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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

o **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2019

OR

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

OR

o **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

For the transition period from to

Commission file number: 001-39137

AnPac Bio-Medical Science Co., Ltd.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

British Virgin Islands

(Jurisdiction of incorporation or organization)

801 Bixing Street, Bihu County
Lishui, Zhejiang Province 323006
The People's Republic of China

(Address of principal executive offices)

Chris Chang Yu, Chairman and Chief Executive Officer
Tel: +86-578-2051-666
chris_yu@anpac.cn
801 Bixing Street, Bihu County
Lishui, Zhejiang Province 323006
The People's Republic of China

(Name, Telephone, E-mail 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(s)	Name of Exchange on Which Registered
American depositary shares (each representing one Class A ordinary share, par value US$0.01 per share)	**ANPC**	**NASDAQ Global Market**
Class A ordinary share, par value US$0.01 per share *		

* Not for trading, but only in connection with the listing on the NASDAQ Global Market of the 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 class the period covered by the annual report:

As of December 31, 2019, there were 9,868,000 ordinary shares, being the sum of (i) 7,004,900 Class A ordinary shares, par value US$0.01 per share, and (ii) 2,863,100 Class B ordinary shares, par value US$0.01 per share.

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

o Yes x 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.

o Yes x No

Note — Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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.

x Yes o 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).

x Yes o 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 the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer o | Accelerated filer o | Non-accelerated filer x | Emerging growth company x

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. o

† 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.

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. o

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

U.S. GAAP x | International Financial Reporting Standards as issued by the International Accounting Standards Board o | Other o

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.

o Item 17 o 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).

o Yes x No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

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.

o Yes o No

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EXPLANATORY NOTE

AnPac Bio-Medical Science Co., Ltd. (the "Company") is filing its annual report on Form 20-F for the fiscal year ended December 31, 2019 (the "Annual Report"), pursuant to the SEC's Order under Section 36 of the Securities Exchange Act of 1934 Granting Exemptions from Specified Provisions of the Exchange Act and Certain Rules Thereunder (SEC Release No. 34-88318) dated March 4, 2020, as amended on March 25, 2020 (SEC Release No. 34-88465).

As set forth in the Company's current report on Form 6-K as filed with the Securities and Exchange Commission (the "SEC") on April 29, 2020, the filing of this Annual Report was delayed due to circumstances related to COVID-19 and its abrupt and significant impact on the Company's business operation. The Company followed the recommendations of local health authorities to minimize exposure risks for its employees, including the temporary closures of its laboratories in China from the Chinese New Year to February this year and its laboratory in the United States since early March this year and having its employees in China work remotely until March 9, 2020 and those in the United States work remotely since early March this year. The lack of enough time and manpower onsite resulted in the delay in the preparation and compilation of the Company's financial statements for the year of 2019 and in completion of its Annual Report, preventing the Company from timely filing the Annual Report by April 30, 2020.

INTRODUCTION

Except where the context otherwise requires:

- "ADRs" refers to the American depositary receipts that evidence our ADSs;
- "ADSs" refers to our American depositary shares, each of which represents one Class A ordinary share;
- "CDA test" refers to our cancer screening and detection test using the CDA technology;
- "CDA-based tests" refers to either or both of our CDA tests and combination tests;
- "China" or "PRC" refers to the People's Republic of China, excluding, for the purpose of this annual report only, Hong Kong, Macau and Taiwan;
- "Class A ordinary shares" refers to our Class A ordinary shares of par value US$0.01 per share;
- "Class B ordinary shares" refers to our Class B ordinary shares of par value US$0.01 per share;
- "combination test" refers to a test that combines our CDA test with an auxiliary test based on another cancer screening and detection technology, such as biomarker-based test, using our proprietary algorithm;
- "detection" of cancers by our CDA-based device or tests refers to the detection of the risk of whether cancer may occur or has occurred, not to cancer diagnosis, and "detect" has the corresponding meaning;
- "RMB" or "Renminbi" refers to the legal currency of China;
- "shares" or "ordinary shares" refers to our ordinary shares, including Class A and Class B ordinary shares, par value US$0.01 per share;
- "US$," "U.S. dollars," "$" or "dollars" refers to the legal currency of the United States; and
- "we," "us," "our company," "our" or "AnPac Bio" refers to AnPac Bio-Medical Science Co., Ltd. and its subsidiaries;

Our reporting currency is the Renminbi. Certain of our financial data in this annual report on Form 20-F are translated into U.S. dollars solely for the reader's convenience. Unless otherwise noted, all convenience translations from Renminbi to U.S. dollars in this annual report on Form 20-F were made at a rate of RMB6.9618 to US$1.00, the exchange rate set forth in the H.10 statistical release of the Board of Governors of the Federal Reserve System on December 31, 2019. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, at the rate stated above, or at all. The PRC government restricts or prohibits the conversion of Renminbi into foreign currency and foreign currency into Renminbi for certain types of transactions. On May 8, 2020, the noon buying rate set forth in the H.10 statistical release of the Federal Reserve Board was RMB7.0732 to US$1.00.

