depending on the result of trial operation and accordingly update Appendix II in writing.
- 5.2 Party A and its Affiliates shall provide this Product, issue and interpret the electronic report and follow up positive cases as detailed below:
- 5.2.1 Upon written authorization of a subject, Party A shall be entitled to use, save and destroy the sample thereof according to the technical requirements of the test to the extent authorized. Party A shall be entitled to refuse unqualified samples (refer to Appendix II for detailed rejection criteria), provided that it immediately notifies Party B in writing.
- 5.2.2 Party A shall issue the test report within the period specified in Appendix II. Such period is expressed as the number of natural days and begins upon receipt by Party A of the conforming sample. Party A shall timely notify Party B in writing if issuance of the report is expected to be delayed during the test. Such notice shall state the reason for delay and the issue date of the official report.
- 5.2.3 Party A shall assure the quality of test results of the qualified samples submitted by Party B. The test shall be invalid unless officially signed and issued by Party A (whether in writing or electronic).
- 5.2.4 Party A shall carry out the gene test subject to strict quality control and workflow and ensure the test data are as accurate as possible. The test report issued is a gene test report which is intended to provide appropriate guide for the subjects and serve as a reference for the professionals.

- 5.2.5 Party A shall investigate and eliminate the disputes, if any, on the test report as stated in Appendix II. Party B shall provide assistance when requested.

6 Promotion of this Product

- 6.1 General principles. Party B shall make all reasonable commercial efforts to promote this Product in the Authorized Territory. All promotional activities shall be carried out in accordance with the code of compliance (as may be revised from time to time by the Parties) separately agreed on by the Parties. Under no circumstance shall Party B be engaged, whether directly or indirectly, in any promotional activity in connection with this Product in any region outside the Authorized Territory in any manner without the prior written consent of Party A.
- 6.2 Except as specified in Article 6.5 hereof, Party B shall make all reasonable commercial efforts to promote this Product in the Authorized Territory as stated below and bear all expenses and liabilities arising therefrom:
- 6.2.1 Party B shall use its current and future drug promotion and sales network to actively and effectively introduce, promote and publicize this Product to the potential customers in the Authorized Territory.
- 6.2.2 Party B shall arrange and organize regional seminars and conferences expedient for the effective promotion of this Product, and any meeting to promote and publicize this Product for the purposes of marketization of education and popularization of science.
- 6.2.3 Party B shall timely reply to any query about this Product submitted by doctors and patients as instructed and trained by Party A. Party B shall timely notify Party A of any question to which it is unable to reply and assist Party A in giving the reply.
- 6.2.4 If any hospital or doctor in the Authorized Territory wishes to further cooperate on this Product (e.g. any doctor wishes to participate in the research and development of this Product, or any hospital wishes to introduce this Product), Party B shall timely notify Party A in writing and assist Party A in communicating with such hospital or doctor and facilitate the cooperation.
- 6.2.5 Party B shall carry out other promotional activities confirmed by the Parties from time to time.
- 6.3 Party A shall provide Party B with:
- 6.3.1 Promotion training remotely or at the premise of Party B.
- 6.3.2 Support for its information sessions. Party A may designate a technical expert to serve as the keynote speaker.
- 6.3.3 Trainings on report interpretation and on the development, arrangement and implementation of the intervention plan. Party A shall help Party B's specialists interpret reports to and develop intervention plans for the subjects.

Party B may request other trainings, if necessary, which Party A shall activity arrange.

6.4 Promotional Materials

- 6.4.1 The descriptions, sales manuals, catalogs and other promotional materials used by Party B for and in connection with this Product (hereinafter referred to collectively as the "Promotional Materials") shall be the materials previously designated by Party A for the promotion of this Product in the Authorized Territory or part thereof or developed based thereon. Party B shall not official use and publish any Promotional Material that is independently developed thereby or modifies, alters and recreates the materials provided by Party A, unless reviewed and approved by Party A. Party A shall review and approval or disapprove the Promotional Materials submitted by Party B within three (3) working days upon receipt thereof. Without the prior written consent of Party A, Party B shall not develop or change the product positioning and key information of this Product.

- 6.4.2 Party B shall exclusively use the Promotional Materials for the purpose of promoting this Product in the Authorized Territory, and shall not distribute the same to any potential customer (including without limitation hospitals, doctors and patients) or for the purpose of selling this Product outside the Authorized Territory.
- 6.4.3 Party B may display its company name, trademarks and/or logo on the Promotional Materials or other public materials of this Product to indicate that it is engaged in the strategic cooperation on and commercial promotion of this Product, but may only display the same together with the company name, trademarks and/or logo of Party B for the purpose of performance of its obligations hereunder.
- 6.4.4 Either Party may use the company name, trademark and/or logo of the other party within the scope of cooperation hereunder or for the purpose of publicizing their cooperation, and shall not use the same in any other business, field or for any other purpose.
- 6.4.5 The Parties shall use the best reasonable efforts to carry out brand promotion and product and cooperation information release in connection with the cooperation hereunder for the purpose of maintaining brand value and their rights and interests. The Parties agree the release of any information (including without limitation the content, form, date of release, etc.) about the cooperation hereunder in any way as required by the regulatory provisions or marketing rules applicable to either Party or by the actual situation shall be reviewed and approved by the other party.

6.5 Promotion in Central Market

The Parties shall use the best reasonable commercial efforts to carry out the Promotional Activities in Central Market in accordance with this Article:

- 6.5.1 Party B shall draft for this Product and provide Party A with the promotion plan for central market in the Authorized Territory (“Promotion Plan for Central Market”) within ten (10) days upon effectiveness hereof for the current year and prior to [***] of each subsequent Calendar Year for its next Calendar Year within the Term hereof. The Promotion Plan for Central Market shall include detailed content, schedule and budget of the Promotional Activities in Central Market. The Parties shall confirm the Promotion Plan for Central Market for the current year within thirty (30) days upon receipt by Party A of the draft thereof and on or prior to [***] of each subsequent Calendar Year for its next Calendar Year in Management Committee meetings.
- 6.5.2 The Parties shall carry out the Promotional Activities in Central Market in each Calendar Year according to the Promotion Plan for Central Market for that year that has been confirmed in the Management Committee meeting. Party A shall lead the implementation of the plan and Party B shall provide appropriate assistance.

6.5.3 The expenses arising from the Promotional Activities in Central Market shall be borne by Party A.

7 Payment and Expenses

- 7.1 The price to be settled by the Parties with respect to this Product ("Settlement Price") is listed in Appendix III. Any change to the Settlement Price, Minimum Exclusive Sales Revenue and Minimum Sales Revenue shall be confirmed by the Parties in writing.
- 7.2 The subjects execute the agreement on their respective mobile phones and directly pay to Party A the test fee by scanning the Promotional QR Code in Hospitals Proposed by Party B. The sales price of this Product at the subject end shall be agreed to by the Parties.
- 7.3 On the third (3th) working day of each month, Party A shall send to Party B the account statement of payables in connection with the samples received due to promotion and sales of this Product by Party B for which the test was finished and the report was issued in the previous month. Party B shall reply to Party A whether or not it accepts the statement within five (5) working days upon receipt thereof, otherwise Party B will be deemed to have accepted the statement. Party B shall issue to Party A a legal VAT invoice of the same amount of the payables if it accepts the statement. Party A shall pay the invoice to the bank account designated by Party B within fifteen (15) days, if it accepts the invoice.
- 7.4 Party B shall ensure that the direct revenue from the Actual Sales Volume Generated by Party B's Promotion (i.e. the sales revenue which is the Actual Sales Volume Generated by Party B's Promotion x Party B's actual sales price of this Product) is not below the minimum sales revenue confirmed by the Parties through negotiation ("Minimum Sales Revenue") listed below in the following years:
- (3) Minimum Sales Revenue in 2021: [***]
- (4) Minimum Sales Revenue in 2022: [***]

Upon failure to realize the Minimum Sales Revenue in a year, Party B shall pay to Party A [***] of the Minimum Sales Revenue above the actual sales revenue within the first thirty (30) days of the following Calendar Year.

The [***] stated above depends on the Settlement Price of this Product currently agreed to by the Parties in the project. It shall be adjusted accordingly upon any change in the Settlement Price in the future.

Note: Party A agrees to take the sum of the direct revenue from the Actual Sales Volume Generated by Party B's Promotion and the direct revenue generated by the hospitals in Party A's List of Hospitals that are stated in Article 2.3(3) in a year as the actual sales revenue of that year compared with the Minimum Sales Revenue of that year. Party A shall provide Party B quarterly with the specific amount of the direct revenue generated by the hospitals in Party A's List of Hospitals that are stated in Article 2.3(3). For the avoidance of doubt, the annual actual sales revenue calculated as above shall only be used to compare with the Minimum Sales Revenue as stated in this Article 7.4 and shall not be used for settlement and be applied to any other term hereof, unless otherwise agreed herein.

7.5 Other Expenses and Taxes

- 7.5.1 Except otherwise agreed herein (including without limitation Article 6.5), Party A shall bear the expenses of blood collection tubes and other consumables, logistics cost and all costs and expenses incurred by the test service. Party B shall bear the expenses payable to any hospital or Third Party for promotion of this Product and collection of blood from the subjects.

- 7.5.2 All payments mentioned herein include all applicable taxes (including VAT, withholding tax, if any), charges and other duties. Where any applicable law requires to deduct or withhold taxes (including withholding tax), charges and other duties from any payable, the payer shall obtain and provide the payee with the appropriate documents in connection with such requirement and the certificates of payment of such taxes (including withholding tax), charges and other duties.

8 Intellectual Property Rights

- 8.1 The Parties confirm that the intellectual property rights in and to this Product are absolutely owned by Party A or its Affiliates and to the knowledge of Party B, do not infringe on the intellectual property rights and other legitimate interests of any Third Party, including without limitation trademarks, marks, patterns, service marks or company names, business names or trade names, appearance, designs, logos, labels, packages, patents, test and study data, software, copyrights, domain names, know-how and trade secrets in connection with this Product and the registrations and applications thereof ("Intellectual Property Rights"). Party A and/or its Affiliates shall be entitled to protect the Intellectual Property Rights at its own discretion, and Party A shall keep Party B harmless from any claim from any Third Party due to its use of the Intellectual Property Rights.
- 8.2 Party B fully acknowledges and agrees that Party A and/or its Affiliates completely and exclusively own the Intellectual Property Rights and the right to control the use thereof.
- 8.3 Party B hereby irrevocably confirms and undertakes that:
- 8.3.1 It will not register or attempt to register in or out of China any Intellectual Property Right in its own name or for any Entity, or acquire or use any Intellectual Property Right out of the Authorized Territory, whether within the Term hereof or after expiry or earlier termination thereof;
- 8.3.2 It will not directly or indirectly use any Intellectual Property Right of Party A and its Affiliates for any other purpose than the promotion of this Product in the Authorized Territory in accordance herewith or in any other scope than specified herein or previously approved in writing by Party A or its Affiliates;
- It will not apply for or register in or out of the territory of China any appearance, design, logo, label, package, patent, software, copyright, domain name, trademark, mark, pattern, service mark or company name, business name or trade name that is identical with or similar to any trademark Party A or any of its Affiliates to such extent that may cause misleading or confusion;
- 8.3.3 It will not use in or out of the territory of China any appearance, design, logo, label, package, patent, software, copyright, domain name, trademark, mark, pattern, service mark or company name, business name or trade name that is identical with or similar to any trademark Party A or any of its Affiliates to such extent that may cause misleading or confusion, except for the purpose of promotion of this Product in the Authorized Territory in accordance herewith or in the scope specified herein or previously approved in writing by Party A or the Affiliate;
- 8.3.4 It will not use the Intellectual Property Rights for any commodity or service other than this Product;
- 8.3.5 It will not use the Intellectual Property Rights in any way that may damage the importance, significance and validity of the Intellectual Property Rights or the goodwill of Party A or its Affiliates;

- 8.3.6 It will not mislead other Entities or the public in any way into thinking the Intellectual Property Rights as the property of Party B or its Affiliates;
- 8.3.7 It will use due diligence and efforts to protect the Intellectual Property Rights, including without limitation notifying Party A in writing immediately upon awareness or knowledge of any infringement on the Intellectual Property Rights by any Entity, and it will provide Party A or its Affiliates with all reasonable assistance upon request thereof to take such protective measures for the Intellectual Property Rights that Party A or its Affiliates deems expedient (with the necessary expenses accepted by the Parties to be borne by Party A);
- 8.3.8 It will immediately notify Party A of the full details of any claim from any Entity arising from infringement on its intellectual property rights by this Product upon receipt thereof. Party A shall be entitled to decide, at its own discretion, whether or not to take actions and what actions to be taken with respect to such claim. Party B shall provide assistance upon request from Party A, provided, that the necessary expenses shall be borne by Party A; and
- 8.3.9 It will promote and publicize this Product hereunder in accordance with the Applicable Laws without infringing on the legitimate rights of any Third Party (including without limitation intellectual property rights), and will independently assume any and all liabilities arising from such promotion and publicity. In addition, it will defend for, indemnify and hold harmless Party A or its Affiliates against the losses, if any, suffered thereby due to such promotion and publicity. For the avoidance of doubt, Party A shall not be deemed to have reviewed or confirmed in any way the legality of the promotion, publicity or any advertisement and/or material used therein by Party B due to its review in any way of the relevant promotional or advertising materials of Party B. Party A or its Affiliates shall not be liable for the promotion, publicity or any advertisement and/or material used therein by Party B that is deemed to have violated any Applicable Law or infringed the legitimate rights of any Third Party.
- 8.4 The obligations and undertakings specified in this Article 8 in connection with protection of the Intellectual Property Rights shall survive the termination or expiry hereof. Party B shall no longer use the Intellectual Property Rights in or out of the territory of China after expiry or earlier termination hereof.

9 Confidentiality

- 9.1 All confidential or proprietary information obtained by Party B or its Affiliates from Party A or its Affiliates hereunder or for the purpose hereof, the existence and the terms hereof, and all information arising from performance hereof shall be the confidential information of Party A ("Party A's Confidential Information") which Party B shall:
- 9.1.1 Keep confidential;
- 9.1.2 Use only to the extent permitted hereby; and
- 9.1.3 Disclose only to the extent permitted by Article 9.3, unless other approved in writing by Party A.
- 9.2 All confidential or proprietary information obtained by Party A or its Affiliates from Party B or its Affiliates hereunder or for the purpose hereof, the existence and the terms hereof, and all information arising from performance hereof shall be the confidential information of Party A ("Party B's Confidential Information", hereinafter referred collectively with Party A's Confidential Information to "Confidential Information") which Party A shall:
- 9.2.1 Keep confidential;

- 9.2.2 Use only to the extent permitted hereby; and
- 9.2.3 Disclose only to the extent permitted by Article 9.3, unless other approved in writing by Party B.
- 9.3 Either Party may disclose the Confidential Information as below:
- 9.3.1 Either Party may disclose the Confidential Information to its directors, employees, consultants, contractors and Affiliates (and the directors, employees and contractors of the Affiliates) (hereinafter referred to collectively as the “Representatives”) that reasonably need to know the Confidential Information, to the extent reasonably necessary for the exercise of the rights and performance of the obligations hereunder, provided, however, that they are subject to the obligation of confidentiality that is at least as strict as that hereunder and the disclosing party assumes liabilities for their acts;
- 9.3.2 Either Party may disclose the commercial or company transactions directly or indirectly involving this Product (including financing and/or issuance of stocks or disposal of assets to its professional consultants, auditors, banks, insurers and existing or potential investors, provided, however, that they are subject to the obligation of confidentiality that is at least as strict as that hereunder and the disclosing party assumes liabilities for their acts;
- 9.3.3 Either Party may disclose the existence, any term and any information arising from performance hereof to the arbitral institution when any dispute arising herefrom or in connection herewith is being resolved through arbitration.
- 9.4 The following information in the Confidential Information shall not be deemed as Confidential Information:
- 9.4.1 Information that has been in the possession and at the disposal of the receiving party prior to disclosure by the disclosing party, as proved by the receiving party’s evidences;
- 9.4.2 Information disclosed to the receiving party by a Third Party after disclosure by the disclosing party which has never obtained any information directly or indirectly from the disclosing party and is not obliged to keep the disclosed information confidential;
- 9.4.3 Information that is or becomes publicly available other than due to any act or default of the receiving party or any Entity to which the receiving party discloses the Confidential Information; or
- 9.4.4 Information that is independently developed by the receiving party without relying on any disclosure hereunder, as proved by the reasonable written evidences kept by the receiving party during such independent development.
- 9.5 Neither Party shall be deemed to have breached its obligations under this Article 9 if it discloses any Confidential Information as required by the Applicable Laws or marketing rules or any order of a court or public body, regulatory authority or security exchange having jurisdiction thereon, provided, however, that, prior to such disclosure and to the extent permitted by the Applicable Laws:
- 9.5.1 It notifies the other party of the proposed disclosure as soon as practical and when reasonably feasibly, prior to the publication of the order of the court or public body, regulatory authority or security exchange;

- 9.5.2 It considers the reasonable requirements submitted by the other party for such disclosure;
- 9.5.3 It requests the court or public body, regulatory authority or security exchange to keep confidential the information to be disclosed; and
- 9.5.4 It provides the other party with an opportunity to state to the court or public body, regulatory authority or security exchange on how to disclose and/or keep confidential the information to be disclosed.
- 9.6 The Parties expressly agree that monetary compensation is insufficient for any act made by the receiving party or any Representative thereof in violation of this Article 9 due to the unique nature of Party A's Confidential Information and Party B's Confidential Information. Therefore, the Parties acknowledge and agree that any act violating or likely to violate this Article 9 will cause unrecoverable harms to the disclosing party and that the disclosing party shall be entitled to request behavior preservation from a court having jurisdiction in addition to the economic remedies hereunder. The receiving party shall be fully liable for any disclosure or use of any Confidential Information of the disclosing party thereby and by any Representative thereof without authorization from the disclosing party.
- 9.7 Except otherwise specified in this Article 9.7, neither Party may issue any press release or other announcement with respect to any aspect hereof without the prior written approval of the other party. Notwithstanding the foregoing provision, either Party may publish any announcement required by the Applicable Laws or marketing rules, including any announcement or report to its shareholders and/or made as required by the rules or regulations of any security market or exchange that applies to it or its parent company or ultimate holding company. The parties agree to negotiate over the wording of any such announcement to the extent reasonably feasible.
- 9.8 The obligation of confidentiality herein shall be valid within the Term and five (5) years upon termination or expiry hereof.

10 Representations, Warranties and Undertakings

- 10.1 The Parties hereby warrant to each other that:
- 10.1.1 It is formally established, validly existing and in good standing under the Applicable Laws;
- 10.1.2 It has the powers, authorities and legitimate rights necessary for the execution hereof and for the performance of its obligations hereunder;
- 10.1.3 It has taken all actions necessary for the approval of the execution hereof and the performance of its obligations hereunder;
- 10.1.4 It has obtained all consents, approvals and authorizations from the government departments and other Entities that are necessary for the execution hereof;
- 10.1.5 The execution hereof and the performance of its obligations hereunder do not conflict with or constitute breach of any contractual obligation or any provision of its articles of association;
- 10.1.6 It will (and will cause any of its Affiliates to) (i) abide by the applicable anti-bribery laws and regulations in the Authorized Territory, including the criminal law, anti-unfair competition law or similar regulations of the People's Republic of China ("Applicable Requirements"); (ii) not participate in any activity, practice or act that will be deemed criminous or illegal under the Applicable Requirements when it is carried out in the Authorized Territory; and (iii) establish and maintain within the Term hereof its own anti-bribery policies and procedures to ensure it and its Affiliates or their respective directors, managers, employees or agents to observe the Applicable Requirements; and

10.1.7 It and its Affiliates will perform this Agreement in accordance with all Applicable Laws.

11 Indemnification

- 11.1 Unless otherwise expressly agreed herein, Party A agrees to indemnify, defend for and hold harmless Party B and its Affiliates and their respective directors and employees against any and all losses, damages, suits, claims, actions, demands, liabilities, expenses and/or costs (including reasonable legal cost and attorney fee) ("Losses") arising from:
- 11.1.1 Any breach of any representation, warranty, obligation or undertaking hereunder by Party A or its Affiliates;
 - 11.1.2 Any gross negligence or willful misconduct of Party A or its Affiliates;
 - 11.1.3 Violation of any Applicable Law by Party A or its Affiliates;
 - 11.1.4 Breach of the provisions in Article 8.1 concerning intellectual property rights by Party A or its Affiliates;
 - 11.1.5 Entry of this Product by any government body into any list of prohibited or restricted goods, resulting in any form of punishment on Party B; or
 - 11.1.6 Any compensation requested or other claims submitted by any subject with respect to this Product (including without limitation the test report and its interpretation, etc.) that is caused by Party A (except due to any reason attributable to Party B or Force Majeure Events).
- provided, however, that the part of the Losses arising from any of the reasons above for which Party B is obliged to indemnify Party A under Article 11.2 shall be excluded.
- The Parties shall negotiate friendly and jointly develop a solution if this Product is added by any government body into any list of prohibited or restricted goods. Any adjustment to the cooperation hereunder arising therefrom shall be made in writing.
- 11.2 Unless otherwise expressly agreed herein, Party B agrees to indemnify, defend for and hold harmless Party A and its Affiliates and their respective directors and employees against any and all Losses arising from:
- 11.2.1 Any breach of any representation, warranty, obligation or undertaking hereunder by Party B or its Affiliates;
 - 11.2.2 Any gross negligence or willful misconduct of Party B or its Affiliates;
 - 11.2.3 Any compensation requested or other claims submitted by any subject with respect to this Product that is caused by Party A; or
 - 11.2.4 Violation of any Applicable Law by Party B or its Affiliates.
- provided, however, that the part of the Losses arising from any of the reasons above for which Party A is obliged to indemnify Party B under Article 11.1 shall be excluded.

12 Term and Termination

- 12.1 This Agreement shall be effective for three (3) years ("Term") from the Effective Date, unless terminated prior to the expiry of the Term or extended upon agreement by the Parties or in any other way in accordance herewith.

- 12.2 If either Party (“Defaulting Party”) breaches this Agreement and fails to make rectification within thirty (30) days upon receipt of the notice of default from the other party (“Non-defaulting Party”) that states the details of the breach and requires rectification to be made, the Non-defaulting Party may terminate this Agreement with a written notice to the Defaulting Party.
- 12.3 Party A shall be entitled to immediately terminate this Agreement with a written notice to Party B under any of the following circumstances:
- 12.3.1 Party B violates Article 3 or Article 10 hereof; or
- 12.3.2 Party B fails to realize the Minimum Sales Revenue in two (2) consecutive years, i.e. 2021 and 2022.
- 12.4 Party B shall be entitled to immediately terminate this Agreement with a written notice to Party A under any of the following circumstances:
- 12.4.1 Party A violates Article 3 or Article 10 hereof;
- 12.4.2 Party A fails to pay to Party B the settlement price confirmed by the Parties as agreed and still fails to pay the same within a reasonable period (sixty (60) days) upon receipt of the notice of call from Party B; or
- 12.4.3 Party A or its Affiliates breaches the provisions in Article 8.1 concerning intellectual property rights.
- The Parties shall negotiate friendly and joint develop a solution, including discussing on whether or not to terminate this Agreement, if this Product is added by any government body into any list of prohibited or restricted goods, or any compensation is requested or other claims are submitted by any subject with respect to this Product (including without limitation the test report and its interpretation, etc.).
- 12.5 Either Party may terminate this Agreement with a written notice to the other party under any of the following circumstances:
- 12.5.1 The other party becomes or is deemed insolvent, bankrupt, or unable to repay its debt on the due date, or admits it is unable or is deemed unable to repay its debts;
- 12.5.2 An order has been made, or a resolution has been passed, or a meeting notice has been issued for the purpose of passing a resolution, or a notice or application has been filed with a court, or any similar legal proceeding has been initiated in respect of the liquidation, bankruptcy, administrative take-over or dissolution; and
- 12.5.3 Any liquidator, bankruptcy trustee, receiver, administrative receiver, administrator or similar manager has been appointed for the other party or any part of the business or assets thereof.

13 Effect of Termination

- 13.1 All rights and licenses granted hereunder shall terminate upon earlier termination hereof, unless other agreed herein or by the Parties.
- 13.2 The termination (for any reason whatsoever) or expiry hereof shall not affect any right or responsibility accrued by either Party as to the termination hereof.
- 13.3 Party B shall facilitate the smooth transfer of the items, documents and materials in connection with this Product to Party A or any other Entity designated thereby in writing which transfer shall be finished within ten (10) days upon termination or expiry hereof under any circumstance.

13.4 Articles 1.1 (to the extent necessary to interpret the surviving articles), 8, 9, 12 and 17 hereof shall survive the termination or expiry hereof.

14 Force Majeure

14.1 Subject to Article 14.2, neither Party hereto shall be liable for any delay in performing or any failure to perform any of its obligations hereunder due to any Force Majeure Event.

14.2 If either Party hereto delays or is incapable of the performance of its obligations hereunder due to any Force Majeure Event, it must:

14.2.1 Notify the other party in writing as soon as reasonably practical of such delay or incapability and at the same time state the start date, scope, cause and estimated duration thereof;

14.2.2 Use the best reasonable efforts to minimize the impact of such delay or incapability on its performance of the obligations hereunder; and

14.2.3 Resume performance of its obligations hereunder as soon as reasonably practical following elimination of the cause of such delay or incapability.

14.3 The Parties may terminate this Agreement through negotiation if either Party is incapable of performing its obligations hereunder due to any Force Majeure Event for more than six (6) months.

15 Notice

15.1 Any notice made in accordance with or in respect of this Agreement must be written in Chinese, and be delivered personally or sent via express service or email to the address below (or any other address designated by the recipient in a notice from time to time):

15.1.1 Party A:

Address: Genetron Health (Beijing) Co. Ltd., Building 11, Zone 1, 8 Shengmingyuan Road, Life Science Park, Zhongguancun, Changping District, Beijing

Attn: [***]

Email: [***]

Tel.: [***]

15.1.2 Party B:

Address: (Jiangning High-tech Park) 1099, Fuying Road, Jiangning District, Nanjing, Jiangsu Province

Attn: [***]

Email: [***]

Tel.: [***]

15.2 Any notice shall be deemed served:

15.2.1 When the evidence submitted show it has arrived at the designated address, if it is delivered personally;

15.2.2 On the fifth (5th) Business Day upon being dispatched, if it is sent by express service; and

15.2.3 When it arrives at the recipient's mailing system, if it is sent via email.

16 Governing Law and Dispute Resolution

- 16.1 The conclusion, validity, interpretation, performance and dispute resolution hereof shall be governed by and construed in accordance with the laws of China.
- 16.2 Any dispute between the Parties arising from this Agreement or in connection herewith, or any controversy in connection with the conclusion, effectiveness or termination ("Dispute") shall be submitted to China International Economic and Trade Arbitration Commission ("CIETAC") to be resolved through arbitration in accordance with the then effective arbitration procedures and rules thereof. The seat of arbitration shall be in Beijing. The arbitration tribunal shall comprise three (3) arbitrators designated in accordance with the arbitration rules of CIETAC. The arbitration shall be held in Chinese. The arbitration award shall be final and binding upon the Parties. The Parties shall keep confidential the existence, content and result of the arbitration.

17 General Provisions

- 17.1 Neither Party may transfer any of its rights or obligations hereunder without the prior written consent of the other party. Either Party may delegate its obligations hereunder to any of its Affiliates, provided that it assumes the responsibility for the acts of such Affiliate. Notwithstanding the foregoing provisions, either Party shall be entitled to transfer and/or sublicense any of its obligations hereunder to its subsidiaries, whether in whole or part, without the prior consent of the other party.
- 17.2 This Agreement constitutes the entire agreement between the Parties with respect to the subject hereof, and shall supersede all prior written or oral agreements, arrangements and understandings between the Parties with respect to the subject hereof.
- 17.3 No provision hereof is intended and shall be deemed to create any partnership or joint venture between the Parties, or authorizes either Party to make or enter into any undertaking for or on behalf of the other party.
- 17.4 Any failure to exercise or any delayed exercise of any right or remedy hereunder or under any Applicable Law by either Party shall not be construed as a waiver by the Party of such right or remedy and shall not hinder or restrict further exercise by the Party of such right or remedy or any other right or remedy. Furthermore, any single or partial exercise of any right or remedy hereunder or under any Applicable Law shall not hinder or restrict further exercise of such right or remedy or any other right or remedy.
- 17.5 If any term hereof is deemed invalid, illegal or unenforceable in whole or in part by any court or any other competent authority, (a) the term (or the part thereof) shall be deemed to have been deleted to the extent necessary and the remaining terms shall not be affected; and (b) the Parties shall immediately revise the term (or the part thereof) through good-faith negotiation so that the term becomes valid, legal and enforceable and as approximate as possible to the initial commercial intention of the Parties, including without limitation with respect to validity period, scope or obligations.
- 17.6 No change shall be made to this Agreement, unless in writing and signed by the duly authorized representatives of the Parties.
- 17.7 This Agreement is made in four (4) counterparts of which the Parties respectively hold two (2).

(The remainder of this page is intentionally left blank. Following is the signature page.)

Genetron Health (Beijing) Co. Ltd.

/s/ Genetron Health (Beijing) Co. Ltd. (Seal)

Name of authorized signatory:

Title:

Signature

Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)
Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

(Signature page of the *Strategic Cooperation Agreement with respect to Liver Cancer Early Screening Product between Genetron Health (Beijing) Co. Ltd. and Chia Tai Tianqing Pharmaceutical Group Co. Ltd.*)

Chia Tai Tianqing Pharmaceutical Group Co. Ltd.

/s/ Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)

Name of authorized signatory:

Title:

Signature:

Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)

Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)
Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

Chia Tai Tianqing Pharmaceutical Group Co. Ltd. (Seal)
Genetron Health (Beijing) Co. Ltd. 1101140215851 (Seal)

Exclusive Business Cooperation Agreement

This Exclusive Business Cooperation Agreement (this “Agreement”) is made and entered into by and between the following parties on December 7, 2020 in Wuxi, Jiangsu, the People’s Republic of China (“**China**” or the “**PRC**”).

Party A: Genetron (Wuxi) Business Management Co., Ltd.

Address: Room 401, No. 1719-8 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China

Party B: Genetron (Wuxi) Biotech Co., Ltd.

Address: 5th Floor, 1719-15 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China

Each of Party A and Party B shall be hereinafter referred to as a “Party” respectively, and as the “Parties” collectively.

Whereas:

1. Party A is a foreign-invested enterprise registered in China and has the necessary resources to provide technical and consulting services. Genetron Health (Hong Kong) Company Limited (a company registered under the laws of Hong Kong) (the “**Hong Kong Company**”) holds 90% of Party A’s equity, Wuxi Huicheng Ruida Venture Capital Partnership (Limited Partnership) holds 6% of its equity, and Shanghai Shunfu Enterprise Management Service Center (Limited Partnership) holds 4% of its equity;
2. Party B is a limited liability company established in China, whose principal business is: the production of the second type of medical device; the third type of the production of medical device; the operation of the third type of medical device; the import and export of goods; the import and export of technology; Specific business items are subject to the approval results); technical services, technology development, technical consultation, technology exchange, technology transfer, technology promotion; corporate management; corporate management consulting; information consulting services (not including licensing information consulting services); health consulting Services (excluding diagnosis and treatment services); marketing planning; software development; software sales; sales of special chemical products (excluding hazardous chemicals); sales of first-class medical devices; sales of second-class medical devices (except projects subject to approval according to law, independently carry out business activities according to law with the business license); the businesses conducted by Party B currently and any time during the term of this Agreement are collectively referred to as the “Principal Business”;

3. Party A agrees to use its advantage of technology, personnel and information to provide relevant exclusive technical services, technical consultation and other services (for the specific scope refers to the following clauses) for party B during the term of this Agreement, and Party B agrees to accept the services provided by Party A or Party A's designated party' (hereinafter referred as to the **"Designated Party"**) under this Agreement; and
4. Party A and Party B desire to execute this Agreement with respect to the business cooperation between Party A and Party B.

Now, therefore, through mutual negotiation, the Parties have reached the following agreements:

1. **Services Provided by Party A**

- 1.1 Party B hereby appoints Party A as Party B's exclusive service provider to provide Party B with complete business support, technology support and consulting services during the term of this Agreement, in accordance with the terms and conditions of this Agreement. Such services may include all or part of services within the scope of the Principal Business of Party B as may be determined from time to time by Party A, including, but not limited to the following: technical service, network support, business consulting, intellectual property license, equipment leasing, marketing consultation, system integration, product research and development and system maintenance, management and consulting services related to Party B's business operation and, from time to time, provide other consultations and services(the **"Services"**) related to the foregoing services and according to Party B's requests, given that such requests are permitted under the PRC laws.
- 1.2 Party B agrees to accept all the consulting and Services provided by Party A. Party B further agrees that unless with Party A's prior written consent, during the term of this Agreement, Party B shall not and shall cause its subsidiary not to accept any consulting and/or services provided by any third party and shall not establish similar cooperation relationships with any third party regarding to the abovementioned matters. Party A may designate the Designated Parties, who may enter into certain agreements described in Section 1.4 with Party B, to provide Party B with the consulting and/or services under this Agreement.
- 1.3 In order to ensure Party B meets the cash flow requirement for its daily operations and/or to compensate any losses arising from the daily operation, regardless of whether Party B actually suffers from operational losses, Party A can independently decide to provide financial support to Party B (given that it is permitted by the PRC laws). Party A can provide financial support for Party B through entrusted loan to the extent permitted by the PRC laws (as defined below), for which the Parties shall sign a separate entrusted loan contract.

1.4 Service Providing Methodology

- (1) Party A and Party B agree that, during the term of this Agreement, the Parties may enter into further technology and consulting service agreements directly or through their respective affiliates with corresponding service ability and resources for the purpose that Party A can provides service to Party B, and reach an agreement on the contents, methods, personnel and fees of the specified services.
- (2) To fulfill this Agreement, the Parties agree that both Party A and Party B can enter into license agreements on intellectual property rights (including but not limited to: software, trademark, patents and technical secrets) directly or through their respective affiliates during the term of this Agreement. Such license agreements shall allow Party B to use the relevant intellectual property rights of Party A at any time according to the business needs of Party B.
- (3) To fulfill this Agreement, the Parties agree that both Party A and Party B can enter into equipment or plant leasing agreements directly or through their respective affiliates during the term of this Agreement. Such equipment or plant leasing agreements shall allow Party B to use the relevant equipment or plant of Party A at any time according to Party B's business needs.
- (4) To fulfill this Agreement, the Parties agree that both Party A and Party B can enter into other agreements such that Party A can provide other services to Party B directly or through their respective affiliates during the term of this Agreement.
- (5) Party A can independently decide to subcontract the services to be provided to Party B in part or full herein to a third party with the corresponding business capacity and resources.

1.5 For the purpose of providing services in accordance to this Agreement, the Parties shall promptly communicate with each other with regards to relevant information about business and/or other information about customers.

The service provided by Party A herein shall be exclusive.

1.6 In order to specify the Parties' rights and obligations and ensure that the foregoing service provisions are actually implemented, the Parties agree as follows, provided that they are permitted under the PRC laws:

- (1) Party B shall carry out its business in accordance with the opinions and suggestions provided by Party A under Article 1.1 herein.

- (2) Party B will appoint the nominee recommended by Party A as Party B's director through the appointment procedures of the PRC laws (including any laws, regulations, rules, notices, interpretations or other documents with binding force issued by the central government, local legislative, administrative or judicial departments before and after the signing of this Agreement, hereinafter referred to as the "**PRC laws**") and, to the extent permitted by the PRC laws, will appoint the senior manager recommended and employed by Party A as Party B's general manager, chief financial officer and other senior management personnel that are in charge of monitoring Party B's company business and operation. Except for retirement, resignation, disqualification or death, Party B shall not dismiss the company's director recommended by Party A under any circumstances without the prior written consent of Party A.
- (3) Party B agrees to cause Party B's director and senior manager exercise the powers that they have under the laws, regulations and articles of association based on Party A's instruction.
- (4) Party A may determine and adjust Party B's organization structure, and manage human resources of Party B.
- (5) Party A is entitled to conduct business activities related to the Services on behalf of Party B. Party B shall provide all necessary support and convenience for Party A to conduct such business activities smoothly, including without limitation, issuing all necessary power of attorney for the provision of services.
- (6) To the extent permitted by the PRC laws, Party A is entitled to check Party B's accounts periodically and at any time, and Party B shall keep its accounts accurately and in due course, and provide the accounts to Party A upon its request. Party B agrees to coordinate with Party A over auditing (including but not limited to connected transaction auditing and other various auditing contents) and provide related information about Party B's operation, business, customers, finance and staffs to Party A and/or auditor engaged by Party A during the term of this agreement, and also agree that Party A or its shareholders can disclose such information to satisfy the requirements of the securities regulation.
- (7) Party B agrees to deliver the relevant certificates and seals which are important to Party B's daily operation, including Party B's business license, organizational code certificate (if any), official seal, contract seal, special seal for finance and legal representative's seal, to Party B's director, legal representative, general manager, chief financial officer and other senior management personnel recommended by Party A and appointed by Party B according to legal procedures for custody.

- 1.7 The Parties agree that the Services provided by Party A to Party B under this Agreement shall also apply to the subsidiaries of Party B, and Party B shall cause its subsidiaries to exercise rights and fulfill obligations hereunder.
2. Calculation of Service Fee, Payment Mode, Financial Statements, Auditing and Taxation
- 2.1 With regard to the Services provided by Party A according to this Agreement and to the extent permitted by the PRC laws, Party B and Party B's subsidiary shall pay to Party A service fees (hereinafter referred to as "**service fees**") equivalent to the net profit of Party B and Party B's subsidiary after deducting the annual loss of the year before (if necessary), deducting the necessary costs, expenses and taxes within the corresponding fiscal year and withdrawing the statutory reserve fund, retained fund, staff award fund, welfare fund, enterprise development fund according to the law during the term of this Agreement; Party A is entitled to determine the foregoing deduction items. The amount of such service fees shall be determined by Party A. The calculation and adjustment of the service fees shall take into consideration the following factors without limitation, and Party A is entitled to independently decide to adjust the service fees without obtaining Party B's consent: (a) the difficulty in technologies provided by Party A and the complexity of technological consulting and other services provided by Party A; (b) the time required by Party A's technical staffs to provide such software development, technological consulting and other services; (c) specific content and commercial value of software development, technological consulting and other services provided by Party A; (d) market price of the services of the same type. The above services fee shall be remitted to the bank account of Party A by wire transfer or other manners agreed by the Parties after Party A has issued the payment instruction, and Party A may change the payment instructions from time to time. The Parties agree that the payment of the above service fees shall not cause any Party to have difficulties in its operation each year. For the purposes above, and to the extent of achieving the above principles, Party A is entitled to agree on Party B's delay of the service fees' payment to avoid any financial difficulties; and Party A is also entitled to make any other adjustments of the service fees as deemed reasonable by itself, but Party A shall send a written notice to Party B in advance.
- 2.2 Party A agrees that Party A will enjoy and undertake all economic interests and risks arising from Party B's business during the term hereof; When Party B suffers from operating loss or faces serious management difficulties, Party A shall provide financial support; in case of the occurrence of foregoing situation, Party A is entitled to decide whether Party B will continue its business operation and Party B shall accept Party A's decision unconditionally.

- 2.3 Party B shall prepare financial statements required by Party A in accordance with the requirements of applicable laws, generally acknowledged accounting standards and business practice.
- 2.4 After notified by Party A in advance, Party A and/or Party A's designated auditor is entitled to review Party B's relevant account books and record and copy necessary partial book accounts and records in the main office location of Party B so as to verify the accuracy in Party B's income and statements. Party B shall provide related information about Party B's operation, business, customers, finance and staffs according to Party A's requirements, and agree that Party A or Party A's direct or indirect shareholder can disclose or make such information publicly if necessary.
- 2.5 The tax arising from the execution of this Agreement shall be undertaken respectively by each party.

3. **Intellectual Property Right, Confidentiality and Prohibited Competition**

- 3.1 Party A shall have exclusive and proprietary ownership, rights and interests in any and all intellectual properties arising out of or created during the performance of this Agreement, including but not limited to software, trademarks, patents, technical secrets, trade secrets and others, and shall be entitled to use these rights for free.
- 3.2 To fulfill this Agreement, Party A and Party B agree that the Parties may execute intellectual property license agreements during the term of this Agreement, which shall permit Party B to use Party A's relevant intellectual property rights for free within Party B's business requirements, or Party A agrees to transfer part of Party A's intellectual property rights to Party B or register such intellectual property rights in Party B's name if necessary. However, Party B shall transfer the foregoing intellectual property rights registered under Party B to Party A at no consideration or at the lowest price permitted by law upon Party A's request. Party B shall execute all appropriate documents, take all appropriate actions, submit all filings and/or applications, render all appropriate assistance and otherwise conduct whatever is necessary as deemed by Party A at its sole discretion for the purposes of vesting any ownership, right or interest of any such intellectual property rights in Party A, and/or perfecting the protections for any such intellectual property rights in Party A. Party A is entitled to use any intellectual property registered under Party B for free.

- 3.3 Unless otherwise permitted by Party A, Party A shall have exclusive and proprietary ownership in any rights, ownership, interests and intellectual property rights generated or created by Party B and Party B's subsidiary during the term of this Agreement, including without limitation, existing and future total copyrights, patents (including invention patents, utility model patents and appearance design patents), patent applications, trademarks, trade names, brands, software, technical secrets, commercial secrets, relevant reputations, domain names and other any similar rights (herein after referred to as "**the rights**"), whether or not developed by Party A or Party B. Party B shall not claim any of the rights from Party A. Party B shall sign all documents and take all actions for Party A to become the owner of the rights. Party B shall guarantee that there is no defects of right for the rights and will compensate any losses to Party A for any defects of rights.
- 3.4 Without Party A's prior written consent, Party B shall not and shall cause its subsidiaries not to transfer, sell, mortgage, permit or dispose of the rights in other ways.
- 3.5 Party B shall manage the rights according to Party A's instruction from time to time, including without limitation, the transferring or authorizing of the rights to Party A to the extent permitted by the PRC laws.
- 3.6 The Parties admit that any oral or written information exchanged between the Parties in connection with this Agreement are regarded as confidential information. Each party shall maintain confidentiality of all such confidential information, and without written consent of other parties, any Party shall not disclose any relevant confidential information to any third party, except for information that are:
(a) known to the public (not disclosed to the public by the Party receiving the information); (b) disclosed according to the requirements of applicable laws or any stock exchange; or (c) required to be disclosed by any Party to its legal or financial consultant to fulfill transactions contemplated hereunder, provided that such legal or financial consultant is also bound by confidentiality obligations similar to those set forth in this article. Disclosure of any confidential information by the employees or institutions employed by any Party shall be deemed as disclosure of such confidential information by such Party, and such Party shall be held liable for breach of this Agreement. This article shall survive the termination of this Agreement, notwithstanding the reason for the termination.
- 3.7 Party B shall not sign any documents or make relevant commitments that conflict with the legal documents, such as agreements in the process of implementation signed by Party A and its Designated Party; Party B shall not cause conflict of interests between Party B, Party A and Party A's shareholder through action or omission. In case of such conflict of interest (Party A is entitled to decide whether such conflict of interest exists), Party B shall immediately take measures to eliminate it as much as possible, subject to the approval by Party A or Party A's Designated Party. In case that any measures to eliminate the conflict of interest are rejected, Party A is entitled to execute the purchase right in the "Exclusive Option Agreement".