FORWARD-LOOKING STATEMENTS

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" provisions of the U.S. 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.

You can identify some of these forward-looking statements by words or phrases such as "believes," "estimates," "anticipates," "expects," "plans," "projects," "intends," "potential," "target," "aim," "predict," "outlook," "seek," "goal" "objective," "assume," "contemplate," "continue," "positioned," "forecast," "likely," "may," "could," "might," "will," "should," "approximately" 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, statements about:

- the implementation of our business model and growth strategies;
- trends and competition in the cancer screening and detection market;
- our expectations regarding demand for and market acceptance of our cancer screening and detection tests and our ability to expand our customer base;
- the duration of COVID-19 and its impact on our business and financial performance;
- our ability to obtain and maintain intellectual property protections for our CDA technology and our continued research and development to keep pace with technology developments;
- our ability to obtain and maintain regulatory approvals from the NMPA, the FDA and the relevant U.S. states and to have our laboratories certified or accredited by authorities including under CLIA;
- our future business development, financial condition and results of operations and our ability to obtain financing cost-effectively;
- potential changes of government regulations;
- general economic and business conditions in China and elsewhere;
- our ability to hire and maintain key personnel; and
- our relationship with our major business partners and customers.

This annual report on Form 20-F also contains estimates, projections and statistical data obtained from various government and private publications. This market data speaks as of the date it was published and includes projections that are based on a number of assumptions and are not representations of facts. The cancer screening and detection market may not grow at the rates projected by market data, or at all. The failure of this market to grow at the projected rate may have a material adverse effect on our business and the market price of our ADSs. If any one or more of the assumptions underlying the market data proves to be incorrect, actual results may differ from the projections based on these assumptions. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and elsewhere in this annual report. You should not place undue reliance on these forward-looking statements.

The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. Except as required by U.S. federal securities law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report and the documents that we reference in this annual report and have filed as exhibits to this annual report, completely and with the understanding that our actual future results may be materially different from what we expect. Other sections of this annual report include additional factors which could adversely impact our business and financial performance. Moreover, we operate in an evolving environment. New risk factors emerge from time to time and it is not possible 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 materially from those contained in any forward-looking statements. We qualify all of our forward-looking statements by these cautionary statements.

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

A. Selected Financial Data

The following selected consolidated statements of comprehensive income data and selected consolidated cash flows data for the years ended December 31, 2017, 2018 and 2019, and selected consolidated balance sheets data as of December 31, 2018 and 2019 have been derived from our audited consolidated financial statements included elsewhere in this annual report beginning on page F-1. Our selected consolidated balance sheets data as of December 31, 2017 has been derived from our audited consolidated financial statements not included in this annual report. Our consolidated financial statements are prepared and presented in accordance with U.S. GAAP. Our historical results do not necessarily indicate results expected for any future periods. You should read this Selected Financial Data section together with our consolidated financial statements and the related notes and "Item 5. Operating and Financial Review and Prospects" below.

The following table presents our selected consolidated statements of comprehensive income data for the years ended December 31, 2017, 2018 and 2019.

	For the year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands, except for share, per share and per ADS data)			
Selected Consolidated Statements of Comprehensive Loss Data:				
Revenues:				
Cancer screening and detection tests	5,203	9,557	10,381	1,491
Physical checkup packages	483	693	464	67
Total revenues	5,686	10,250	10,845	1,558
Cost of revenues[(1)]	(3,954)	(5,672)	(6,047)	(869)
Gross profit	1,732	4,578	4,798	689
Operating expenses:				
Selling and marketing expenses[(1)]	(6,490)	(9,827)	(13,633)	(1,958)
Research and development expenses[(1)]	(11,405)	(10,106)	(9,839)	(1,413)
General and administrative expenses[(1)]	(24,938)	(28,847)	(70,781)	(10,167)
Other operating income	178	593	373	54
Loss from operations	(40,923)	(43,609)	(89,082)	(12,795)
Non-operating income and expenses				
Interest expense, net	(338)	(925)	(2,609)	(375)
Foreign exchange gain (loss), net	644	(2,776)	(3,219)	(461)
Share of net (loss) gain in equity method investments	(3)	(441)	190	27
Other income (loss), net	1,309	5,256	(7,119)	(1,023)
Net loss before income taxes	(39,311)	(42,495)	(101,839)	(14,627)
Income tax (expense) benefit	(9)	199	218	31
Net loss	(39,320)	(42,296)	(101,621)	(14,596)
Net loss attributable to non-controlling interests	(244)	(233)	(561)	(81)
Net loss attributable to ordinary shareholders	(39,076)	(42,063)	(101,060)	(14,515)
Loss per share:				
Ordinary shares-basic and diluted	(4.92)	(4.93)	(11.31)	(1.62)
Weighted average number of ordinary shares used in loss per share computation:				
Ordinary shares-basic and diluted	7,937,300	8,524,100	8,937,600	8,937,600