- 3.8 Within the term of this Agreement, all customer information relating to Party B's business and the Services provided by Party A and other related documents shall be possessed by Party A.
- 3.9 The Parties hereby agree that Article 3 shall survive the modification, cancellation or termination of this Agreement.

4. Representations, Warranties and Covenants

4.1 Party A hereby represents, warrants and covenants as follows:

- (1) Party A is a foreign-invested company legally registered and validly existing in accordance with the PRC laws, is an independent legal person, possesses complete and independent legal status and capacity, has obtained appropriate authorization to sign, deliver and execute this Agreement, and can serve as the subject of litigation independently.
- (2) Party A signs and executes this Agreement in accordance with its legal person qualification and within its business scope, with necessary permits, records and qualifications to provide the services hereof. Party A has taken necessary corporate action, obtained appropriate authorization and also the permission and approval of third party and governmental institutions to fulfill the transactions contemplated hereunder, and will not violate laws or restrictions applicable to Party A.
- (3) After the execution and delivery of this Agreement, this Agreement will constitute Party A's legal, valid and binding obligations, and shall be enforceable against it in accordance with its terms.

4.2 Party B hereby represents, warrants and covenants as follows:

- (1) Party B is a company legally registered and validly existing in accordance with the PRC laws, is an independent legal person, has complete and independent legal status and capacity, has obtained appropriate authorization to sign, deliver and execute this Agreement, and can serve as the subject of litigation independently.
- (2) Party B's acceptance of the services provided by Party A does not violate any the PRC laws; Party B signs and executes this Agreement in accordance with its legal person qualification and within its business scope; Party B has taken necessary corporate action, obtained appropriate authorization and also the permission and approval of third party and governmental institutions to fulfill the transactions contemplated hereunder, and will not violate laws or restrictions applicable to Party B.

- (3) After the execution and delivery of this Agreement, this Agreement will constitute Party B's legal, valid and binding obligations, and shall be enforceable against it in accordance with its terms.
- (4) There are no existing or threatened litigation, arbitration or other judicial or administrative procedures known to Party B that may affect Party B's ability to perform the obligations herein. In case of any litigation, arbitration or other judicial or administrative penalty occurring or possibly occurring to Party B's assets, businesses or income, Party B shall instantly notify Party A after learning of the fact.
- (5) Party B has already disclosed all contracts, government approvals and licenses that may have significant adverse effect on Party B's ability to fully fulfill the obligations herein or documents binding Party B's assets or businesses. There is no misrepresentation or omission of any major facts in documents provided by Party B to Party A previously.
- (6) Party B shall pay service fees to Party A in full according to the clauses herein and maintain the continuous validity of related licenses and qualifications of business of Party B and Party B's subsidiaries, and assist Party A, provide sufficient cooperation with Party A, actively cooperate over the services provided by Party A in all affairs for Party A to effectively execute the responsibilities and obligations herein, and also accept reasonable comments and suggestions from Party A relating to the businesses of Party B and Party B's subsidiaries.
- (7) Without Party A's prior written consent, beginning from the signing date of this Agreement, Party B shall not and shall cause Party B's subsidiary not to sell, transfer, mortgage or dispose in through other ways any assets (except for assets of less than RMB1,000,000 necessary for normal business operation), business, right of management and legitimate rights and interests.
- (8) Without Party A's prior written consent, Party B shall not pay any expenses to any third party for any reason except for reasonable expenditures in the course of normal business operation, and shall not exempt any third party's debts or borrow or lend loan to any third party, or provide guarantee or warranty, or allow any third party to place other security interests on Party B's assets or interests.

- (9) Without Party A's prior written consent, beginning from the signing date of this Agreement, Party B shall not and shall cause Party B's subsidiary not to incur, inherit, guarantee or tolerate any debts (except debt of less than RMB1,000,000 necessary for normal business operation).
- (10) Without Party A's prior written consent, beginning from the signing date of this Agreement, Party B shall not and shall cause Party B's subsidiary not to sign any major contracts (except the contract of less than RMB1,000,000 necessary for normal business operation) or sign any other contracts, agreements or arrangements conflicting with this Agreement or possibly damaging Party A's rights and interests herein.
- (11) Party B shall not cause conflict of interest between Party B and Party A and its shareholders in the manner of act or omission. In the event of such conflict of interest (Party A is entitled to decide whether such conflict of interest arises unilaterally), Party B shall take measures to eliminate as soon as possible with the consent of Party A or its Designated Party.
- (12) Without Party A's prior written consent, Party B shall not and shall cause Party B's subsidiary not to be merged into or constitute a joint entity with any third party, invest in or purchase any third party or be invested in, purchased or controlled, increase or decrease the registered capital, change the corporation form or registered capital structure in other ways or accept the investment and capital increase of existing shareholders or third party in Party B, or liquidate and dissolve beginning from the signing date herein.
- (13) To the extent permitted by relevant the PRC laws, Party B will appoint candidates recommended by Party A as Party B's director; Except for written permission from Party A or with legal reasons, Party B shall not refuse to appoint the candidate recommended by Party A by any reasons.
- (14) Party B shall hold any and all governmental licenses, certificates, authorizations and approvals necessary for operating business during the term of this Agreement, and also shall ensure all foregoing governmental licenses, certificates, authorizations and approvals are effective and legal during the entire term of this Agreement. In case of alteration and/or increase of governmental licenses, certificates, authorizations and approvals for Party B to operate business during the term of this Agreement due to changes of provisions of relevant government authorities, Party B shall implement the alteration and/or supplementation according to the requirements of related local laws.

- (15) Immediately notify Party A of occurrence or possible occurrence of situations that may have material adverse effect on Party B's business and operation, and put forth its best effort to prevent such situation from occurring and/or prevent losses from increasing.
 - (16) Without Party A's prior written consent, Party B and /or Party B's subsidiary shall not modify articles of association, change principal business, change business scope, model, profit model, marketing strategies, business principles or make material adjustments in customer relations.
 - (17) Without Party A's prior written consent, Party B and /or Party B's subsidiary shall not have any arrangement of entering into any partnership or joint venture or profit sharing with any third party, or other arrangements, such as payment of usage fees, service fees or consulting fees, to transfer benefits or share profits.
 - (18) Upon Party A's request, Party B shall provide information about Party B's operation management and financial condition to Party A from time to time.
 - (19) Without Party A's prior written consent, Party B shall not disclose or distribute profits, dividends or any other interests to other shareholders.
 - (20) Provide Party A any technologies or other information that is necessary or useful for Party A to provide services contemplated herein, and permit Party A to use relevant equipment, materials, information of Party B deemed necessary or useful in providing services hereunder.
 - (21) Without Party A's prior written consent, Party B shall not alter, change or dismiss Party B's director and senior manager.
- 4.3 The Parties represents to each other: In the event that the PRC laws allows Party A to directly hold Party B's equities and permits Party A and/or Party A's subsidiaries (if any) to be engaged in Party B's business, and if Party A intends to directly hold Party B's equities, the Parties will terminate this Agreement immediately.

5. Validation and Effective Term

This Agreement shall take effect as of the signing date. Unless this Agreement is terminated according to Article 6.2 herein, the Agreement shall remain effective for ten (10) years which may be extended by Party A. If Party A fails to confirm the renewal of this Agreement upon the expiration of this Agreement, this Agreement shall be automatically renewed until Party A delivers the confirmation letter to determine the renewal term of this Agreement.

6. **Termination**

- 6.1 Unless otherwise renewed according to relevant sections hereunder, this Agreement shall be terminated on the expiration date.
- 6.2 This Agreement shall be terminated:
- (a) On the effective date of Party B's bankruptcy, liquidation, termination or dissolution in accordance with the law prior to the expiration date of this Agreement;
 - (b) On the effective date of the transfer of Party B's equities and assets to Party A pursuant to the "Exclusive Option Agreement" signed by the Parties and Party B's existing shareholder on December 7, 2020;
 - (c) On the date when Party A is officially registered as Party B's sole shareholder after Party A is permitted to directly hold Party B's equities under the PRC laws and Party A and/or Party A's subsidiaries and branches can legally engage in Party B's business;
 - (d) On the expiration date of the written notification of terminating this Agreement sent by Party A to Party B 30 days in advance at any time within the effective term of this Agreement;
 - (e) Terminated in advance in accordance with the provisions of Article 7 herein.
- 6.3 Party B shall not terminate this Agreement during the term of this Agreement. Party A shall not undertake the responsibility for breach of this Agreement if it terminates this Agreement unilaterally in accordance with Article 6.2(d).
- 6.4 The rights and obligations of Article 3,5,7,8,10,11 and 16.3 shall survive the termination of this Agreement.
- 6.5 Each Party's payment obligations (including but not limited to the service fees) herein due on the termination date of this Agreement or before the expiry date of this Agreement will not be exempted and any liability for breach of the contract before the termination of this Agreement will also not be exempted when this Agreement is terminated in advance or expired for any reason. All payable service fees before the termination and expiry of this Agreement shall be paid to Party A within 15 working days as of the termination date of this Agreement.

7. **Liability for Breach of this Agreement**

- 7.1 Unless otherwise specified in other articles herein, if Party B(the “**Defaulting Party**”) fails to fulfill certain obligations herein or violates this Agreement in other ways, Party A (the “**Damaged Party**”) may: (a) notify the Defaulting Party of the nature and scope of the violation in writing and ask the Defaulting Party to remediate at its own expense within a reasonable period of time (hereinafter referred to as “**Remediation Period**”); and if the Defaulting Party fails to take remedial measures during the Remediation Period, the Damaged Party is entitled to ask the Defaulting Party to undertake all responsibilities for its violation and also compensate all actual economic losses due to the Damaged Party, including without limitation, the legal fees incurred in litigation and arbitration proceedings relating to the violation. The Damaged Party is also entitled to ask the Defaulting Party to perform its contractual obligations and petition the court or the relevant arbitration institution to issue an order of specific performance or compulsory performance by the Defaulting Party; (b) terminate this Agreement and ask the Defaulting Party to undertake all responsibilities for its violation and also compensate all damages; or (c) place the pledged equity on discount, auction or selling according to the Equity Interest Pledge Agreement signed on December 7, 2020 by and among the Parties and Party B’s existing shareholders, be entitled to compensation priority in the amount of discount, auction and selling, and ask the Defaulting Party to undertake all losses hereof. While exercising the foregoing remedial right, the Damaged Party is entitled to other remedial rights regulated herein and under the relevant laws and regulations.
- 7.2 The Parties hereby agree and confirm that, unless otherwise compulsorily provided by the PRC laws, if Party B is the Defaulting Party, the Damaged Party is entitled to terminate this Agreement unilaterally and ask the Defaulting Party to compensate the losses.

8. **Governing Laws, Dispute Resolution and Modification of Law**

- 8.1 The signing, validation, interpretation, implementation, revision and termination of this Agreement and settlement of disputes herein shall be governed by the PRC laws.

- 8.2 Any disputes arising from the interpretation and implementation of this agreement shall be firstly solved through the Parties' friendly negotiations. In case that the consensus on settlement of such disputes is not reached within 30 days after any Party asks the other party to reach solution through friendly negotiations, any Party can submit the disputes to China International Economic and Trade Arbitration Commission, which gives verdict according to the prevailing arbitration rule at that time. The arbitration shall take place in Beijing and language for arbitration shall be Chinese. The arbitration award is final and binding on each party. The arbitral tribunal can order Party B to compensate the losses of Party A with Party B's equity interests, assets or property rights and interests, reach judgment of mandatory relief through mandatory transfer of related business or assets or order Party B to declare bankruptcy. After the arbitration award becomes effective, any Party is entitled to petition the relevant court to execute the arbitration award. If necessary, the arbitral institution is entitled to order the Defaulting Party to cease the breach of this Agreement or refrain from actions that would increase the losses to Party A before making final verdict for the disputes of all parties. The courts in Hong Kong, Cayman Islands, China or other places with right of jurisdiction (including the court in the place of Party B, or the court in the place of main asset of Party A or Party B shall be deemed as the court with right of jurisdiction) similarly are entitled to confer or execute the verdict of the arbitral tribunal and is also entitled to make judgment or execute temporary relief for Party B's equity or property interests, and give verdict or judgment of providing certain temporary relief for the party instigating the arbitration before the establishment of arbitral tribunal or in other appropriate circumstances, such as reaching verdict or judgment of ordering the Defaulting Party to cease the breaching of this Agreement or not to cause additional losses to Party A.
- 8.3 In the arbitration for any disputes arising from the interpretation and implementation of this Agreement, the Parties herein shall continue executing other rights and obligations herein respectively except the matters herein in dispute.
- 8.4 Due to the issuing or alteration of any the PRC laws, rules or regulations or due to the change in interpretation or application of such laws, rules or regulations any time after the signing date, the following agreement shall be applicable: to the extent permitted by the PRC laws, (a) if the alteration of laws or newly issued regulations are more preferential for a Party compared to the relevant laws, decrees, orders or regulations that were in effect on the signing date hereof, each Party shall actively and immediately apply for obtaining the benefits brought by the modification or new regulations and put forth their best effort to obtain the approval for the application; or (b) in case that any Party's economic benefit is directly or indirectly adversely influenced due to the alteration of foregoing laws or newly issued regulations, this Agreement shall be continuously executed as scheduled. All parties shall obtain the exemption from the altered or new regulations through legal means. If the negative effect on the economic benefit of any Party cannot be resolved under this Agreement, all Parties shall immediately negotiate and make all necessary alterations to this Agreement after receiving the notification of the affected Party to safeguard the economic benefit of the affected Party.

9. Force Majeure

- 9.1 “**Force majeure**” refers to events that cannot be foreseen, avoided and overcome so that the this Agreement cannot be executed in part or full. Such events include but are limited to earthquake, typhoon, flood, water disaster, war, strike, turmoil, governmental behavior, changes to legal regulations or their application.
- 9.2 In case of the occurrence of a force majeure event, a Party’s obligation that is being affected by force majeure shall be automatically suspended during the delay caused by force majeure, and the party’s period of implementation of this Agreement shall be automatically prolonged. The prolonged period is the period of the suspension, and the party shall not undertake responsibility and suffer from punishment for it. In case of force majeure, all parties shall instantly negotiate with each other to seek a fair solution and try to minimize effect of force majeure by exerting all reasonable efforts.

10. Compensations

With regard to any litigation and claim for compensation directed at Party A or any losses, damages, responsibilities or expenses incurred arising from the consultation and services provided by Party A pursuant to Party B’s requests, Party B shall compensate Party A so that Party A is free of damages unless such losses, damages, responsibilities or expenses are incurred due to party A’s grievous fault or intentional misconduct.

11. Notices

- 11.1 All notices and other communications required or permitted to be given pursuant to this Agreement shall be delivered personally or sent by registered mail, postage prepaid, by a commercial courier service or by facsimile transmission to the address of such parties set forth in Exhibit I. A confirmation copy of each notice shall also be sent by email. The date on which such notices shall be deemed to have been effectively given shall be determined as follows:
- (1) Notices given by personal delivery, by courier service or by registered mail, postage prepaid, shall be deemed effectively delivered on the date of receipt or refusal at the address specified for notices.
 - (2) Notices given by facsimile transmission shall be deemed effectively delivered on the date of successful transmission (subject to transmission confirmation information automatically generated).

- 11.2 Any party can change the receiving address, fax and/or e-mail address when notifying other parties in accordance with the article herein.
12. **Transfer**
- 12.1 Without prior written consent of Party A, Party B shall not transfer the rights and obligations herein to any third party.
13. **Severability**
- In case that one or several of the terms of this Agreement are found to be invalid, illegal or unenforceable in any aspect in accordance with any laws or regulations, the validity, legality or enforceability of the remaining provisions of this Agreement shall not be affected or compromised in any respect. All parties shall strive for replacing such invalid, illegal or unenforceable terms with effective ones to the extent permitted by law and in accordance with the expectations of each party through friendly negotiation, and the economic effect of such effective terms shall be as close as possible to the that of those invalid, illegal or unenforceable terms.
14. **Revision and Supplementation**
- 14.1 Any revision and supplementation of this Agreement shall be made in writing. Any revision and supplementary agreement signed by the Parties relating to this Agreement shall be the inalienable part of this Agreement, having the same legal effect.
- 14.2 If revision of this Agreement is proposed by related Stock Exchange or other regulatory institutions, or is required according to securities listing regulations of the related Stock Exchange or related regulations, rules and guiding requirements, this Agreement shall be revised by the Parties reasonably.
15. **Text**
- This Agreement has two copies with one held by each Party, having the same legal effect.
16. **Miscellaneous**
- 16.1 Except for the amendments, supplements or changes in writing executed after the execution of this Agreement, this Agreement shall constitute the entire agreement reached by and among the Parties hereto with respect to the subject matter hereof, and shall supersede all prior oral and written consultations, representations and contracts reached with respect to the subject matter of this Agreement.

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- 16.2 This Agreement shall have binding force on successors of the Parties and their respective transferees who are approved by the Parties.
- 16.3 Any Party may waive the rights of this Agreement, provided that such a waiver must be provided in writing and shall require the signatures of the Parties. No waiver by any Party in certain circumstances with respect to a breach by other Parties shall operate as a waiver by such a Party with respect to any similar breach in other circumstances.
- 16.4 The titles of this Agreement are for convenience in reading only, and shall not be used to interpret, explain or influence the meanings regulated herein.

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(This page is intentionally left blank and is the signing page of this Exclusive Business Cooperation Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Business Cooperation Agreement as of the date and at the address first above written.

Genetron (Wuxi) Business Management Co., Ltd.

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Exclusive Business Cooperation Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Business Cooperation Agreement as of the date and at the address first above written.

Genetron (Wuxi) Biotech Co., Ltd.

By: /s/ Sizhen Wang

Shareholder Voting Rights Entrustment Agreement

This Shareholder Voting Rights Entrustment Agreement (hereinafter referred to as the “**Agreement**”) is signed among following Parties on December 7, 2020 in Wuxi, Jiangsu, the People’s Republic of China (the “**PRC**”).

Party A: Genetron (Wuxi) Business Management Co., Ltd., a limited liability company, organized and existing under the laws of the PRC, with its address at Room 401, No. 1719-8 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

Party B: Wang Sizhen, a Chinese citizen with Chinese Identification No.: 110108197610316015; and
Jiao Yuchen, a Chinese citizen with Chinese Identification No.: 120101197704302519.

Party C: Genetron (Wuxi) Biotech Co., Ltd., a limited liability company organized and existing under the laws of PRC, with its address at 5th Floor, 1719-15 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

Whereas:

1. Party B is the current shareholder of Party C. By the signing date of this Agreement, Party B held all of Party C’s equity (hereinafter referred to as “**Party C’s Equity Interest**”);
2. Party A is a foreign-invested enterprise registered in Wuxi. Genetron Health (Hong Kong) Company Limited (a company registered under the laws of Hong Kong) (the “**Hong Kong Company**”) holds 90% of Party A’s equity, Wuxi Huicheng Ruida Venture Capital Partnership (Limited Partnership) holds 6% of its equity, and Shanghai Shunfu Enterprise Management Service Center (Limited Partnership) holds 4% of its equity.
3. The Parties hereunder signed an Exclusive Option Agreement (hereinafter referred to as the “**Exclusive Option Agreement**”) on December 7, 2020. To the extent permitted by the PRC laws and corresponding requirements, if Party A makes a purchase request based on its independent judgment: (a) Party B shall transfer Party C’s Equity Interest that it holds to Party A in whole or in part according to its requirements; (b) Party C shall transfer all or part of its assets to Party A according to its requirements.
4. The Parties to this Agreement entered into an Equity Interest Pledge Agreement (hereinafter referred to as the “**Equity Pledge Agreement**”) on December 7, 2020. Thus, Party B pledges all of the Equity Interest it holds in Party C (Party C’s Equity Interest) to Party A as pledge guarantee for the Contract Obligations and Secured Indebtedness thereunder.

5. Party A and Party C entered into an Exclusive Business Cooperation Agreement (including revisions from time to time, hereinafter referred to as the **“Business Cooperation Agreement”**) on December 7, 2020. Party A shall provide Party C with related exclusive technical services, technical consultations and other services based on the Business Cooperation Agreement.
6. To guarantee and protect the performance of the Business Cooperation Agreement and Party A's lawful rights and interests, the Parties intend to sign this Agreement on matters such as Party B's entrusted shareholder voting rights to Party A.

The Parties agree as follows after friendly negotiation:

1. Proxy Rights

- 1.1 Party B severally and not jointly, unconditionally and irrevocably undertakes to sign the Power of Attorney (hereinafter referred to as the **“Power of Attorney”**) with the same content and format as shown in Appendix I of this Agreement after signing this Agreement, and authorize Party A or Party A's designee (hereinafter referred to as the **“Trustee”**) according to Party A's instructions to exercise all of its rights as Party C's shareholder and rights representing Party B in exercising all shareholders' rights in all matters of Party C according to Party C's current articles of association, joint venture contract, Transaction Documents(as defined in the **“Equity Pledge Agreement”**), and applicable laws and regulations. Such shareholder's rights (hereinafter referred to as **“Proxy Rights”**) shall include but not limited to:
 - 1) Exercising all of Party B's shareholder's rights, voting rights, as the shareholder of Party C, under the PRC laws (including all laws, rules, regulations, notices, interpretations or other binding documents promulgated by any central or regional legislative, administrative or judicial departments before or after signing this Agreement, which are hereinafter referred to as the **“PRC laws”**) and Transaction Documents(as defined in the Equity Pledge Agreement) and Party C's articles of association and joint venture contract (including any other shareholders' voting rights specified after the articles of association and joint venture contract are revised), including but not limited to rights to share dividends, sell or transfer or pledge Party C's Equity Interest in part or in whole;

- 2) According to particular clauses of election of the legal representative in Party C's articles of association and joint venture contract, appoint or replace Party C's legal representative (Chairman of the Board of Directors), director, supervisor, CEO (or manager) and other senior managers on behalf of Party B; when the actions of the directors, supervisors or senior managers of Party C damage the interests of Party C or its shareholders, filing a lawsuit or taking other legal acts against them.
 - 3) Signing documents to exercise shareholder rights related to Party C's Equity Interest (but not including signing Transaction Documents (as defined in the Equity Pledge Agreement) or any revision thereof) and documents archived in the relevant company registry (if needed).
 - 4) Exercising voting rights at the time of Party C's bankruptcy, liquidation, dissolution or termination on behalf of Party C's registered shareholders;
 - 5) Exercising the rights to allocate Party C's residual assets after Party C's bankruptcy, liquidation, dissolution or termination;
 - 6) Deciding matters relating to the submission and registration of documents regarding Party C to and with government agencies; and
 - 7) Lawfully exercising all of the shareholder's rights regarding disposition of Party C's assets, including but not limited to the rights to manage businesses about its assets, obtain its incomes and acquire its assets.
- 1.2 Without limiting generality of the power granted hereunder, Party A shall own the power and authorities hereunder, sign the share transfer contract (to which Party B must be a party) agreed and defined in the Exclusive Option Agreement on behalf of Party B, and perform the Equity Pledge Agreement and the Exclusive Option Agreement which were signed on the same day this Agreement was signed and to which Party B is also a party.
- 1.3 Party B as a shareholder of Party C shall not abuse its shareholder rights to the detriment of Party C's interests. If Party B abuses the rights of shareholders, Party A has the right to exercise the Purchase Right under the Exclusive Option Agreement.
- 1.4 Party B hereby specially undertakes that in case of Party C's bankruptcy, liquidation, dissolution or termination, all assets obtained by Party B after such bankruptcy, liquidation, dissolution or termination, including Party C's Equity Interest, shall be transferred to Party A for free or at the minimum prices to the extent permitted by the current PRC laws, or the current liquidator shall sell all of Party C's assets including the Equity Interest for the purpose of protecting interests of Party A's direct or indirect shareholders and/or the creditor's interests.

- 1.5 Party B agrees that Party A shall have rights to transfer the proxy rights to a third party at its discretion with respect to the matters under Article 1.1. The trustee and/or Party A shall exercise the proxy rights as if Party B is exercising its shareholder's rights personally. The proxy rights shall be granted and entrusted on the premise that the trustee is a member of Party A's Board of Directors, or a Chinese citizen designated by the Board of Directors through negotiation, and that Party B agrees to such authorization and consignment. When Party A notifies Party B in writing of replacing the trustee, Party B shall immediately agree that the other entity or Chinese citizen appointed by Party A may exercise such proxy rights, and sign the Power of Attorney with the content and format as shown in Appendix I of this Agreement. The new power of attorney shall supersede the original one once it is executed. Besides, Party B shall notify related personnel through a notice or other forms of announcement to announce or specify that the original Power of Attorney has been nullified. In addition, Party B shall not revoke the consignment and authorization for the trustee and/or Party A.
- 1.6 Subject to other terms of this Agreement (including but not limited to Article 11.1), Party B shall confirm and acknowledge all legal consequences resulting from the trustee's and/or Party A's exercising of above proxy rights, and undertake corresponding legal responsibilities.
- 1.7 All of the trustee's and/or Party A's behaviors related to Party C's Equity Interest and/or exercising of the proxy rights shall be deemed as Party B's own behaviors. And all documents(but not including Transaction Documents(as define in the Equity Pledge Agreement) or any revision thereof) signed by the trustee and/or Party A shall be assumed to have been signed by Party B. The trustee and/or Party A may act in their discretion without Party B's prior consent. Party B hereby specially acknowledge and approves the trustee's and/or Party A's such behaviors and/or documents.
- 1.8 Within the term of this Agreement, Party B agrees and confirms, without the prior written consent of Party A, shall not to personally perform all its shareholder rights related to Party C's Equity Interest which have been granted to Party A and/or the trustee.
- 1.9 In case that Party B is subject to death, incapacity, marriage, divorce, bankruptcy, liquidation, dissolution, or other circumstances which might impact its holding of Party C's Equity Interest, Party B's successor(including spouse, children, parents, siblings, grandparents) or current shareholder of Party C's Equity Interest or the assignee shall be deemed as a party to this Agreement and inherit/bear all of the Party B's rights and obligations under this Agreement.

2. Right to know

- 2.1 To exercise the proxy rights hereunder, Party A and/or the trustee shall have rights to obtain Party C's relevant information (including Party C's operations, businesses, customers, financial affairs and employees) and review relevant materials of Party C, while Party C shall be cooperative to help them acquire such information.

3. Exercise of the Proxy Rights

- 3.1 Party B shall fully assist the trustee and/or Party A in exercising the proxy rights, including promptly signing related legal documents when necessary (e.g. for the purpose of meeting requirements of documents which must be submitted for examination, approval, registration and archiving by government agencies, laws, rules, regulations, normative documents, corporate articles of association, joint venture contract, commands or orders of other government agencies), including but not limited to the Power of Attorney which specifies the scope of authorization (if stipulated by relevant laws, rules, regulations, articles of association, joint venture contract, or other normative documents).
- 3.2 Party B irrevocably agrees that when Party A makes a written request to exercise the proxy rights, Party B shall take actions to satisfy Party A's requests to exercise such rights in accordance with Party A's written request within three (3) days upon receiving the request.
- 3.3 Should the proxy rights hereunder cannot be authorized or exercised for any reason (other than Party B's or Party C's breach of this Agreement) at any time within the term of this Agreement, all Parties shall immediately seek an alternative plan the content of which is the consistent to this Agreement. If necessary, a supplemental agreement shall be signed to modify or revise terms of this Agreement, in order to continue realizing the purposes of this Agreement.

4. Disclaimer and Indemnification

- 4.1 The Parties of this Agreement confirm that in any case, Party A shall not be required to undertake any responsibility, make any economic or other compensations to any third party for its or its designated trustee's exercise of the proxy rights hereunder.
- 4.2 Subject to other terms of this Agreement (including but not limited to Article 11.1), Party B and Party C agree to indemnify Party A from all actual or potential losses and damages for its or its designated trustee's exercise of the proxy rights, including but not limited to the losses arising from a third party's lawsuits, recovery, arbitrations or claims or government authorities' administrative surveys or punishments. However, Party A shall not be indemnified from the losses resulting from Party A's and/or the trustee's deliberate or gross negligence.

5. Representations and Warranties

5.1 Party B hereby severally and not jointly represents and warrants as follows:

- 5.1.1 Party B has completed and independent legal status and capacity. Besides, Party B has been legitimately authorized to sign, deliver and perform this Agreement as an independent subject of litigations.
- 5.1.2 Party B possesses the full power and authorities to sign and deliver this Agreement and all other documents related to transactions hereunder. Party B also possesses the full power and authorities to complete such transactions. This Agreement shall be legitimately and appropriately signed and delivered. It shall constitute legitimate and binding obligations, which shall be compulsorily fulfilled according to this Agreement.
- 5.1.3 Party B is Party C's legitimate shareholder registered with an administration for industry and commerce and recorded on the Register of Shareholders when this Agreement takes effects. The proxy rights shall not include any third-party rights except for those specified under this Agreement, the Equity Pledge Agreement, the Exclusive Option Agreement and Transaction Documents (as defined in the Equity Pledge Agreement). According to this Agreement, Party A and/or the trustee may completely and fully exercise the proxy rights based on Party C's current articles of associations and joint venture contract.
- 5.1.4 Party B's signing, delivery or performance of this Agreement and completion of the transactions hereunder will not violate the PRC laws, or any agreements, contracts or other arrangements that Party B enters into with a third party.

5.2 Party A and Party C hereby represents and warrants as follows:

- 5.2.1 They are limited liability companies legitimately incorporated and validly existing under laws of their registered place. They have complete and independent legal status and capacity for signing, delivering and performing this Agreement as an independent subject of litigations.
- 5.2.2 They possess the full internal corporate power and authorities to sign and deliver this Agreement and all other documents related to transactions hereunder. They also possess the full power and authorities to complete such transactions.

- 5.3 Party C hereby further represents and warrants as follows:
- 5.3.1 Party B is Party C's lawful shareholder when this Agreement takes effects. The proxy rights shall not include any third-party rights except for those specified under this Agreement, the Equity Pledge Agreement and the Exclusive Option Agreement. According to this Agreement, Party A and/or the trustee may completely and fully exercise the proxy rights based on Party C's current articles of association and joint venture contract.
- 5.3.2 Party B's signing, delivery or performance of this Agreement and conclusion of the transactions hereunder will not violate the PRC laws, or any agreements, contracts or other arrangements that Party B enters into with a third party and is bound as one party.

6. Term of the Agreement

- 6.1 On the premise that Party B or Party B's successor or current assignee of Party C's Equity Interest is Party C's shareholder, this Agreement shall be irrevocable and remain valid from the date of signing this Agreement unless otherwise instructed by Party A, or Party A terminates this Agreement according to Article 7.2 or Article 8 before it expires. Once Party A informs Party B in writing of terminating this Agreement in whole or in part or replacing the trustee, Party B shall immediately revoke its consignment and authorization for Party A and the trustee. Besides, Party B shall immediately sign a Power of Attorney in the format as shown in Appendix I of this Agreement to authorize and entrust other personnel or subjects nominated by Party A with the same terms of this Agreement according to Party A's written instructions.
- 6.2 This Agreement shall be automatically terminated: (a) on the date on which Party A is formally registered as Party C's sole shareholder once the PRC laws stipulate that Party A may directly hold Party C's Equity Interest and lawfully engage in Party C's businesses; or (b) if Party A purchases all assets of Party C in accordance with the provisions of the Exclusive Option Agreement, and legally engage in Party C's business by using Party C's assets.

7. Liability for Breach of Contract

- 7.1 Subject to other terms of this Agreement (including but not limited to Article 11.1), All Parties of this Agreement agree and confirm that if any party (hereinafter referred to as the "**Defaulting Party**") violates any clause hereunder, or fails to perform or delays its performance of any obligation hereunder, such party shall be deemed to have constituted a breach of this Agreement (hereinafter referred to as "**breach**"). In this case, any of other non- Breaching Parties (hereinafter referred to as the "**Non-Defaulting Parties**") shall have rights to ask the Defaulting Party to take corrective or remedial actions within a reasonable deadline. If the Defaulting Party fails to take corrective or remedial actions within a reasonable term or within ten (10) days after the other Party notifies the Defaulting Party in writing and makes the request for correction:
- 7.1.1 The Non-Defaulting Parties shall have rights to unilaterally and immediately terminate this Agreement and ask the Defaulting Party to compensate for damages provided that Party B or Party C is the Defaulting Party;

- 7.1.2 If Party A is the Defaulting Party, the Non-Defaulting Parties shall indemnify Party A from the compensation for damages. Unless otherwise specified by laws, this Agreement shall not be terminated or rescinded in any other cases.
- 7.2 Notwithstanding other provisions of this Agreement, Article 8 shall survive the termination of this Agreement.

8. Confidentiality

All Parties admit that all oral or written materials exchanged with respect to this Agreement are confidential. All Parties are required to keep such materials confidential. Without the prior written consent of all other Parties, no party is allowed to disclose any related materials to a third party unless in following cases: (a) Such materials have been known to the public (but not disclosed by the party receiving such materials); (b) The materials are required to be disclosed by applicable laws or rules of any securities exchange; or (c) Any party of this Agreement discloses the materials to its legal adviser or financial adviser regarding the transactions specified hereunder, while such legal adviser or financial adviser is also bound by the same confidentiality obligations as those under this article; or (d) Any party that is a limited partnership (or a direct or indirect affiliate or subsidiary of a limited partnership) discloses the above confidential information to the general partner, manager and existing or potential limited partners of the limited partnership. The disclosure of any confidential information by staff or organizations hired by any party of this agreement shall be deemed as such party's disclosure of such confidential materials, and such party shall undertake legal responsibilities for violating this Agreement. This article shall survive the termination of this Agreement regardless of the reason why this Agreement is terminated.

9. Governing Laws and Dispute Resolution

- 9.1 The signing, effectiveness, interpretation, performance, modification and termination of this Agreement as well as dispute resolution hereunder shall be governed by the PRC laws.

- 9.2 In case that any dispute occurs in interpreting and performing this Agreement, the Parties of this Agreement shall firstly try to resolve it through friendly negotiation. If the Parties fail to reach a consensus on such dispute resolution through negotiation within thirty (30) days as required by any party, any party may submit such dispute to the China International Economic and Trade Arbitration Commission, which will resolve the dispute through arbitration according to current effective arbitration rules. The arbitration shall be performed in Beijing in Chinese. The arbitration awards shall be final and binding on all Parties. After arbitration awards take effect, any party shall be authorized to apply to a competent court for enforcing arbitration awards. The arbitration tribunal may decide upon compensation with respect to Party C's rights and interests in the Equity Interest, assets or property, or compensate Party A for the losses resulting from other Parties' breach of this Agreement, adjudicate compulsory remedies or order Party C to go bankrupt regarding related businesses or compulsory asset transfer. If necessary, arbitration organizations shall have rights to firstly ask the Defaulting Party to immediately stop its defaults before giving the final awards on disputes of all Parties concerned, or prohibit the Defaulting Party from conducting acts which might aggravate Party A's losses. Courts of Hong Kong, Cayman Islands or other competent courts (including courts of the place where Party C lives, or courts of the place where Party C's or the Party A's main assets are) shall have rights to grant or execute awards of an arbitration tribunal. They shall have rights to adjudicate or enforce temporary relief with respect to Party C's rights and interests in the Equity Interest or property. They shall also have rights to offer temporary relief to the party making a request for arbitration by giving awards or judgments before the tribunal court forms. For instance, the Defaulting Party may be adjudicated or arbitrated to immediately suspend their breaches or forbidden to conduct any act which might further aggravate the Party A's losses.
- 9.3 When any dispute occurs in interpreting or performing this Agreement, or any dispute is under arbitration, all Parties of this Agreement shall continue exercising their rights and performing their respective obligations hereunder except for disputed matters.
- 9.4 If any law, rule or regulation of the PRC are promulgated or revised after the date of signing this Agreement, or the interpretation or applicability of such laws, rules or regulations changes, the following provisions shall apply: in the case of the PRC laws permitting (a) If the revised laws or newly promulgated rules are more beneficial for any party than pertinent laws, rules or regulations which take effects after signing this Agreement without imposing material adverse impacts upon other Parties, the Parties of this Agreement shall promptly apply for gaining benefits from such modifications or new rules and try their best to have the application approved; or (b) The original clauses of this agreement shall further prevail if such revised laws or newly enacted rules directly or indirectly impose material adverse impacts upon any party's economic benefits hereunder. The Parties shall try to be exempt from obeying these revised laws or new rules by all lawful means. If the adverse impacts on any party's economic benefits can't be alleviated according to this Agreement, all Parties shall promptly negotiate with each other and make all necessary revisions to this Agreement after the affected party notifies all other Parties, in order to perform all such requisite revisions and protect the affected party's economic benefits.

10. Notices

- 11.1 All notices and other communications which are issued as required or permitted by this Agreement shall be delivered by special personnel or sent to corresponding Parties' address and fax number listed on Appendix II through registered mail, postage prepaid, commercial express delivery services or fax. After sending each notice, an email shall be sent for confirming the delivery. Such notices shall be deemed to have been delivered as follows:
 - 10.1.1 The notices shall be deemed to have been delivered to the designated address on the date of sending or rejection if they are delivered by special personnel, express delivery services or registered mail, postage prepaid.
 - 10.1.2 The notices shall be deemed to have been delivered if they are sent by fax, confirmed by automatically generated information on delivery. (It should be evidenced by an automatically generated delivery confirmation)
- 11.2 Any party may issue a notice to all other Parties according to this article to inform them of the address, fax and/or email address changed from time to time.

11. Others

- 11.1 Notwithstanding any other provision of this Agreement or other Transaction Documents (as defined in the Equity Pledge Agreement) or any other document or law, Party B's obligations and responsibilities under this Agreement are several and non-joint. This clause shall survive for the terminating this Agreement regardless of the reason why this Agreement is terminated.
- 11.2 All revisions, modifications and supplementations of this Agreement shall be in writing. They shall take effects after they are signed or stamped by all Parties hereunder and governmental registration procedures (if applicable) are completed.
- 11.3 Party A may unilaterally notify Party B and Party C in writing anytime of unconditionally terminating this Agreement at discretion without assuming any responsibility. Party B and Party C shall have no rights to unilaterally terminate this Agreement.
- 11.4 If revision of this Agreement is proposed by the related Stock Exchange or other regulatory institutions, or is required according to securities listing regulations of the related Stock Exchange or related regulations, rules and guiding requirements, this Agreement shall be revised by the Parties reasonably.

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- 11.5 All expenses and actual outlays related to this Agreement, including but not limited to lawyers' fees, flat costs, stamp duties, any other taxes and fees, shall be borne by Party C.
- 11.6 This Agreement is made in four (4) copies. Each party shall hold one (1) copy. All copies shall have equal legal forces.

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(This page is intentionally left blank and is the signing page of this Shareholder Voting Rights Entrustment Agreement)

IN WITNESS WHEREOF, the Parties have executed this Shareholder Voting Rights Entrustment Agreement as of the date and at the address first above written.

Genetron (Wuxi) Business Management Co., Ltd. (seal)

By: /s/ Sizhen Wang
Name: Wang Sizhen
Title: Legal Representative

(This page is intentionally left blank and is the signing page of this Shareholder Voting Rights Entrustment Agreement)

IN WITNESS WHEREOF, the Parties have executed this Shareholder Voting Rights Entrustment Agreement as of the date and at the address first above written.

Wang Sizhen

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Shareholder Voting Rights Entrustment Agreement)

IN WITNESS WHEREOF, the Parties have executed this Shareholder Voting Rights Entrustment Agreement as of the date and at the address first above written.

Jiao Yuchen

By: /s/ Yuchen Jiao

(This page is intentionally left blank and is the signing page of this Shareholder Voting Rights Entrustment Agreement)

IN WITNESS WHEREOF, the Parties have executed this Shareholder Voting Rights Entrustment Agreement as of the date and at the address first above written.

Genetron (Wuxi) Biotech Co., Ltd. (seal)

By: /s/ Sizhen Wang

Equity Interest Pledge Agreement

This Equity Interest Pledge Agreement (hereinafter referred to as this “Agreement”) has been executed by and among the following parties on December 7, 2020 in Wuxi, Jiangsu:

Party A: **Genetron (Wuxi) Business Management Co., Ltd.**, a limited liability company, organized and existing under the laws of the PRC, with its address at Room 401, No. 1719-8 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

Party B: **Wang Sizhen**, a Chinese citizen with Chinese Identification No.: 110108197610316015; and **Jiao Yuchen**, a Chinese citizen with Chinese Identification No.: 120101197704302519.

Party C: **Genetron (Wuxi) Biotech Co., Ltd.**, a limited liability company organized and existing under the laws of PRC, with its address at 5th Floor, 1719-15 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

In this Agreement, each of the Pledgee, the Pledgors and Party C shall be hereinafter referred to as a “**Party**” respectively, and as the “**Parties**” collectively.

Whereas:

1. The Pledgors as of the signing date hereof are shareholders of Party C, and hold 100% of the Equity Interest of Party C, among which Wang Sizhen holds 90% of the Equity Interest (corresponding to Party C’s capital contribution of RMB 18,000,000), Jiao Yuchen holds 10% (corresponding to Party C’s capital contribution of RMB 2,000,000). Party C is a limited liability company registered in China.
2. The Pledgee is a foreign-invested enterprise registered in Wuxi. Genetron Health (Hong Kong) Company Limited (a company registered under the laws of Hong Kong) (the “**Hong Kong Company**”) holds 90% of Party A’s equity, Wuxi Huicheng Ruida Venture Capital Partnership (Limited Partnership) holds 6% of its equity, and Shanghai Shunfu Enterprise Management Service Center (Limited Partnership) holds 4% of its equity.
3. The Pledgee and Party C executed the Exclusive Business Cooperation Agreement (including revisions from time to time, hereinafter referred to as the “**Business Cooperation Agreement**”) on December 7, 2020. The Pledgee provides relevant exclusive technical services, technical consultations and other services to Party C based on the Business Cooperation Agreement.

4. The Parties of this Agreement executed an Exclusive Option Agreement(including revisions from time to time, hereinafter referred to as the **“Exclusive Option Agreement”**) on December 7, 2020. To the extent permitted by the PRC laws and corresponding requirements, if the Pledgee decides to make the purchase request in its sole discretion: (a)the Pledgors shall transfer all or part of their Equity Interest held in Party C to the Pledgee, who needs to be the Cayman Company or a subsidiary that is directly or indirectly wholly controlled by it) according to its requirements; (b) Party C shall transfer all or part of its assets to the Pledgee according to the requirements of the Pledgee and/or the Designee.
5. The Parties of this Agreement executed a Shareholder Voting Rights Entrustment Agreement (including revisions from time to time, hereinafter referred to as the **“Shareholder Voting Rights Entrustment Agreement”**) on December 7, 2020. The Pledgors have irrevocably entrusted the person designated by the Pledgee with the full power to exercise all their rights to entrust and vote as Party C’s shareholder.
6. As the Pledgors’ guarantee of the performance of the Contract Obligations (as defined below) and the settlement of the Secured Indebtedness (as defined below), the Parties intend to execute this Agreement on the provision of Equity Interest pledge by Party B to Party A. The Pledgors severally and not jointly pledge all the Equity Interest they held in Party C to the Pledgee to provide pledge guarantee for securing the complete and due performance of such obligations and debt. Party C agrees with such equity interest pledge arrangements.

1. Definitions

Unless otherwise provided herein, the terms below shall have the following meanings:

- 1.1 **“Pledge”**: shall refer to the Security Interest granted by the Pledgors to the Pledgee pursuant to Article 2 of this Agreement, i.e., the right of the Pledgee to be paid in priority with the Equity Interest based on the monetary valuation that such Equity Interest is converted into or from the proceeds from the auction or sale of the Equity Interest.
- 1.2 **“Equity Interest”** shall refer to all Party C’s equity interest lawfully held by the Pledgors from the effective date of this Agreement, such that the Pledgors have rights to dispose and pledge it to the Pledgee according to provisions of this Agreement as guarantee for Party C’s fulfillment of its Contractual obligations and Secured Indebtedness hereunder (including the Pledgors’ current Equity Interest constituting Party C’s registered capital and all related Equity Interest) and increase Equity Interest as per Article 6.7 of this Agreement.
- 1.3 **“Term of the Pledge”** shall refer to the term set forth in Article 3 of this Agreement.