Note:

(1) Share-based compensation expenses were allocated as follows:

	For the year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Cost of revenues	—	317	327	47
Selling and marketing expenses	2,444	2,871	5,393	775
Research and development expenses	4,044	1,958	2,534	364
General and administrative expenses	4,270	2,790	24,601	3,533

The following table presents our selected consolidated balance sheet data as of December 31, 2017, 2018 and 2019.

	As of December 31			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Selected Consolidated Balance Sheet Data:				
Current assets:				
Cash and cash equivalents	11,412	12,887	6,125	880
Total current assets	17,949	20,852	22,171	3,185
Total assets	60,148	52,762	52,982	7,611
Current liabilities				
Short-term debt	12,500	25,961	38,568	5,540
Amounts due to related parties	3,077	28,687	4,597	660
Total current liabilities	35,349	71,438	66,197	9,509
Total liabilities	50,651	75,155	68,906	9,898
Total shareholders' equity (deficit)	9,497	(22,393)	(15,924)	(2,287)

The following table presents our selected consolidated cash flow data for the years ended December 31, 2017, 2018 and 2019.

	For the year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Selected Consolidated Cash Flow Data:				
Net cash used in operating activities	(21,641)	(31,147)	(48,600)	(6,980)
Net cash used in investing activities	(8,017)	(2,680)	(3,461)	(497)
Net cash generated from financing activities	39,807	36,271	46,108	6,622
Effect of foreign exchange rate changes on cash and cash equivalents	(2,893)	(969)	(809)	(116)
Net increase (decrease) in cash and cash equivalents	7,256	1,475	(6,762)	(971)
Cash and cash equivalents at the beginning of the period	4,156	11,412	12,887	1,851
Cash and cash equivalents at the end of the period	11,412	12,887	6,125	880

Non-GAAP Financial Measure

In evaluating our business, we consider and use adjusted net loss, a non-GAAP measure, as a supplemental measure to review and assess our operating performance. The presentation of this non-GAAP financial measure is not intended to be considered in isolation or as a substitute for financial information prepared and presented in accordance with U.S. GAAP. We define adjusted net loss as net loss adjusted to add back share-based compensation expenses.

We believe that adjusted net loss helps to identify underlying trends in our business that could otherwise be distorted by the effect of the expenses that we add back to net loss. We believe that adjusted net loss provides useful information about our operating results, enhances 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 its financial and operational decision-making.

The non-GAAP financial measure "adjusted net loss" is not defined under U.S. GAAP, is not presented in accordance with U.S. GAAP and has limitations as an analytical tool. One of the key limitations of using adjusted net loss is that it does not reflect all of the items of income and expense that affect our operations. Share-based compensation has been and may continue to be incurred in our business and is not reflected in the presentation of adjusted net loss. Further, the non-GAAP financial measure "adjusted net loss" may differ from the non-GAAP information used by other companies, including peer companies, and therefore their comparability may be limited.

We compensate for these limitations by reconciling the non-GAAP financial measure to the nearest U.S. GAAP performance measure, all of which should be considered when evaluating our performance. This non-GAAP financial measure should be viewed in addition to, and not as a substitute for, our reported results prepared in accordance with U.S. GAAP and should be read only in conjunction with our consolidated financial statements prepared in accordance with U.S. GAAP that are included elsewhere in this annual report.

The table below sets forth a reconciliation of our net loss to adjusted net loss for the periods indicated:

	Year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Net loss	(39,320)	(42,296)	(101,621)	(14,596)
Add:				
Share-based compensation expenses	10,758	7,936	32,855	4,719
Adjusted net loss	(28,562)	(34,360)	(68,766)	(9,877)

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Risks Related to Our Business

We are a development-stage biotechnology company with a limited operating history, which makes it difficult to evaluate our prospects and may increase the probability that we will not be successful.

We commenced our operations in 2010. We achieved commercialization of our CDA test and started generating revenue in China in 2015; we currently do not have commercial operations in the U.S. We are a development-stage biotechnology company with a limited operating history, and our history may not provide a meaningful basis for you to evaluate our business, financial performance and prospects.