- 1.4 **“Event of Default”** shall refer to any of the circumstances set forth in Article 7 of this Agreement.
- 1.5 **“Notice of Default”** shall refer to the notice issued by the Pledgee in accordance with this Agreement declaring an Event of Default.
- 1.6 **“Contract Obligations”** shall refer to all the obligations of the Pledgors under the Exclusive Option Agreement and Shareholder Voting Rights Entrustment Agreement; and all the obligations of Party C under the Transaction Agreement; and all the obligations of the Pledgors and Party C under this Agreement.
- 1.7 **“Transaction Agreement”** shall refer to this Agreement, the Business Cooperation Agreement, as well as the Exclusive Option Agreement and Shareholder Voting Rights Entrustment Agreement, or one or more of them.
- 1.8 **“Secured Indebtedness”** shall refer to (a) all debts that Party C owes to the Pledgee, including but not limited to consultation and service fees that Party C shall pay to the Pledgee according to the Business Cooperation Agreement (whatever on the given maturity date, ahead of time or in other ways), and the interest, liquidated damages(if any), compensation, lawyers’ fees, arbitration fees, and fees for exercising rights of pledge such as Equity Interest evaluation and auction; (b)all the direct, indirect and derivative losses and losses of anticipated profits, suffered by the Pledgee, incurred as a result of any Event of Default by the Pledgors or Party C. The amount of such loss shall be calculated in accordance with the reasonable business plan and profit forecast of the Pledgee, and(c)all expenses occurred in connection with enforcement by the Pledgee of the Pledgors and/or Party C’s Contract Obligations. Subject to other terms of this Agreement(including but not limited to Article 19.1), the amount of credit guaranteed by Party B shall not be less than RMB 20,000,000, among which the amount of credit guaranteed by Wang Sizhen shall not be less than RMB 18,000,000, the amount of credit guaranteed by Jiao Yuchen shall not be less than RMB 2,000,000.
- 1.9 **“PRC laws”** shall include all laws, regulations, rules, notices, interpretations or other binding documents legislated by any central or regional legislation, administrative or judicial department before or after the execution of this Agreement.
- 1.10 **“Security Interest”** shall include security, mortgage, third-party rights or Interest, all rights to purchase Equity Interest, rights of acquisition, pre-emptive rights, rights of set-off, retained title or other collateral arrangements.

2. Pledge

- 2.1 The Pledgors hereby severally and not jointly pledge the respective Equity Interest to the Pledgee in the first order of priority to guarantee prompt and full repayment of Secured Indebtedness and performance of Contract Obligations. Party C agrees that the Pledgors may pledge the Equity Interest to the Pledgee as per this Agreement.
- 2.2 All Parties understand and acknowledge that the estimated monetary value generated for Secured Indebtedness or related estimated value shall be changeable and floating until the settlement date (refer to Article 2.4 for the definition). The Pledgors and the Pledgee may adjust and confirm the maximum amount of Secured Indebtedness secured by the Equity Interest from time to time by the settlement date by revising and supplementing this Agreement with both Parties' consent in case of any change to the estimated monetary value of Secured Indebtedness and Equity Interest.
- 2.3 In any of following events (hereinafter referred to as "**Events for Settlement**"), the value of Secured Indebtedness shall be determined based on the total amount of payable guaranteed that is not paid to the Pledgee on the latest date before any event for settlement occurs or on the date of the event (hereinafter referred to as "**Confirmed Debts**"):
- (a) The Business Cooperation Agreement has expired or has been terminated according to the relevant articles;
 - (b) The Pledgee issues a Notice of Default to the Pledgors as per Article 7.3, because any Event of Default specified in Article 7 of this Agreement has occurred and is still unsolved;
 - (c) After proper investigation, the Pledgee reasonably determines that Party B and/or Party C have become insolvent or might become insolvent; or
 - (d) Any other event occurs, under which Secured Indebtedness shall be determined as provided by the PRC laws.
- 2.4 To avoid ambiguity, the date on which the event for settlement occurs shall be deemed the settlement date (hereinafter referred to as the "**Settlement Date**"). The Pledgee shall have rights to exercise the Pledge according to Article 8 at its discretion on the Settlement Date or thereafter.

- 2.5 Within the Term of the Pledge (as defined in Article 3.1), the Pledgee shall have rights to accept any dividend, bonus or other distributable interests generated because of the Equity Interest and use it to give priority to the Pledgee. The Pledgors shall deposit or cause Party C to deposit such fructus in the account designated by the Pledgee in writing after receiving the Pledgee's written requirements. The Pledgors shall not withdraw such fructus deposited in the account deposited in the account designated by the Pledgee in writing without the written consent of the Pledgee.
- 2.6 Within the term of this Agreement, the Pledgee shall not assume any responsibility for any Equity Interest depreciation unless otherwise caused by the Pledgee's intentions or gross negligence. In this case, the Pledgors shall have no right to make any claim or request to the Pledgee.
- 2.7 Without violating Article 2.6 of this Agreement, the Pledgors agree that the Pledgee may auction or sell the Equity Interest on behalf of the Pledgors anytime provided that any value of the Equity Interest is likely to decline and thereby probably impairs the Pledgee's Rights, and the Pledgors agree that the proceeds from such auction or sales shall be used for debt repayment or such money shall be held in escrow by a notary office of the area where the Pledgee is (All expenses thereby incurred shall be deducted from the proceeds from such auctions or sales).
- 2.8 The Equity Interest pledge hereunder is a continuous guarantee. It shall be effective until full performance of all Contract Obligations and full repayment of Secured Indebtedness. The Pledgee's exemption or tolerance of the Pledgors' any default or the Pledgee's late exercising of any right under the Transaction Agreement and this Agreement shall not affect the Pledgee's subsequent rights to require the Pledgors or Party C to strictly perform the Transaction Agreement and this Agreement thereafter according to this Agreement, the relevant PRC laws and the Transaction Agreement, or affect the Pledgee's subsequent rights against the Pledgor's or Party C's breach of the Transaction Agreement and/or this Agreement.

3. Term of the Pledge

- 3.1 The pledge shall take effect from the date of registration of the pledge of the Equity Interest under this Agreement at the registration of the industrial and commercial administration department (hereinafter referred to as the "**Registration Authority**") of the locality of Party C. The validity period of the pledge (hereinafter referred to as the "**Term of the Pledge**") is from the effective date mentioned above until (a) the last Secured Indebtedness and Contract Obligations guaranteed by the Pledge are fully paid and fulfilled; or(b) the Pledgee shall, subject to the PRC laws, decide to purchase the entire Equity Interest of Party C held by the Pledgors in accordance with the Exclusive Option Agreement, and the Equity Interest of Party C has been transferred to the Pledgee in accordance with the laws, and the Pledgee can legally engage in the business of Party C; or(c) The Pledgee decides to purchase all the assets of Party C in accordance with the Exclusive Option Agreement subject to the PRC laws, and all the assets of Party C have been transferred to the Pledgee in accordance with the laws, and the Pledgee can legally engage in the business of Party C using the above assets; or(d) The Pledgee unilaterally requests termination of this Agreement (the right of the Pledgee to terminate this Agreement is the right without any restrictive conditions, and the right is only enjoyed by the Pledgee. The Pledgors or Party C does not have the right to terminate this Agreement unilaterally); or(e) Termination in accordance with the requirements of applicable PRC laws and regulations.

- 3.2 During the Term of the Pledge, if Party B and/or Party C fails to perform its Contract Obligations or pay the Secured Indebtedness (including payment of exclusive consulting or service fees according to the Business Cooperation Agreement or failure to comply with any other aspects of the Transaction Agreement), the Pledgee shall have the right but not the obligation to dispose of the Pledge in accordance with the provisions of this Agreement.

4. Pledge Registration

- 4.1 The Pledgors and Party C agree and undertake that, after signing this Agreement, Party C must immediately and the Pledgors must procure Party C to immediately record the arrangements for the Equity Interest pledge hereunder on Party C's Register of Shareholders on the date of signing this Agreement; and an application shall be submitted to the registration authority for registering the Equity Interest pledge according to the Measures for the Registration of Equity Interest Pledge at Administrative Departments for Industry and Commerce within twenty(20) days after signing this Agreement or within a longer term agreed by the Pledgee. The registration authority shall completely and accurately record matters about such Equity Interest pledge on the register of Equity Interest pledge.
- 4.2 Within the Term of the Pledge specified hereunder, the Pledgors shall submit original contribution certificate for the Equity Interest and the register of shareholders documenting pledge (and other documents reasonably required by the Pledgee, including but not limited to the notice on pledge registration issued by the administration for industry and commerce) to the Pledgee within one week from the completion date of the Pledge registration in accordance with above Article 4.1. The Pledgee shall keep such documents within the entire pledge term specified hereunder.

5. Representations and Warranties of the Pledgors and Party C

The Pledgors severally and not jointly represent and warrant to the Pledgee as the following Article 5.1 to 5.13:

- 5.1 The Pledgor has complete and independent legal status and capacity under the law of the place of registration. Besides, the Pledgor has been legitimately authorized to sign, deliver and perform this Agreement. The Pledgor may be an independent subject of litigations.

- 5.2 The Pledgor is the sole legal owner and beneficiary of the Equity Interest. The Pledgor has full rights and power to pledge the Equity Interest to the Pledgee according to this Agreement, while the Pledgor shall be also authorized to dispose of the Equity Interest and any part of the Equity Interest. Unless the Pledgor and the Pledgee additionally enter into an agreement, the Pledgor shall possess the legitimate and full title of the Equity Interest.
- 5.3 Except as otherwise provided in the Transaction Agreement, the Pledgee shall have rights to dispose and transfer the Equity Interest in accordance with this Agreement.
- 5.4 Except as otherwise provided in the Pledge or the Transaction Agreement, the Pledgor doesn't set any security interest or other encumbrances on the Equity Interest. There is no dispute on the Equity Interest's ownership, outstanding tax or fee on the Equity Interest. The ownership of the Equity Interest isn't detained or subject to restraints of other legal proceedings or similar threats and can be pledged and transferred according to applicable laws.
- 5.5 The Pledgor's signing of this Agreement or exercising of any right hereunder or performance of obligations hereunder will not violate or go against any laws, regulations, court awards, arbitration authority's awards, administrative authorities' decisions, agreements or contracts binding upon the Pledgor's assets under which the Pledgor is party, or any commitments that the Pledgor makes to any third party.
- 5.6 All documents, materials, statements and vouchers that the Pledgor offers to the Pledgee shall be accurate, true, complete and effective no matter if they are offered before or after this agreement takes effect or within the pledge term.
- 5.7 This Agreement shall constitute lawful, valid and binding obligations on the Pledgor after it is appropriately executed by the Pledgor.
- 5.8 The Pledgor has full rights and authorities to sign and deliver this Agreement and all other documents on aforementioned transactions hereunder to be executed. In addition, the Pledgor has full rights and authorities to complete such transactions.
- 5.9 Apart from registering the Equity Interest pledge with a registration authority, any third party's consent, permission, waiver or authorization, or any government organization's approval, permission or exemption, or registration or filing formalities handled with any government agency, which are necessary for signing and performing this Agreement and making the Equity Interest pledge effective hereunder, have been obtained or handled, and will keep fully effective within the term of this Agreement.

- 5.10 The pledge hereunder constitutes the first Security Interest upon the Equity Interest under this Agreement.
- 5.11 All taxes and fees for obtaining the Equity Interest have been fully paid by the Pledgor.
- 5.12 The Pledgor, or its property or Equity Interest is not subject to any outstanding lawsuits, legal proceedings or requests or those that are known by the Pledgor to be threatening from any court or arbitration tribunal. Besides, the Pledgor, or its property or Equity Interest is not subject to any of such lawsuits, legal proceedings or requests from any government agency or administrative authority. There is no material or adverse impacts imposed upon the Pledgor's economic conditions or abilities to fulfill obligations and perform the guarantee responsibilities hereunder.
- 5.13 Unless otherwise specified hereunder, the Pledgee shall not be hindered from exercising its rights as Pledgee hereunder anywhere and anytime.
- 5.14 The Pledgors severally and not jointly warrant to the Pledgee that the representations and warranties as stated in the above Article 5.1 to 5.13 shall be true, correct, accurate, complete and fully obeyed anytime under all circumstances before all Contract Obligations are fulfilled or the Secured Indebtedness are fully repaid.

Party C represents and warrants to the Pledgee as follows:

- 5.15 Party C is a limited liability company lawfully incorporated and validly existing under the PRC laws. Being qualified as independent legal entity, it may act as independent subject of litigation. Formally registered with a competent administration for industry and commerce, Party C has lawfully submitted the annual reports. With complete and independent legal status and standing, Party C has been appropriately authorized to sign, deliver and perform this Agreement.
- 5.16 This contract shall constitute legitimate, effective and binding obligations upon Party C after it is appropriately executed by Party C and takes effect.
- 5.17 Party C owns the full power and authorities to sign and deliver this agreement and all other documents related to transactions hereunder. Party C also owns the full power and authorities to complete such transactions.
- 5.18 There is no material Security Interest or other encumbrances which might affect the Pledgee's Rights or Interest in Equity Interest, including but not limited to transfer of any of Party C's intellectual property or any assets with a worth no less than RMB500,000, or any encumbrance in property or rights to use such assets.

- 5.19 The Equity Interest, or Party C or its assets are not subject to any outstanding lawsuits, arbitrations or other legal proceedings or those known to be threatening by Party C from any court or arbitration tribunal. Besides, the Pledgor, or its property or Equity Interest is not subject to any of such lawsuits, arbitrations or legal proceedings from any government agency or administrative authority. There is no material or adverse impacts imposed upon Party C's economic conditions or the Pledgor's or Party C's abilities to perform the obligations and guarantee responsibilities hereunder.
- 5.20 Party C hereby agrees to assume joint liability for the Pledgors' representations and warranties under this Agreement.
- 5.21 Party C's signing of this Agreement and exercising of its rights hereunder or fulfillment of its obligations under this Agreement will not violate or conflict with any laws, rules, any court judgments, any arbitration authority's awards, any administrative authority's decisions, any agreement or contract under which Party C is bound as a party or its assets are bound, or any commitment that Party C makes to any third party.
- 5.22 All documents, materials, statements and proofs that Party C provides to the Pledgee shall be accurate, true, complete and valid no matter whether they are provided before or after this Agreement takes effects within the Term of the Pledge.
- 5.23 Apart from registering the Equity Interest pledge with a registration authority, any third party's consent, permission, waiver or authorization, or any government organization's approval, permission or exemption, or registration or filing formalities handled with any government agency, which are necessary for signing and performing this contract and making the Equity Interest pledge effective hereunder, have been obtained or handled, and will continue to be effective within the term of this Agreement.
- 5.24 The pledge hereunder constitutes the first lien secured Interest upon the Equity Interest under this Agreement.
- 5.25 Party C hereby undertakes to the Pledgee that all the above representations and warranties shall be true and correct under any circumstance at any time before all Contract Obligations are performed or the Secured Indebtedness is fully repaid, and Party C will completely abide by such representations and warranties.

6. Undertakings and Further Consents of the Pledgors and Party C

- 6.1 Within the term of this Agreement, the Pledgors shall hereby severally and not jointly undertake to the Pledgee that:
- 6.1.1 Except for performing the Exclusive Option Agreement or other Transaction Agreements, the Pledgor shall not transfer or permit others to transfer the Equity Interest in whole or in part, impose or permit others to impose any new pledge, Security Interest or other encumbrance on the Equity Interest which might affect the Pledgee and Interest in the Equity Interest without the prior written consent of the Pledgee. For the Equity Interest transfer performed with the Pledgee's written consent, the Pledgor shall firstly use the proceeds from such Equity Interest transfer for repaying Secured Indebtedness to the Pledgee or hold the proceeds in escrow by a third person designated by the Pledgee.
 - 6.1.2 The Pledgor must obey and exercise all laws, rules and regulations applicable to the Pledge. Within five(5) days after receiving any notice, order or suggestion on the Pledge from related competent authorities (or any other related departments), the Pledgor shall show the Pledgee such notices, orders or suggestions, or bring forth objections or statements regarding them according to the Pledgee's reasonable requirements or with the Pledgee's consent.
 - 6.1.3 The Pledgor shall immediately notify the Pledgee of all events which might affect the Pledgee, the Equity Interest, or any rights of it, or any events affecting the Interest under the Transaction Agreement and this Agreement (including but not limited to any lawsuit, arbitration, other requests, any third party's dispute over the Equity Interest title, any civil or criminal/administrative proceedings, arbitrations or any other legal proceedings filed against the Pledgor or Equity Interest when the Pledgee's Pledge is or might be subject to any third party's adverse impacts, or potential threats of confronting any aforementioned lawsuit, arbitration or legal proceeding judged by the Pledgor), notices received by the Pledgor, and any event which might affect any warranties or obligations of the Pledgor under this Agreement, and take all necessary measures to protect the Pledgee's Rights and Interest in the pledged Equity Interest according to the Pledgee's reasonable requirements.
- 6.2 The Pledgors severally and not jointly agree that the Pledgee's exercise of the Pledge hereunder shall not be interrupted by the Pledgor or any successor or representative of the Pledgor or any others through legal proceedings.
- 6.3 To protect or improve the Security Interest granted for repaying Secured Indebtedness and performing Contract Obligations, and ensure the Pledgee's exercise of the Security Interest over the pledged Equity Interest and such rights, Party C shall immediately and the Pledgors shall cause Party C to register the Equity Interest pledge hereunder with related registration authority within twenty(20) days after signing this Agreement or within a longer period agreed by the Pledgee. Besides, the Pledgors shall appropriately sign and cause other Parties concerned in the Equity Interest pledge to sign all documents designated by the Pledgee (including but not limited to the supplemental agreement of this agreement), certificates, agreements, deeds and/or undertakings. The Pledgors also undertake to take and cause other Parties concerned in the Equity Interest pledge to take actions required by the Pledgee, assist the Pledgee in exercising its rights and authorities hereunder, and sign all related documents regarding the Equity Interest title with the Pledgee. The Pledgors undertake to provide the Pledgee with all notices, orders and decisions on the Pledge within reasonable deadlines at the Pledgee's request.

- 6.4 The Pledgors hereby severally and not jointly undertake to the Pledgee to obey and perform all warranties, undertakings, agreements, statements and requirements under this Agreement. Subject to other terms of this Agreement, the Pledgors shall compensate the Pledgee all losses thereby incurred if the Pledgors fail to perform or only partially perform their warranties, undertakings, agreements, statements and requirements hereunder.
- 6.5 The Pledgors(severally and not jointly) shall make every effort (including offering other guarantees to the court or taking other measures to rescind the court's or other departments' coercive measures against the Equity Interest) in case that any court or other government agency takes any compulsory measures against the Equity Interest pledged hereunder.
- 6.6 Subject to other terms of this Agreement(including but not limited to Articles 19.1), if the Equity Interest is concerned in any property preservation or compulsory enforcement, or is likely to depreciate or be loss to impair the Pledge, the Pledgors shall immediately inform the Pledgee of such circumstances in writing, and cooperatively take effective measures for protecting the Pledge and Interest together with the Pledgee. The Pledgee may auction or sell the Equity Interest anytime, and firstly use the proceeds from such auction or sales for advance Secured Indebtedness repayment or drawing. All expenses thereby incurred shall be borne by the Pledgor.
- 6.7 Without the prior written consent of the Pledgee, the Pledgors(severally and not jointly) and/or Party C shall not by themselves(or assisting others to) increase, reduce or transfer Party C's registered capital (or their amount of contributions to Party C), or impose any encumbrance on the registered capital (including the Equity Interest). On the premise of following this provision, Party C's equity that the Pledgors register and obtain after the signing date of this Agreement (hereinafter referred to as the **"Extra Equity Interest"**) and corresponding capital stock of such Equity Interest in Party C's registered capital must be also deemed the Equity Interest that the Pledgors pledge to the Pledgee in accordance with this Agreement. The Pledgors and Party C shall immediately enter into a supplementary Equity Interest pledge agreement on the Extra Equity Interest with the Pledgee at the time of obtaining such extra Equity Interest, request Party C's Board of Directors to approve the supplementary Equity Interest pledge agreement. Besides, they shall offer the Pledgee all necessary documents for signing the supplementary Equity Interest pledge agreement, including but not limited to the original capital contribution certificate on such extra Equity Interest issued by Party C. The Pledgor and Party C shall handle formalities for registering the pledge of such extra Equity Interest(or changes) in accordance with Article 4.1 of this Agreement, and deliver related documents to the Pledgee for safekeeping according to Article 4.2 of this Agreement.

- 6.8 Unless otherwise instructed by the Pledgee in writing in advance, the Pledgors(severally and not jointly) and/or Party C agree that if the Equity Interest are transferred between the Pledgors and any third party (hereinafter referred to as the “**Equity Interest Assignee**”) against this Agreement in part or in whole, the Pledgee and/or Party C shall ensure that the Equity Interest Assignee unconditionally admits the Pledge and handles the necessary formalities for registering the pledge changes (including but not limited to signing related documents) in order to guarantee survival of the Pledge.
- 6.9 If the Pledgee provides loans to Party C, the Pledgors(severally and not jointly) and/or Party C agree to grant the Pledgee the Pledge by pledging the Equity Interest as collateral, in order to guarantee the loan, and handle related formalities as soon as possible according to laws, regulations or local practices (if any), including but not limited to signing related documents and handling formalities for registering pledge or pledge changes.
- 6.10 The Pledgors shall not or allow anyone to take any actions which might have adverse effects on the Pledge or Equity Interest under the Transaction Agreement and this Agreement. Hereby, the Pledgors irrevocably waiver the preemptive rights when the Pledgee exercises the Pledge.
- 6.11 When it is necessary to transfer any Equity Interest for exercising the Pledge hereunder, the Pledgors undertake to make such transfer possible by taking all measures to the extent permitted by the PRC laws.
- 6.12 The Pledgors shall ensure that the procedures for convening meetings and ways for voting/making decisions by the Board of Directors for signing this Agreement, imposing the Pledge and exercising the Pledge do not violate laws, administrative regulations or Party C’s articles of associations and joint venture contract.
- 6.13 Before the Contract Obligations are fulfilled and the Secured Indebtedness is fully repaid, the Pledgors shall not abandon the Equity Interest pledged to the Pledgee herein, and/or abandon the fructus generated for holding such Equity Interest, including but not limited to dividends.
- 6.14 Before all Contract Obligations are fulfilled and the Secured Indebtedness is fully repaid, the Pledgors shall not allow Party C to transfer, sell or dispose of any of its assets in any other way through any resolution without the Pledgee’s prior written consent.
- 6.15 The Pledgors as shareholders of Party C shall not abuse their shareholder rights to damage Party C’s interests. If there is a situation in which the Pledgors abuse the shareholder rights, the Pledgee has the right to exercise the Purchase Right under the Exclusive Option Agreement.

- 6.16 If any revision, supplementation or update of this Agreement cannot take effect until the corresponding procedures for examination/approval and/or registration of pledge changes are completed as stipulated by applicable laws, Party C shall, and Party B shall take all necessary measures to cooperate with Party C to register such changes with the relevant registration authorities within five(5) days of the revision, supplementation or update.

Party C undertakes and further agrees that:

- 6.17 If any third party's consent, permission, waiver or authorization or any government organization's approval, permission or exemption or registration or filing with any government organizations are necessary for signing/performing this Agreement and pledging the Equity Interest hereunder, Party C shall try its best to assist in handling such formalities and keep them fully effective within the term of this Agreement. Party C shall handle registration formalities for extending its business term if it expires within the term of this Agreement, in order to maintain effectiveness of this Agreement.
- 6.18 Without the Pledgee's prior written consent, Party C shall not help or allow the Pledgors to impose any new pledge on Equity Interest, or authorize any other Security Interest or encumbrances, or help or permit the Pledgors to transfer the Equity Interest.
- 6.19 Party C agrees to strictly perform the obligations under articles 6.3, 6.7, 6.8, 6.9, 6.11, 6.12, 6.14 and 6.15 under this Agreement.
- 6.20 Without the Pledgee's prior written consent, Party C shall not transfer or sell Party C's assets or impose or allow others to impose any Security Interest or other encumbrances which might impact the Pledgee's Equity Interest rights and interests, including but not limited to transfer of any of Party C's intellectual property or any assets with a worth of no less than RMB500,000 or any encumbrance in property or rights to use such assets.
- 6.21 When there is any lawsuit, arbitration or other request which might have adverse impacts upon interests of Party C, Equity Interest or the Pledgee under the Transaction Agreement and this Agreement, Party C undertakes to promptly notify the Pledgee in writing, and take all necessary measures for protecting the Pledgee's pledge rights over the pledged Equity Interest according to the Pledgee's reasonable requests.
- 6.22 Party C shall not or allow anyone to take any actions which might have adverse impacts upon the Pledgee's interests or Equity Interest under the Transaction Agreement and this Agreement.

- 6.23 Party C shall provide the Pledgee with financial statements of the preceding quarter of the Gregorian calendar (including but not limited to the balance sheet, income statement and cash flow statement) within the first month of each quarter of the Gregorian calendar.
- 6.24 Party C undertakes to take all necessary measures and sign all necessary documents in accordance with the reasonable requirements of the Pledgee so as to protect the Pledgee's pledge rights and interests in the pledged Equity Interest, exercise and realize such rights and interests.
- 6.25 When it is necessary to transfer any Equity Interest for exercising of the Pledge hereunder, Party C undertakes to make such transfer possible by taking all measures.
- 6.26 In the event of the pledgor's death, incapacity, marriage, divorce, bankruptcy, liquidation, dissolution or other circumstances which might impact its exercising of Party C's Equity Interest, the Pledgor's successor, or Party C's current shareholder or assignee shall be deemed as party of this Agreement to inherit/bear all of the Pledgor's rights and obligations under this Agreement.
- 6.27 This Agreement shall be terminated if Party C is required to be dissolved or liquidated by the PRC laws; Party C shall (and Party B shall allow Party C) shall transfer all its assets including the Equity Interest to Party A without charge or at the minimum prices and within the limits permitted by the current PRC laws, or the current liquidator shall dispose of all Party C's assets including the Equity Interest at its discretion for the purpose of protecting interests of shareholders and/or creditors of Party A's direct or indirect parents overseas.
- 6.28 All Parties undertake to each other that they shall terminate this Agreement immediately once the Pledgee is permitted by the PRC laws and the Pledgee decides to purchase all of Party C's Equity Interest from the Pledgors in accordance with the Exclusive Option Agreement.

7. Event of Default

- 7.1 All of following circumstances shall be deemed Event of Default:
 - 7.1.1 The Pledgors violate or fail to perform any Contract Obligations under the Exclusive Option Agreement, the Shareholder Voting Rights Entrustment Agreement and/or this Agreement; Party C violates or fails to perform any Contract Obligations under the Transaction Agreement and/or this Agreement;
 - 7.1.2 Any representation or warranty made by the Pledgors under Article 5 of this Agreement contain material misstatements or errors, and/or the Pledgors violate any warranty under Article 5 of this Agreement, and/or any undertakings under Article 6 of this Agreement;

- 7.1.3 Party C fails or Party B fails to assist Party C to register Equity Interest pledge with related registration authority according to Article 4.1;
- 7.1.4 The Pledgors and Party C violate any rules or articles of this Agreement;
- 7.1.5 Unless otherwise clearly specified in Article 6.1.1, the Pledgors transfer or intend to transfer or abandon pledged Equity Interest or transfer pledged Equity Interest without the Pledgee's written consent;
- 7.1.6 The Pledgors' loans, undertakings, compensations, commitments or other debts to a third party (a) are required to be repaid or performed ahead of time due to the Pledgors' breach of the relevant agreement with the third party; or (b) have become due, but cannot be repaid or performed on time;
- 7.1.7 The Pledgors cannot repay general debts or other debts;
- 7.1.8 Any approval, license, consent, permission or authorization from government organizations making this Agreement compulsorily enforceable, legitimate and effective is revoked, terminated, nullified or changes substantively;
- 7.1.9 The promulgation of applicable laws makes this Agreement illegal or makes it impossible for the Pledgors to continue to perform the obligations under this Agreement;
- 7.1.10 The Pledgee believes that the Pledgors' abilities to fulfill its obligations under this Agreement have been affected in case of adverse changes to the Pledgors' property.
- 7.1.11 Party C or its heir or trustee can only partially perform or refuses to perform its payment responsibilities under the Business Cooperation Agreement, and/or Party C can only partially repay or refuse to repay the Secured Indebtedness; and
- 7.1.12 Any other circumstances under which the Pledgee can't or might not exercise its rights of Pledge.
- 7.2 The Pledgors and Party C shall immediately notify the Pledgee in writing once any circumstances mentioned in Article 7.1 are known or discovered, or any events leading to above circumstances have occurred..

- 7.3 Subject to other terms of this Agreement (including but not limited to Article 19.1), unless the Event of Default listed in Article 7.1 has been solved to the Pledgee's satisfaction within thirty(30) days after receiving the Pledgee's notice, the Pledgee may issue a Notice of Default to the Pledgors when such Event of Default occurs or any time after the occurrence, and exercise all its remedial rights and power against the defaults under the PRC laws, Transaction Agreement and this Agreement, including but not limited to:
- (a) asking Party C to immediately make all outstanding payments due under the Business Cooperation Agreement, repay all debts due under the Transaction Agreement, make all other payables due to the Pledgee, and/or repay the loan; and/or
 - (b) disposing of the Pledge according to Article 8 of this Agreement; and/or disposing of the pledged Equity Interest in other ways (including but not limited to giving discounts to the Equity Interest in whole or in part, and enjoying the priority of compensation from the proceeds of the Equity Interest auction and sales).
- Subject to other terms of this Agreement (including but not limited to Article 19.1), the Pledgee shall have rights to exercise any of such rights based on its independent judgments and choices. Under this situation, all other Parties of this Agreement shall unconditionally agree and fully collaborate. The Pledgee shall not assume any responsibility for any loss resulting from its appropriate exercise of such rights and power.
- 7.4 The Pledgee shall be authorized to appoint its lawyer or other agent in writing to exercise any and all such rights and power, while the Pledgors or Party C shall not raise any objection to such appointment.
- 7.5 Subject to other terms of this Agreement (including but not limited to Article 19.1), the Pledgee shall be authorized to simultaneously or successively exercise any of its remedies. Before exercising its rights to auction or sell the Equity Interest under this Agreement, the Pledgee need not exercise other remedies in advance.

8. Exercise of the Pledge

- 8.1 Except for fulfilling the Exclusive Option Agreement or other Transaction Agreement, before all Contract Obligations are performed and the Secured Indebtedness is fully repaid, the Pledgors shall not transfer their rights or Equity Interest in Party C without the Pledgee's prior written consent.
- 8.2 The Pledgee may issue a Notice of Default to the Pledgors according to Article 7.3 in exercising the Pledge.
- 8.3 Subject to the provisions of Article 7.3, the Pledgee may compulsorily enforce the Pledge while issuing a Notice of Default according to Article 7.3 or any time after issuing such notice. The Pledgors shall cease to own any Equity Interest-related rights or interests once the Pledgee decides on the compulsory enforcement of the Pledge.

- 8.4 When the Pledgee exercises the Pledge, within the scope of the license and in accordance with applicable laws, the Pledgee shall have disposition rights of the pledged Equity Interest, all payments received from the Pledge in exercising the Pledge shall be disposed of in the following order:
- (a) Pay all fees incurred for disposition of the Equity Interest and the Pledgee's exercising of its rights and power, including the lawyer fees and agent's fees;
 - (b) Pay taxes for disposing of the Equity Interest;
 - (c) If there is a surplus after the above payments are deducted, the balance (excluding interests) shall be paid to the Pledgors or held in escrow by a third party authorized to receive such money according to the relevant PRC laws or a local notary office of the place where the Pledgee is based (all expenses thereby incurred shall be deducted from such balance).
- 8.5 The Pledgors and Party C shall provide necessary assistance when the Pledgee disposes of the Pledge according to this Agreement, in order for the Pledgee to compulsorily enforce the Pledge according to this Agreement.
- 8.6 All actual outlays, taxes and legal fees related to the Equity Interest pledge and the Pledgee's exercising of rights under this Agreement shall be assumed by Party C, except for those borne by the Pledgee as specified by laws. The Pledgee shall be authorized to deduct such expenses from the money earned from its exercising of rights and power on an accrual basis.
- 8.7 The amount of the Secured Indebtedness independently confirmed by the Pledgee in exercising the Pledge over the Equity Interest according to this Agreement shall be deemed as conclusive evidence of Secured Indebtedness under this Agreement.

9. Transfer

- 9.1 The Pledgors shall not transfer their rights and obligations under this Agreement without the Pledgee's prior written consent.
- 9.2 This Agreement shall be binding upon the Pledgors, Party C and their respective heirs and authorized assignees (if any) and shall be effective for the Pledgee, its heirs and assignees.
- 9.3 The Pledgors shall strictly comply with provisions of this Agreement and other agreements executed by the Pledgors, including Transaction Agreement, and perform the obligations under this Agreement and other agreements (including Transaction Agreement) without any act or omission which might affect effectiveness and enforceability of such obligations. Unless otherwise instructed by the Pledgee in writing, the Pledgors shall not exercise any remaining rights in the Equity Interest pledged under this Agreement.

10. Termination

When the Term of the Pledge expires, this Agreement terminates, and the Pledgee shall cancel or terminate this Agreement as soon as possible to the extent feasible and practicable, and rescind the Equity Interest pledge under this Agreement. Besides, the Pledgors and Party C shall document the release of the Equity Interest pledge on Party C's Register of Shareholders and register such cancellation with the relevant registration authority. The reasonable expenses incurred for releasing the Equity Interest pledge shall be borne by Party C. Article 12, Article 13 and Article 19.1 shall survive the termination of this Agreement.

11. Commissions and Other Expenses

All expenses and actual outlays related to this Agreement, including but not limited to lawyers' fees, flat costs, stamp duties, any other taxes and fees, shall be borne by Party C. Party C shall fully reimburse the Pledgee for such paid taxes and fees if the Pledgee is required to bear some related taxes and fees as stipulated by applicable laws.

12. Confidentiality

All Parties admit that all oral or written materials exchanged with respect to this Agreement are confidential. All Parties are required to keep such materials confidential. Without the prior written consent of all other Parties, no party is allowed to disclose any related materials to a third party unless in following cases: (a) such materials have been known to the public (but not disclosed by the party receiving such materials); (b) the materials are required to be disclosed by applicable laws or rules of any securities exchange; or (c) any Party of this Agreement discloses the materials to its legal adviser or financial adviser regarding the transactions specified hereunder, and such legal adviser or financial adviser is bound by the same confidentiality obligations as those under this article; or (d) any Party that is a limited partnership (or a direct or indirect affiliate or subsidiary of the limited partnership) discloses the above confidential information to the general partner, manager and existing or potential limited partners of the limited partnership. The disclosure of any confidential information by staff or organizations hired by any Party shall be deemed as such party's disclosure of such confidential materials, and such party shall assume legal responsibilities for violating this Agreement. This article shall survive the termination of this Agreement, notwithstanding the reason of termination.

13. Governing Laws and Dispute Resolution

- 13.1 The signing, effectiveness, interpretation, performance, modification and termination of this Agreement as well as dispute resolution hereunder shall be governed by the PRC laws.

- 13.2 In case that any dispute occurs in interpreting and performing this agreement, the Parties of this agreement shall firstly try to resolve it through negotiation in good faith. If the Parties fail to reach a consensus on such dispute resolution through negotiation within thirty(30) days as required by any Party, any Party may submit such dispute to the China International Economic and Trade Arbitration Commission, which will resolve the dispute through arbitration according to current effective arbitration rules. The arbitration shall be performed in Beijing in Chinese. The arbitration awards shall be final and binding upon all Parties. The arbitration tribunal may decide upon compensation with respect to Party C's rights in the Equity Interest, assets or property, or compensate the Pledgee for the losses resulting from other Parties' breach of this agreement, adjudicate compulsory remedies or order Party C to go bankrupt regarding related businesses or compulsory asset transfer. After arbitration awards take effects, any Party shall be authorized to apply to a competent court for enforcing arbitration awards. If necessary, arbitration organizations shall have rights to firstly ask the breaching party to immediately stop its defaults before giving the final awards on disputes of all Parties concerned, or prohibit the breaching party from conducting acts which might aggravate the Pledgee's losses. Courts of Hong Kong, Cayman Islands or other competent courts (including courts of the place where Party C lives, or courts of the place where Party C's or the Pledgee's main assets are) shall have rights to grant or execute awards of an arbitration tribunal. They shall have rights to adjudicate or enforce temporary relief with respect to Party C's rights and interests in the Equity Interest or property. They shall also have rights to offer temporary relief to the party making a request for arbitration by giving awards or judgments before the tribunal court forms. For instance, the breaching party may be ordered by way of court judgment or arbitrated award to immediately suspend their breaches or conduct which might further aggravate the Pledgee's losses.
- 13.3 When any dispute occurs in interpreting or performing this Agreement, or any dispute is under arbitration, Parties of this Agreement shall continue to exercise their rights and performing their respective obligations under this Agreement except for disputed matters.
- 13.4 If any law of the PRC, rule or regulation is promulgated or revised after the date of signing this agreement, or the interpretation or applicability of such law, rule or regulation changes, the following provisions shall apply: In the case of PRC laws(a) if the revised laws or newly promulgated rules are more preferential for any Party as compared to laws, rules or regulations in effect at the time this Agreement was executed without imposing material adverse impacts upon other Parties, the Parties of this Agreement shall promptly apply for obtaining benefits from such modifications or new rules and try their best to have the application approved; or (b) the original articles of this Agreement shall prevail if such revised laws or newly enacted rules directly or indirectly impose material adverse impacts upon any Party's economic interests under this Agreement. The Parties shall seek to be exempted from these revised laws or new rules by all lawful means. If the adverse impacts on any Party's economic benefits cannot be alleviated according to this Agreement, all Parties shall promptly negotiate with each other and make all necessary revisions to this Agreement after the affected party notifies all other Parties and protect the affected party's economic interests.

14. Force Majeure

- 14.1 “**Force majeure**” means unforeseeable, unavoidable and irresistible events which make it impossible to perform this Agreement in part or in whole. Such events include but are not limited to earthquake, typhoon, flood, wars, strike, riot, government actions, or changes to laws or rules or their application.
- 14.2 In the event of a force majeure incident, a party’s obligations under this Agreement shall be naturally suspended for the delay caused by the incident, and the term for performing its obligations shall be extended accordingly. Such party shall not be subject to any punishment or assume any responsibility. In case of a force majeure incident, all Parties shall immediately negotiate with each other to look for a fair solution, and make every reasonable effort to minimize impacts of force majeure.

15. Notices

- 15.1 All notices and other communications which are issued as required or permitted by this Agreement shall be delivered in person or sent to the Parties’ address and fax number listed in Appendix I through registered mail, postage prepaid, commercial express delivery services or fax. After notice is sent, an email shall be sent to confirm the delivery. The date of effective delivery of such notices shall be determined as follows:
- 15.1.1 The notices shall be deemed to have been delivered to the designated address on the date of sending or rejection if they are delivered in person, express delivery services or registered mail, postage prepaid.
- 15.1.2 The notices shall be deemed to have been delivered if they are successfully sent by fax (should be confirmed by the message automatically generated upon successful delivery).
- 15.2 Any party may issue a notice to all other Parties according to this article to inform them of the address, fax and/or email address, which can be changed from time to time.

16. Severability

If one or more articles of this Agreement are adjudicated to be ineffective, illegitimate or unenforceable in any aspect according to any laws, rules or regulations, validity, legitimacy or enforceability of other articles of this Agreement shall not be affected or impaired in any aspect. All Parties shall strive to replace such ineffective, illegitimate or unenforceable articles with valid ones to the maximum extent permitted by laws and expected by Parties. The economic results from such invalid articles shall be as similar as possible to those from ineffective, illegal or unenforceable articles.

17. Appendixes

Appendixes hereunder shall be integral parts of this Agreement.

18. Effectiveness, Revision, Modification, Supplementation and Texts

- 18.1 This Agreement shall become effective from the date of signing by the Parties, and the Equity Interest pledge under this Agreement shall become effective from the date on which the registration authority completes the relevant registration procedures.
- 18.2 All revisions, modifications and supplementations of this agreement shall be in writing. They shall take effects after they are executed or stamped by all Parties hereunder and governmental registration procedures (if applicable) are completed.
- 18.3 If revision of this Agreement is proposed by the related Stock Exchange or other regulatory institutions, or is required according to securities listing regulations of the related Stock Exchange or related regulations, rules and guiding requirements, this Agreement shall be revised by the Parties reasonably.
- 18.4 This Agreement is made in five (5) copies. Each party shall hold one(1) copy and one (1) copy shall be reported to the registration authority. All copies shall have equal legal forces.

19. Others

- 19.1 Notwithstanding any other provision of this Agreement or any other Transaction Agreement or any other document or law, the Pledgors' obligations and liabilities under this Agreement are several and not joint.
- 19.2 Except for the written revisions, supplementations or modifications made after the date of signing, this Agreement shall constitute the entire agreement concluded among all Parties hereunder regarding the subject matter of this Agreement. It shall supersede all previous oral and written negotiations, statements and contracts concluded regarding the subject matter of this Agreement.
- 19.3 This Agreement shall be binding upon and beneficial to all Parties' respective heirs and authorized assignees.

- 19.4 Any Party may waive its rights under this Agreement, whereas such waiver shall be in writing and approved by all Parties' signatures. Any Party's waiver against another party's breach of this Agreement under certain circumstance shall not be deemed as its waiver against such party's similar breaches under other circumstances.
- 19.6 The headings of this Agreement are only for the convenience of reading. They shall not be used for interpreting, describing or impacting definitions under this Agreement in other aspects.
- 19.7 All Parties agree to promptly sign documents and take further actions which are reasonably necessary or convenient to perform this Agreement and achieve its purposes.
- 19.8 To the extent there is no violation of other articles of the Transaction Agreement and this Agreement, the Pledgors and Party C shall immediately take actions according to the Pledgee's written instructions and reasonable requirements provided that the enactment or changes of any laws, rules or regulations of the PRC, or changes to the interpretation or applicability of such laws, rules or regulations, or changes to related registration procedures make the Pledgee believe that keeping this Agreement or the Pledge under this Agreement effective and/or disposing of the Equity Interest in ways designated under this Agreement may become illegal or violate such laws, rules or regulations, in order to: (a) keep this Agreement and the Pledge hereunder effective; (b) for the convenience of disposition of the Equity Interest in ways specified by this Agreement; and/or (c) maintain the guarantees which have been or are to be established by this Agreement.
- 19.9 This Agreement is a legal document independent of Transaction Agreement and other security documents, the invalidity of which shall not affect all Parties' rights or obligations under this Agreement. If Transaction Agreement or other security documents are announced to be invalid, but the Pledgors still have remaining Contract Obligations and/or Party C still owes Secured Indebtedness to the Pledgee, the Equity Interest under this Agreement shall still be used as collateral for pledging the Contract Obligations and Secured Indebtedness until the Secured Indebtedness is fully repaid and all Contract Obligations are performed.

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(This page is intentionally left blank and is the signing page of this Equity Interest Pledge Agreement)

IN WITNESS WHEREOF, the Parties have executed this Equity Interest Pledge Agreement as of the date and at the address first above written.

Genetron (Wuxi) Business Management Co., Ltd. (seal)

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Equity Interest Pledge Agreement)

IN WITNESS WHEREOF, the Parties have executed this Equity Interest Pledge Agreement as of the date and at the address first above written.

Wang Sizhen

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Equity Interest Pledge Agreement)

IN WITNESS WHEREOF, the Parties have executed this Equity Interest Pledge Agreement as of the date and at the address first above written.

Jiao Yuchen

By: /s/ Yuchen Jiao

(This page is intentionally left blank and is the signing page of this Equity Interest Pledge Agreement)

IN WITNESS WHEREOF, the Parties have executed this Equity Interest Pledge Agreement as of the date and at the address first above written.

Genetron (Wuxi) Biotech Co., Ltd. (seal)

By: /s/ Sizhen Wang

Exclusive Option Agreement

This Exclusive Option Agreement (this “**Agreement**”) is executed by and among the following Parties on December 7, 2020 in Wuxi, Jiangsu, the People’s Republic of China (the “**PRC**”):

Party A: **Genetron (Wuxi) Business Management Co., Ltd.**, a limited liability company, organized and existing under the laws of the PRC, with its address at Room 401, No. 1719-8 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

Party B: **Wang Sizhen**, a Chinese citizen with Chinese Identification No.: [***]; and **Jiao Yuchen**, a Chinese citizen with Chinese Identification No.: [***].

Party C: **Genetron (Wuxi) Biotech Co., Ltd.**, a limited liability company organized and existing under the laws of PRC, with its address at 5th Floor, 1719-15 Huishan Avenue, Huishan Economic Development Zone, Wuxi, Jiangsu, China.

In this Agreement, each of Party A, Party B and Party C shall be hereinafter referred to as a “**Party**” respectively, and as the “**Parties**” collectively.

Whereas:

- 1 Party B holds 100% of the equity interests of Party C collectively;
- 2 Party A is a foreign-invested enterprise registered in Wuxi. Genetron Health (Hong Kong) Company Limited (a company registered under the laws of Hong Kong) (the “**Hong Kong Company**”) holds 90% of Party A’s equity, Wuxi Huicheng Ruida Venture Capital Partnership (Limited Partnership) holds 6% of its equity, and Shanghai Shunfu Enterprise Management Service Center (Limited Partnership) holds 4% of its equity;
- 3 Party B and Party C are respectively inclined to grant Party A an irrevocable and exclusive option to purchase all or part of the equity interests and assets of Party C held by Party B;
- 4 Party A, Party B and Party C intend to execute this Agreement for the purpose that Party B and Party C grant Party A an exclusive option right.

Now therefore, through mutual discussion and negotiation, the Parties have reached the following agreements:

1. Sale and Purchase of Equity Interest and Assets

1.1 Option Granted

Party B hereby severally, but not jointly agrees to grant Party A an irrevocable and exclusive right to purchase the equity interests in Party C that held by Party B, once or at multiple times at any time in part or in whole and at the price set forth in Article 1.3 hereof in accordance with the procedure promulgated by Party A in Party A's sole and absolute discretion to the extent permitted by the PRC laws (including any laws, administrative regulations, rules, notifications, interpretations or other binding documents issued by any central or local legislative, executive or judicial authority before or after the signing of this Agreement, the "**PRC laws**") within the term of this agreement (the "**Equity Interest Purchase Right**"). Party C hereby agrees the grant by Party B of the Equity Interest Purchase Right to Party A. Party C hereby agrees to grant Party A an irrevocable and exclusive right to purchase a portion or whole of the asset of Party C from Party C, once or at multiple times at any time, and at the price set forth in Article 1.3 hereof in accordance with the procedure promulgated by Party A in Party A's sole and absolute discretion to the extent permitted by the PRC laws within the term of this agreement (the "**Asset Purchase Right**", and together with the Equity Interest Purchase Right referred to as the "**Purchase Right**"). Party B hereby agrees the grant by Party C of the Asset Purchase Right to Party A. Except for Party A, no other third party shall be entitled to the Purchase Right or other rights with respect to the equity interests held by Party B and assets of Party C. The term "**person**" as used herein shall refer to individuals, corporations, joint ventures, partnerships, enterprises, trusts or non-corporate organizations.

1.2 Steps for Exercise of the Purchase Right

The exercise of the Purchase Right by Party A shall subject to the provisions of the PRC laws. Party A may exercise the Purchase Right according to Article 1.1 by issuing a written notice to Party B and/or Party C (the "**Equity Interest Purchase Notice**" or the "**Asset Purchase Notice**"), specifying: (a) Party A's decision to exercise the Purchase Right; (b) the equity interests to be purchased by Party A from Party B (the "**Purchased Interests**") and/or the asset to be purchased by Party A from Party C (the "**Purchased Asset**") ; and (c) the purchase date or transfer date of the Purchased Interests and/or the Purchased Asset. After receiving the Equity Interest Purchase Notice and/or the Asset Purchase Notice, Party B and/or Party C shall transfer the Purchased Interests and/or the Purchased Asset to Party A according to the notice through the way specified in article 1.4 herein.

1.3 Purchase Price and Payment

The total purchase price (the “**Purchase Price**”) for the purchased interest and/or asset shall be the nominal price when Party A exercises the Purchase Right, however, if the relevant governmental department or the PRC laws require that the Purchase Price be different from the nominal price, then the Purchase Price shall be the lowest price meeting such requirements. Notwithstanding, to the extent permitted by the PRC laws, the Purchase Price Party A paid to Party B and/or Party C shall be returned by Party B and/or Party C to Party A (but the tax (if applicable) is withheld and deducted from the Purchase Price). After necessary tax is withheld and deducted for the Purchase Price in accordance with the PRC laws, the Purchase Price shall be paid to the designated account of Party B and/or Party C within 7(seven) days from the date when the Purchased Shares and/or the Purchased Asset is officially transferred to Party A.

1.4 Transfer of the Purchased Interests and/or the Purchased Asset

For each exercise of the Purchase Right:

- 1.4.1 Party B shall cause Party C to promptly convene a shareholders’ meeting, at which a resolution shall be adopted approving Party B and/or Party C’s transfer of the Purchased Interests and/or the Purchased Asset;
- 1.4.2 Party B and/or Party C shall execute an equity interest transfer contract and/or an asset transfer contract, and any other documents with respect to each transfer with Party A, in accordance with the provisions of this Agreement and the Equity Interest Purchase Notice and/or the Asset Purchase Notice;
- 1.4.3 The relevant Parties shall execute all other necessary contracts, agreements or documents (including but not limited to the Articles of Association, the joint venture Contract and its amendment of Party C), obtain all necessary internal approval and authorization, government approvals, licenses and permits (including but not limited to Party C’s business license) and take all necessary measures to transfer the valid ownership of the Purchased Interests and/or the Purchased Asset to Party A, unencumbered by any security interests, and cause Party A to become the registered owner(s) of the Purchased Interests (subject to the completion of corresponding industrial and commercial registration and the reporting of the commercial department (if applicable))and/or the owner of the Purchased Asset. For the purpose of this Section and this Agreement, “**security interests**” shall include securities, mortgages, third party’s rights or interests, any stock options, acquisition rights, rights of first refusal, rights to offset, ownership retention or other security arrangements, but shall be deemed to exclude any security interest created by this Agreement, the Equity Interest Pledge Agreement or any other transaction documents (as defined in the Equity Interest Pledge Agreement). The “**Equity Interest Pledge Agreement**” as used in this Section and this Agreement shall refer to the Equity Interest Pledge Agreement (as amended from time to time) executed by and among Party A, Party B and Party C on the date hereof. Under the Equity Interest Pledge Agreement, Party B may, in order to guarantee party C to fulfill its obligations under the Exclusive Business Cooperation Agreement executed between party C and party A on the date hereof (as amended from time to time, the “**Business Cooperation Agreement**”), the Shareholder Voting Rights Entrustment Agreement executed among the Parties on the date hereof (as amended from time to time, the “**Shareholder Voting Rights Entrustment Agreement**”), the Power of Attorney(if any)(as amended from time to time, the “**Power of Attorney**”) issued by Party B according to the Shareholder Voting Rights Entrustment Agreement and this Agreement, respectively pledge to Party A the full equity interests of Party C it holds.

2. Covenants

2.1 Covenants of Party C

Party C hereby covenants as follows:

- 2.1.1 Without the prior written consent of Party A, Party C shall not in any manner supplement, change or amend the articles of association and bylaws of Party C, increase or decrease its registered capital, change its structure of registered capital in other manners or take any other measures to separate, dissolve or change the forms of Party C;
- 2.1.2 Party C shall maintain its corporate existence in accordance with good financial and business standards and practices, operate its business and handle its affairs prudently and effectively, and shall fulfill the obligations stipulated under the Business Cooperation Agreement;
- 2.1.3 Without the prior written consent of Party A, Party C shall not at any time from the date hereof, sell, transfer, mortgage or dispose of in any manner any material assets (tangible or intangible assets) of Party C or legal or beneficial interest in the material business or revenues of Party C of more than RMB1,000,000, or allow the encumbrance thereon of any security interest;
- 2.1.4 Unless otherwise required by the PRC laws, Party C shall not be dissolved or liquidated without prior written consent by Party A; After the liquidation described in Article 3.6, Party B shall pay any residual value to Party A in full or shall cause such payment to take place. Provided that such payment is forbidden according to the PRC laws, Party B will pay the income to Party A to the extent permitted by the PRC laws.
- 2.1.5 Without the prior written consent of Party A, Party C shall not incur, inherit, guarantee or suffer the existence of any debt, except for (i) debt incurred in the ordinary course of business other than through loans; and (ii) debts have been disclosed to Party A for which Party A's written consent has been obtained.

- 2.1.6 Party C shall always operate all of Party C's businesses within the normal business scope to maintain the asset value of Party C and refrain from any action/omission that may affect Party C's operating status and asset value; and the board of directors of Party A is entitled to supervise the asset of Party C and assess whether it has control over the above asset. If the board of directors of Party A believes that the business operation of Party C will affect the value of its asset or affect the board's control over the asset of Party C, Party A will engage legal counsels or other professionals to deal with issues hereof;
- 2.1.7 Without the prior written consent of Party A, Party C shall not execute any major contract, except for the contracts in the ordinary course of business and the contracts signed between Party C and Party A's foreign parent company or its subsidiaries directly or indirectly held by Party A's foreign parent company (for the purpose of this subsection, a contract with a price exceeding RMB 1,000,000 shall be deemed as a major contract);
- 2.1.8 Without the prior written consent of Party A, Party C shall not provide any person with any loan, financial support, or mortgage, pledge and any other form of security, or shall not allow any other third party to place any mortgage or pledge on Party C's asset or equity interests;
- 2.1.9 Party C shall provide all materials relating to its operation and financial status to Party A upon Party A's request;
- 2.1.10 Without the prior written consent of Party A, Party C shall not engage in any merge, partnership, joint venture or union with any party, or to acquire or invest in any party;
- 2.1.11 Party C shall promptly notify Party A of the occurrence or possible occurrence of any litigation, arbitration or administrative proceedings relating to Party C's assets, business or revenue, and take all necessary measures as Party A may reasonably request;
- 2.1.12 To maintain the ownership by Party C of all of its assets, Party C shall execute all necessary or appropriate documents, take all necessary or appropriate actions, file all necessary or appropriate complaints, and raise necessary and appropriate defenses against all claims;
- 2.1.13 Without the prior written consent of Party A, Party C shall ensure that it shall not in any manner distribute dividends to its shareholders. Provided that upon Party A's written request, Party C shall immediately distribute all distributable profits to its shareholders;

- 2.1.14 At the request of Party A, Party C shall appoint any person designated by Party A as the director, supervisor and/or senior management of Party C, and/or remove the incumbent director, supervisor and/or senior management and perform all relevant resolutions and filing procedures; Party A shall be entitled to require Party B and Party C to replace the foregoing personnel;
- 2.1.15 Subject to other provisions of this Agreement (including but not limited to Articles 5.2 and Articles 12.1), if Party A fails to exercise the Purchase Right due to the Party C's shareholders or Party C fails to fulfill the tax obligation under the applicable laws, Party A shall be entitled to request Party C or its shareholders to fulfill the tax obligation, or request Party C or its shareholders to pay the tax to Party A so that Party A can pay it on behalf of Part C or its shareholders;
- 2.1.16 As for the covenants applicable to Party C under Article 2.1 hereof, Party C shall cause its subsidiary companies to similarly obey the covenants under applicable situations as if the subsidiary companies are acting as Party C and bound by the corresponding articles herein.

2.2 Covenants of Party B

Party B hereby severally, not jointly and irrevocably covenants as follows:

- 2.2.1 Without the prior written consent of Party A, Party B shall not sell, transfer, mortgage or dispose of in any other manner any legal or beneficial interest in the equity interests in Party C held by Party B, or allow the encumbrance thereon, except for the pledge placed thereon in accordance with the Equity Interest Pledge Agreement or any other transaction documents (as defined in the Equity Interest Pledge Agreement); and Without the prior written consent of Party A, Party B shall cause the shareholders' meeting and/or the directors (or the executive director) of Party C not to approve any sale, transfer, mortgage or disposition in any other manner of any legal or beneficial interest in the equity interests in Party C held by Party B, or allow the encumbrance thereon of any security interest, except for the pledge placed thereon in accordance with the Equity Interest Pledge Agreement or any other transaction documents(as defined in the Equity Interest Pledge Agreement);
- 2.2.2 Party B shall not engage in any business operations or take any other actions that may adversely affect Party C's reputation;
- 2.2.3 Party B shall take reasonable measures to ensure Party C's business licenses are legitimate, effective and renewed in according with the law;

- 2.2.4 As shareholders of Party C, Party B shall not injure any of the interests of Party C by abusing the shareholder's rights; Party A shall be entitled to exercise the Purchase Right under the Exclusive Option Agreement in the case of Party B's abusing;
- 2.2.5 Party B shall not request Party C to distribute dividends or profits in other forms with respect to the Party C's equity held by Party B, or shall not submit relevant resolution matters to the Board of Directors. In any event that Party B receives any revenue, profit distribution or dividend of Party C, Party B shall forfeit such revenues, profits distribution and dividends, and promptly transfer or pay the foregoing revenues, profit distribution, dividend to Party A to the extent permitted by the PRC laws;
- 2.2.6 Party B shall cause the shareholders' meeting and/or the directors (or the executive director) of Party C not to approve any sale, transfer, mortgage or disposition in any other manner of any legal or beneficial interest in the equity interests in Party C held by Party B without the prior written consent of Party A, or set the encumbrance thereon of any security interests, except for the pledge placed hereon according to the Equity Interest Pledge Agreement;
- 2.2.7 Party B shall cause the shareholders' meeting and/or the board of directors (or the executive director) of Party C not to approve the merge, partnership, joint venture or union with any person, or the acquisition of or investment in any person, or Party C's splitting, modification of the Article of Association of Party C or its joint venture contract, or the change of registered capital or the form of Party C without the prior written consent of Party A;
- 2.2.8 Party B shall immediately notify Party A of the occurrence or possible occurrence of any litigation, arbitration or administrative proceedings relating to the equity interests in Party C held by Party B, and take any and all necessary measure as Party A may reasonably request;
- 2.2.9 Party B shall cause the shareholders' meeting or the board of directors (or the executive director) of Party C to vote their approval of the transfer of the Purchased Interests and/or the Purchased Asset as set forth in this Agreement and to take any and all other actions that may be requested by Party A;
- 2.2.10 At the request of Party A at any time, Party B and/or Party C shall immediately and unconditionally transfer its equity interests and/or assets of Party C to Party A in accordance with the Purchase Right under this Agreement, and Party B shall hereby waive its right of first refusal to the transfer of equity interests by any other shareholder of Party C to Party A (if any);

- 2.2.11 Party B shall strictly abide by the provisions of this Agreement and other contracts jointly or separately executed by and among Party B, Party C and Party A (including but not limited to the Equity Interest Pledge Agreement and the Business Cooperation Agreement), perform obligations hereunder, and refrain from any action/omission that may affect the effectiveness and enforceability thereof. To the extent that Party B has any remaining rights with respect to the equity interests subject to this Agreement or the Equity Interest Pledge Agreement or the Power of Attorney in which Party A as a beneficiary, Party B shall not exercise such rights except in accordance with the written instructions of Party A.
- 2.2.12 Prior to Party C's liquidation, if Party A has paid the Purchase Price of equity interest to Party B, but related changes in the registration in authority has not completed, Party B shall pay the income from distribution of residual property of Party C's equity held by Party B to Party A freely at the time of or after dissolution of Party C. Under such circumstance, Party B should not claim any rights for related income of residual property distribution (unless under Party A's instruction);
- 2.2.13 Party B agrees to unconditionally return the Purchase Price received from Party A for the transfer of the Purchased Interests and/or the Purchased Asset transferred by Party B to the extent permitted by the PRC Laws at that time (but the tax (if applicable) shall be withheld and deducted for the Purchase Price); and
- 2.2.14 Party B agrees to execute an irrevocable Power of Attorney in the form and substance satisfactory to Party A, and entrust Party A to exercise all the shareholders' rights of Party B; and
- 2.2.15 Party B shall ensure that Party C will be validly existing and in good standing, and will not be terminated, liquidated or dissolved.

3. Representations and Warranties

Party B and Party C hereby represent and warrant to Party A as stated in the following articles from Article 3.1 to Article 3.2, severally and not jointly, as of the date of this Agreement and each date of the transfer of the Purchased Interests and the Purchased Asset, and Party C hereby represents and warrants to Party A as stated in the following articles from Article 3.4 to Article 3.9, as of the date of this Agreement and each date of the transfer of the Purchased Interests and the Purchased Asset:

- 3.1 They have the power and capacity to execute and deliver this Agreement and any transfer contracts to which they are parties concerning the Purchased Interests and/or the Purchased Asset to be transferred thereunder (each, a “**Transfer Contract**”), and to perform their obligations under this Agreement and any Transfer Contracts. Party B and Party C agree to enter into Transfer Contracts consistent with the terms of this Agreement upon Party A’s exercise of the Purchase Right. This Agreement and the Transfer Contracts to which they are parties constitute or will constitute their legal, valid and binding obligations and shall be enforceable against them in accordance with the provisions thereof;
- 3.2 The execution and delivery of this Agreement or any Transfer Contracts and the obligations under this Agreement or any Transfer Contracts shall or will not: (i) cause any violation of any applicable laws of China; (ii) be inconsistent with the articles of association, joint venture contracts, bylaws or other organizational documents; (iii) cause the violation of any contracts or instruments to which they are a party or which are binding on them, or constitute any breach under any contracts or instruments to which they are a party or which are binding on them; (iv) cause any violation of any condition for the grant and/or continued effectiveness of any licenses or permits issued to either of them; or (v) cause the suspension or revocation of or imposition of additional conditions to any licenses or permits issued to them;
- 3.3 Party B has a good and merchantable title to the equity interests of Party C held by Party B. Except for the Equity Interest Pledge Agreement or any other transaction documents (as defined in the Equity Interest Pledge Agreement), Party B has not placed any security interest on such equity interests;
- 3.4 Party C has a good and merchantable title to all of its assets, and has not placed any security interest on the aforementioned assets;
- 3.5 Party C does not have any outstanding debts, except for (i) debt incurred within the normal business scope; and (ii) debts disclosed to Party A for which Party A’s written consent has been obtained.
- 3.6 If Party C dissolves or liquidates required by the PRC laws, Party C shall sell all the assets to Party A at the lowest price permitted under the PRC laws to the extent permitted by the PRC laws. Party C shall exempt any payment obligation of Party A arising from the sale of assets; and subject to the applicable PRC laws at the time, any revenue arising from the sale of assets shall be paid to Party A as part of service fees under the Business Cooperation Agreement;
- 3.7 Party C has complied with all laws and regulations of China applicable to asset acquisitions; and

- 3.8 There are no existing or pending litigation, arbitration or administrative proceedings relating to the equity interests of Party C, assets of Party C or Party C.
- 3.9 Under the circumstance of death, incapacity, marriage, divorce, bankruptcy, dissolution, liquidation or other circumstances that may influence Party B's equity interest of Party C, Party B's successors (including spouse, children, parents, siblings and grandparents) or the shareholder or transferee of the equity of Party C at that time will be deemed to be the signatory of this Agreement, and be entitled to inherit, enjoy and undertake all rights and obligations of Party B herein, and transfer the relevant equity interests of Party C to Party A according to the applicable law at that time and this Agreement.

4. Effective Date and Term

This Agreement shall become effective upon execution by the Parties, and the effective term shall be ten (10) years which may be extended by Party A, remaining effective until the date of the full transfer of the Purchased Interests and/or Purchased Assets held by Party B or Party C to Party A (subject to the completion of the change of the industrial and commercial registration and the reporting to the Commercial Department(if applicable)) and Party A, its subsidiary company and branches are legally engaged in Party C's business. If Party A fails to confirm the renewal of this Agreement until the expiration of this Agreement, this Agreement shall be automatically renewed until Party A delivers the confirmation letter to determine the renewal term of this Agreement. Notwithstanding the foregoing, Party A is entitled to terminate this Agreement at any time by sending written notice to Party B and Party C, and be exempted from any liability for breach of contract relating to its unilateral termination of this Agreement. Unless otherwise provided by the PRC laws, Party B and Party C shall not be entitled to terminate this Agreement unilaterally.

5. Liability for Breach of Contract

- 5.1 Unless otherwise specified in other articles herein, if a Party(the “**Defaulting Party**”) fails to fulfill certain obligations herein or violates this agreement in other ways, the other Parties (the “**Damaged Party**”) may: (a) notify the Defaulting Party of the nature and scope of the violation in writing and ask the Defaulting Party to remediate at its own expense within a reasonable period of time (hereinafter referred to as “**Remediation Period**”); and if the Defaulting Party fails to take remedial measures during the Remediation Period, the Damaged Party are entitled to ask the Defaulting Party to undertake all responsibilities for its violation and also compensate all actual economic losses due to the Damaged Party, including without limitation, the legal fees incurred in litigation and arbitration proceedings relating to the violation. The Damaged Party are also entitled to require the Defaulting Party to perform its contractual obligations and request the court or the relevant arbitration institution to issue an order of specific performance or compulsory performance by the Defaulting Party; (b) terminate this agreement and ask the Defaulting Party to undertake all responsibilities for its violation and also compensate all damages; or (c) place the pledged equity on discount, auction or selling according to the Equity Interest Pledge Agreement, be entitled to compensation priority in the amount of discount, auction and selling, and ask the Defaulting Party to undertake all losses hereof. While exercising the foregoing remedial right, the Damaged Party are entitled to other remedial rights regulated herein and under the relevant laws and regulations.
- 5.2 The Parties hereby agree and confirm that, subject to the compulsory requirements of PRC laws, if Party B or Party C is the Defaulting Party, the Damaged Party is entitled to terminate this agreement unilaterally and require the Defaulting Party to compensate the losses. However, if Party A is the Defaulting Party, the Party B and Party C shall exempt Party A’s obligation of compensating the losses, and unless the law states otherwise, the Party B and Party C is not entitled to terminate this agreement under any circumstance.

6. Governing Law and Dispute Resolution

6.1 Governing Law

The execution, effectiveness, construction, performance, amendment and termination of this Agreement and the resolution of disputes hereunder shall be governed by Chinese law.

6.2 Dispute Resolution

Any disputes arising from the interpretation and implementation of this agreement shall be firstly solved through the Parties' friendly negotiations. In case that the consensus on settlement of such disputes is not reached within 30 days after any party asks the other party to reach solution through friendly negotiations, any party can submit the disputes to China International Economic and Trade Arbitration Commission, which gives verdict according to the prevailing arbitration rule at that time. The arbitration shall take place in Beijing and language for arbitration shall be Chinese. The arbitration award is final and binding on each party. The arbitral tribunal can order Party C to compensate the losses of Party A with Party C's equity interests, assets or property rights and interests, reach judgment of mandatory relief through mandatory transfer of related business or assets or order Party B to declare bankruptcy. After the arbitration award becomes effective, any party is entitled to petition the relevant court to execute the arbitration award. If necessary, the arbitral institution is entitled to order the Defaulting Party to cease the breach of this agreement or refrain from actions that would increase the losses to Party A before making final verdict for the disputes of all parties. The courts in Hong Kong, Cayman Islands, China or other places with right of jurisdiction (including the court in the place of Party C, or the court in the place of main asset of Party A or Party C shall be deemed as the court with right of jurisdiction) similarly are entitled to confer or execute the verdict of the arbitral tribunal and is also entitled to make judgment or execute temporary relief for Party C's equity or property interests, and give verdict or judgment of providing certain temporary relief for the party instigating the arbitration before the establishment of arbitral tribunal or in other appropriate circumstances, such as reaching verdict or judgment of ordering the Defaulting Party to cease the breaching of this Agreement or not to cause additional losses to Party A.

6.3 In the arbitration for any disputes arising from the interpretation and implementation of this agreement, the Parties herein shall continue executing other rights and obligations herein respectively except the matters herein in dispute.

6.4 Due to the issuing or alteration of any PRC Laws, rules or regulations or due to the change in interpretation or application of such laws, rules or regulations any time after the signing date, the following agreement shall be applicable: to the extent permitted by PRC Laws, (a) if the alteration of laws or newly issued regulations are more preferential for a Party compared to the relevant laws, decrees, orders or regulations that were in effect on the signing date hereof, each Party shall actively and immediately apply for obtaining the benefits brought by the modification or new regulations and put forth their best effort to obtain the approval for the application; or (b) in case that any party's economic benefit is directly or indirectly adversely influenced due to the alteration of foregoing laws or newly issued regulations, this agreement shall be continuously executed as scheduled. All parties shall obtain the exemption from the altered or new regulations through legal means. If the negative effect on the economic benefit of any Party cannot be resolved under this agreement, all Parties shall immediately negotiate and make all necessary alterations to this agreement after receiving the notification of the affected Party to safeguard the economic benefit of the affected Party.

7. Taxes and Fees

Party C shall pay any and all transfer and registration taxes, expenses and fees incurred thereby or levied thereon in connection with the preparation and execution of this Agreement and the Transfer Contracts, as well as the consummation of the transactions contemplated under this Agreement and the Transfer Contracts.

8. Notices

8.1 All notices and other communications required or permitted to be given pursuant to this Agreement shall be delivered personally or sent by registered mail, prepaid postage, a commercial courier service or facsimile transmission to the address or fax number of such Party as listed in Exhibit I. A confirmation copy of each notice shall also be sent by email. The dates on which notices shall be deemed to have been effectively given shall be determined as follows:

- 8.1.1 Notices given by personal delivery, courier service, registered mail or prepaid postage shall be deemed effectively given on the date of receipt or refusal at the address specified for notices;
- 8.1.2 Notices given by facsimile transmission shall be deemed effectively given on the date of successful transmission (as evidenced by an automatically generated confirmation of transmission).

8.2 Any Party may at any time change its address, fax number and or email address for notices by a notice delivered to the other Parties in accordance with the terms hereof.

9. Confidentiality

The Parties acknowledge that any oral or written information exchanged between the Parties in connection with this Agreement is regarded as confidential information. Each Party shall maintain confidentiality of all such confidential information, and without the written consent of other Parties, it shall not disclose any relevant confidential information to any third parties, except for the following circumstances: (a) the information is in the public domain (other than through the receiving Party's unauthorized disclosure); (b) the information is under the obligation to be disclosed pursuant to the applicable laws or rules of any stock exchange; (c) the information is required to be disclosed by any Party to its legal counsel or financial advisors regarding the transaction contemplated hereunder, provided that such legal counsels, or financial advisors shall be bound by the confidentiality obligations similar to those set forth in this Section; or (d) the information is disclosed by any party as a limited partnership (or a direct or indirect affiliate or subsidiary of a limited partnership) to the general partners, managers and existing and potential limited partners of such limited partnership. Disclosure of any confidential information by the employees or agencies engaged by any Party shall be deemed disclosure of such confidential information by such Party and such Party shall be held liable for breach of this Agreement. The Parties agree that the provisions of this Article shall survive the termination of this Agreement regardless of the reason why this Agreement is terminated.

10. Further Warranties

The Parties agree to promptly execute documents that are reasonably required for or are conducive to the implementation of the provisions and purposes of this Agreement and take further actions that are reasonably required for or are conducive to the implementation of the provisions and purposes of this Agreement.

11. Force Majeure

11.1 “**Force majeure**” refers to events that cannot be foreseen, avoided and overcome so that the this Agreement cannot be executed in part or full. Such events include but are limited to earthquake, typhoon, flood, water disaster, war, strike, turmoil, governmental behavior, changes to legal regulations or their application.

11.2 In case of the occurrence of a force majeure event, a Party’s obligation that is being affected by force majeure shall be automatically suspended during the delay caused by force majeure, and the party’s period of implementation of this agreement shall be automatically prolonged. The prolonged period is the period of the suspension, and the party shall not undertake responsibility and suffer from punishment for it. In case of force majeure, all parties shall instantly negotiate with each other to seek a fair solution and try to minimize effect of force majeure by exerting all reasonable efforts.

12. Miscellaneous

12.1 Non-Joint Liabilities

Despite any adverse provisions in this Agreement or other transaction documents (as defined in the Equity Interest Pledge Agreement) or any other document or law, Party B’s obligations and liabilities under this Agreement are on a several and not joint basis.

12.2 Amendments, changes and supplement

For matters not included herein, the Parties may otherwise enter into supplement agreement upon negotiations. Any revision and supplementation of this agreement shall be made in writing. Any revision and supplementary agreement signed by the Parties relating to this agreement shall be the inalienable part of this agreement, having the same legal effect.

If any revisions to this Agreement is proposed by the related Stock Exchange or other regulatory authorities, or any change in the related listing rules or related requirements hereof relating to this agreement, the parties shall revise this agreement reasonably and accordingly.

12.3 Entire agreement

Except for the amendments, supplements or changes in writing executed after the execution of this Agreement, this Agreement shall constitute the entire agreement reached by and among the Parties hereto with respect to the subject matter hereof, and shall supersede all prior oral and written consultations, representations and contracts reached with respect to the subject matter of this Agreement.

12.4 Headings

The headings of this Agreement are for convenience in reading only, and shall not be used to interpret, explain or otherwise affect the meanings of the provisions of this Agreement.

12.5 Text

This agreement has four copies with one held by each Party, having the same legal effect.

12.6 Severability

In the event that one or several of the provisions of this Agreement are found to be invalid, illegal or unenforceable in any aspect in accordance with any laws or regulations, the validity, legality or enforceability of the remaining provisions of this Agreement shall not be affected or compromised in any respect. The Parties shall strive in good faith to replace such invalid, illegal or unenforceable provisions with effective provisions that accomplish to the greatest extent permitted by law and the intentions of the Parties, and the economic effect of such effective provisions shall be as close as possible to the economic effect of those invalid, illegal or unenforceable provisions.

12.7 Successors

This Agreement shall be binding on and shall inure to the interest of the respective successors of the Parties and the permitted assigns of such Parties.

12.8 Survival

12.8.1 Any obligations that occur or that are due as a result of this Agreement upon the expiration or early termination of this Agreement shall survive the expiration or early termination thereof.

12.8.2 The provisions of Article 6,7,8,9,12.1 and this Article 12.8 shall survive the termination of this Agreement.

12.9 Waivers

Any Party may waive the rights hereof, provided that such a waiver must be provided in writing and shall require the signatures of the Parties. No waiver by any Party in certain circumstances with respect to a breach by other Parties shall operate as a waiver by such a Party with respect to any similar breach in other circumstances.

12.10 Compliance with laws and regulations

The Parties shall comply with and make sure its business operation comply with all Chinese laws and regulations which are binding on them and have been formally issued and may be publicly acquired.

12.11 Transfer

Without prior written consent of Party A, Party C and/or Party B should not transfer any rights/and or obligations herein to any third party.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

(This page is intentionally left blank and is the signing page of this Exclusive Option Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Option Agreement as of the date and at the address first above written.

Genetron (Wuxi) Business Management Co., Ltd. (seal)

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Exclusive Option Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Option Agreement as of the date and at the address first above written.

Wang Sizhen

By: /s/ Sizhen Wang

(This page is intentionally left blank and is the signing page of this Exclusive Option Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Option Agreement as of the date and at the address first above written.

Jiao Yuchen

By: /s/ Yuchen Jiao

(This page is intentionally left blank and is the signing page of this Exclusive Option Agreement)

IN WITNESS WHEREOF, the Parties have executed this Exclusive Option Agreement as of the date and at the address first above written.

Genetron (Wuxi) Biotech Co., Ltd. (seal)

By: /s/ Sizhen Wang

Spouse Consent Letter

To: Genetron (Wuxi) Business Management Co., Ltd.

Whereas:

1. I, [***] (ID card/passport number: [***]), am the spouse of the natural person Wang Sizhen (ID card number: [***]). Wang Sizhen holds 90% equity of Genetron (Wuxi) Biotech Co., Ltd. (hereinafter referred to as “**Target Equity Interest**”)
2. With respect to the aforementioned Target Equity Interest held by Wang Sizhen, Wang Sizhen entered into the Exclusive Option Agreement with other related parties on December 7, 2020, entered into the Equity Pledge Agreement with other related parties on December 7, 2020, and entered into the Shareholder Voting Rights Entrustment Agreement with other related parties on December 7, 2020; and
3. Genetron (Wuxi) Biotech Co., Ltd. entered into the Exclusive Business Cooperation Agreement with Genetron (Wuxi) Business Management Co., Ltd. on December 7, 2020. This Exclusive Business Cooperation Agreement together with the aforementioned Exclusive Option Agreement, Equity Pledge Agreement and Shareholder Voting Rights Entrustment Agreement constitute the contractual control arrangement regarding Genetron (Wuxi) Biotech Co., Ltd. (hereinafter referred to as the “**Contractual Control Arrangement**”).

I hereby confirm and irrevocably undertake as follows on December 7, 2020:

1. I confirm that I have noted and agree that my spouse Wang Sizhen entered into the Exclusive Call Agreement, Equity Pledge Agreement and Shareholder Voting Rights Entrustment Agreement. The aforementioned Target Equity Interest of Genetron (Wuxi) Biotech Co., Ltd. held by Wang Sizhen is not our joint property. I have no rights and interests in such Target Equity Interest, (including the rights gained from the Contractual Control Arrangement). I will never take any action to interfere with the Contractual Control Arrangement, including but not limited to claiming any right over the aforementioned Target Equity Interest and the Contractual Control Arrangement.
2. I hereby undertake, I have not participated in and will not plan to actually participate in the operation and management of Genetron (Wuxi) Biotech Co., Ltd. in the future, and I will not claim any right related to the equity interests and assets of Genetron (Wuxi) Biotech Co., Ltd..

-
3. If, for any reason, I obtain all or part of the Target Equity Interest, I unconditionally agree to be a party of the Contractual Control Arrangement and be bound by the Contractual Control Arrangement. In this respect, I undertake to take all necessary actions and to sign all necessary documents.

This letter will take effect immediately upon its signature by me and will be continuously effective.

(This page is intentionally left blank and is the signing page of this Spouse Consent Letter)

Undertaker's Signature: /s/ [Name of Spouse]

Date: December 7, 2020

Spouse Consent Letter

To: Genetron (Wuxi) Business Management Co., Ltd.

Whereas:

1. I, [***] (ID card/passport number: [***]), am the spouse of the natural person Jiao Yuchen (ID card number: [***]). Jiao Yuchen holds 10% equity of Genetron (Wuxi) Biotech Co., Ltd. (hereinafter referred to as “**Target Equity Interest**”)
2. With respect to the aforementioned Target Equity Interest held by Jiao Yuchen, Jiao Yuchen entered into the Exclusive Option Agreement with other related parties on December 7, 2020, entered into the Equity Pledge Agreement with other related parties on December 7, 2020, and entered into the Shareholder Voting Rights Entrustment Agreement with other related parties on December 7, 2020; and
3. Genetron (Wuxi) Biotech Co., Ltd. entered into the Exclusive Business Cooperation Agreement with Genetron (Wuxi) Business Management Co., Ltd. on December 7, 2020. This Exclusive Business Cooperation Agreement together with the aforementioned Exclusive Option Agreement, Equity Pledge Agreement and Shareholder Voting Rights Entrustment Agreement constitute the contractual control arrangement regarding Genetron (Wuxi) Biotech Co., Ltd. (hereinafter referred to as the “**Contractual Control Arrangement**”).

I hereby confirm and irrevocably undertake as follows on December 7, 2020:

1. I confirm that I have noted and agree that my spouse Jiao Yuchen entered into the Exclusive Call Agreement, Equity Pledge Agreement and Shareholder Voting Rights Entrustment Agreement. The aforementioned Target Equity Interest of Genetron (Wuxi) Biotech Co., Ltd. held by Jiao Yuchen is not our joint property. I have no rights and interests in such Target Equity Interest, (including the rights gained from the Contractual Control Arrangement). I will never take any action to interfere with the Contractual Control Arrangement, including but not limited to claiming any right over the aforementioned Target Equity Interest and the Contractual Control Arrangement.
2. I hereby undertake, I have not participated in and will not plan to actually participate in the operation and management of Genetron (Wuxi) Biotech Co., Ltd. in the future, and I will not claim any right related to the equity interests and assets of Genetron (Wuxi) Biotech Co., Ltd..

-
3. If, for any reason, I obtain all or part of the Target Equity Interest, I unconditionally agree to be a party of the Contractual Control Arrangement and be bound by the Contractual Control Arrangement. In this respect, I undertake to take all necessary actions and to sign all necessary documents.

This letter will take effect immediately upon its signature by me and will be continuously effective.

(This page is intentionally left blank and is the signing page of this Spouse Consent Letter)

Undertaker's Signature: /s/ [Name of Spouse]

Date: December 7, 2020

List of Principal Subsidiaries and the VIEs of the Registrant and Subsidiaries of the VIEs

Principal Subsidiaries	Place of Incorporation
Genetron Health (Hong Kong) Company Limited	Hong Kong
Genetron (Tianjin) Co., Ltd.	PRC
Genetron Health, Inc.	Delaware
Genetron (Wuxi) Business Management Co., Ltd.	PRC
VIEs	Place of Incorporation
Genetron Health (Beijing) Co., Ltd.	PRC
Genetron (Wuxi) Biotech Co., Ltd.	PRC
Subsidiaries of the VIEs	Place of Incorporation
Beijing Genetron Biotechnology Co., Ltd.	PRC
Beijing Genetron Medical Laboratory Co., Ltd.	PRC
Chongqing Genetron Bio-Technology Co., Ltd.	PRC
Chongqing Genetron Medical Laboratory Co., Ltd.	PRC
Shanghai Genetron Bio-Technology Co., Ltd.	PRC
Shanghai Genetron Medical Laboratory Co., Ltd.	PRC
Guangzhou Genetron Bio-Technology Co., Ltd.	PRC
Guangzhou Genetron Medical Laboratory Co., Ltd.	PRC

**CERTIFICATION BY THE PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Sizhen Wang, certify that:

1. I have reviewed this annual report on Form 20-F of Genetron Holdings Limited (the “Company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) [Omitted];
 - (c) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and
5. The Company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’s board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.

Date: April 9, 2021

By: /s/ Sizhen Wang

Sizhen Wang

Chief Executive Officer (principal executive officer)

**CERTIFICATION BY PRINCIPAL FINANCIAL OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Evan Ce Xu, certify that:

1. I have reviewed this annual report on Form 20-F of Genetron Holdings Limited (the “Company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) [Omitted];
 - (c) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and
5. The Company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company’s auditors and the audit committee of the Company’s board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal control over financial reporting.

Date: April 9, 2021

By: /s/ Evan Ce Xu

Evan Ce Xu

Chief Financial Officer (principal financial and accounting officer)

**CERTIFICATION BY PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Genetron Holdings Limited (the “Company”) on Form 20-F for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Sizhen Wang, Chief Executive Officer, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 9, 2021

By: /s/ Sizhen Wang
Sizhen Wang
Chief Executive Officer (principal executive officer)

**CERTIFICATION BY PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Genetron Holdings Limited (the “Company”) on Form 20-F for the year ended December 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Evan Ce Xu, Chief Financial Officer, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 9, 2021

By: /s/ Evan Ce Xu

Evan Ce Xu

Chief Financial Officer (principal financial and accounting officer)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333- 252371) of Genetron Holdings Limited of our report dated April 9, 2021 relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers Zhong Tian LLP
Beijing, the People's Republic of China
April 9, 2021

Partners:
 Paul Aherne **
 Joanne Collett *
 Mark Cummings *****
 Stuart D'Addona ****
 Nicholas Davies ***
 Shamar Ennis ***
 James Gaden *****
 Kristen Kwok **
 Jo Lit *
 Callum McNeil **
 Alice Molan *****
 Andrew Randall **
 Rupen Shah *****
 Denise Wong **

9 April 2021

JWYL/BLUI/G3359-H22357

Genetron Holdings Limited 泛生子基因(控股)有限公司

Walkers Corporate Limited
 190 Elgin Avenue
 George Town
 Grand Cayman KY1-9008
 Cayman Islands

Dear Sirs

Genetron Holdings Limited 泛生子基因(控股)有限公司

We consent to the reference to our firm under the heading “Item 10.E. Additional Information—Taxation—Cayman Islands Taxation” in Genetron Holdings Limited 泛生子基因(控股)有限公司’s Annual Report on Form 20-F for the fiscal year ended 31 December 2020 (the “**Annual Report**”), which will be filed with the Securities and Exchange Commission (the “SEC”) in the month of April 2021.

We further consent to the incorporation by reference into the Registration Statement (Form S-8 No. 333-252371) pertaining to Genetron Holdings Limited’s 2019 Genetron Health Share Incentive Plan and 2019 Genetron Health Share Incentive Scheme of the summary of our opinion under the heading “Item 10.E. Additional Information—Taxation—Cayman Islands Taxation” in the Annual Report.

We also consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully,

/s/ Walkers (Hong Kong)
Walkers (Hong Kong)

Walkers (Hong Kong)**滙嘉律師事務所 (香港)**

15th Floor, Alexandra House, 18 Chater Road, Central, Hong Kong

T +852 2284 4566 F +852 2284 4560 www.walkersglobal.com

Bermuda | British Virgin Islands | Cayman Islands | Dubai | Guernsey | Hong Kong | Ireland | Jersey |
 London | Singapore

*England and Wales; **BVI; ***Cayman Islands; ****New South Wales (Australia); *****Ireland;
 *****Victoria (Australia); *****Bermuda



北京市朝阳区东三环北路甲26号博瑞大厦A座16层1606室 邮编: 100026
Suite 1606, 16/F, Tower A, Borui Plaza, No.A26 East 3rd Ring North Road, Chaoyang District, Beijing 100026, P.R.China

April 9, 2021

To: Genetron Holdings Limited (泛生子基因(控股)有限公司)

1-2/F, Building 11, Zone 1
No.8 Life Science Parkway
Changping District, Beijing
People's Republic of China

Dear Sirs/Madams,

We hereby consent to the reference to our firm in Genetron Holdings Limited's annual report on Form 20-F for the fiscal year ended December 31, 2020, which will be filed by Genetron Holdings Limited in April 2021 with the Securities and Exchange Commission pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and further consent to the incorporation by reference of the summaries of our opinions that appear in the annual report on Form 20-F into the Registration Statements (No. 333-252371) on Form S-8.

We also consent to the filing with the Securities and Exchange Commission of this consent letter as an exhibit to the annual report on Form 20-F for the fiscal year ended December 31, 2020. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours Sincerely,

/s/ SHIHUI PARTNERS
SHIHUI PARTNERS