Furthermore, we may not have sufficient experience or resources to address the risks frequently encountered by development-stage biotechnology companies, which include our potential failure to:

- achieve and maintain profitability;
- acquire and retain customers and increase adoption of our cancer screening and detection tests—including primarily our CDA test and combination tests (namely a combination of our CDA test and, on an auxiliary basis, biomarker-based cancer screening and detection tests)—by physicians, key opinion leaders, or KOLs (including research scientists and doctors in the U.S. who are willing to validate our tests after research), patients, hospitals, medical institutions, healthcare payers and others in the medical community;
- respond to competitive market conditions;
- attract, train, motivate and retain qualified personnel;
- protect our proprietary technologies and intellectual property rights;
- secure a stable supply of blood samples to support our research and clinical studies;
- keep up with evolving industry standards and market developments;
- obtain and maintain the regulatory licenses, certifications, and approvals required for us to further market our cancer screening and detection tests and commercialize our CDA device in China and to commercialize our tests and CDA device in the United States;
- increase the awareness of our tests and protect our reputation;
- maintain adequate control of our operational costs; and
- manage our relationships with our research partners.

If we are unsuccessful in addressing any one or more of these risks, they could adversely affect our business, financial condition and results of operations and increase the probability that we will not be successful.

We have incurred losses each year since our inception, we expect to continue to incur losses for the foreseeable future, and we may not be able to achieve and maintain profitability.

Although our revenue grew rapidly in recent years, we have incurred losses each year since our inception. For the years ended December 31, 2017, 2018 and 2019, we incurred net losses of RMB39.3 million, RMB42.3 million and RMB101.6 million (US$14.6 million), respectively. As of December 31, 2019, we had an accumulated deficit of RMB276.5 million (US$39.7 million). To the date of this annual report, we have financed our operations primarily with proceeds from equity offerings, borrowings from banks and non-banks, and loans from related parties. We have devoted and expect to continue to devote substantially all of our resources to the research, development and commercialization of our CDA technology, device and test. We expect to continue to incur losses for the foreseeable future. We cannot predict the extent of these future losses, or when we may achieve profitability, if at all. If we are unable to generate sufficient revenue from our business and control our costs and expenses to achieve and maintain profitability, the value of your investment in us could be negatively affected.

Our success depends heavily on the success of our CDA technology and related cancer screening and detection test.

We derive our revenue primarily from our CDA-based tests, which depend on our CDA technology. If we obtain relevant approvals from the NMPA to sell our CDA device, we also anticipate generating revenue from the sales of our CDA device. We believe that our commercial success will depend upon our ability to achieve and maintain market acceptance of our current or future cancer screening and detection tests, which will depend on a number of factors, including:

- our ability to further validate the clinical utility and superiority of our CDA technology by increasing its sensitivity and specificity and through research studies and accompanying publications;
- the timing and scope of additional approvals from the NMPA for our CDA device and test our ability to maintain these approvals;
- acceptance of our CDA test by physicians, KOLs, patients, hospitals, medical institutions, healthcare payers and others in the medical community;
- our ability to enter and develop the China hospital market for our CDA device and test;
- sufficient coverage and reimbursement by third-party payers for our services, which may depend on multiple factors such as the enforceability of relevant laws that mandate the coverage of cancer or pre-cancer disease screening;
- our ability to maintain and expand our customer base in China, especially among insurance companies, corporate customers and the hospital market;
- our sales and marketing capabilities, including our success in expanding our sales and marketing team and establishing our own sales network in China;
- the amount and nature of competition from other early cancer screening and detection products and procedures;
- our ability to successfully penetrate the U.S. market; and
- negative publicity regarding our or our competitors' tests and technologies resulting from defects or errors.

If we are unsuccessful in addressing these or other factors that might affect the market acceptance of our tests, our business and results of operations will suffer.

We face risks related to natural disasters, health epidemics, civil and social disruption and other outbreaks, which could significantly disrupt our operations.

We are vulnerable to social and natural catastrophic events that are beyond our control, such as natural disasters, health epidemics, and other catastrophes, which may materially and adversely affect our business. Since December 2019, there has been an outbreak of a novel strain of coronavirus (COVID-19) in China and around the world. COVID-19 is considered to be highly contagious and poses a serious public health threat. The World Health Organization labeled the coronavirus a pandemic on March 11, 2020, given its threat beyond a public health emergency of international concern that the organization had declared on January 30, 2020. In response to this pandemic, China, the United States and many other countries and jurisdictions have taken, and may continue to adopt, additional restrictive measures to contain the virus' spread, such as quarantines, travel restrictions and work from home policies. These measures have slowed down the development of the Chinese economy and the U.S. economy and adversely affected the global economic conditions and financial markets. We currently derive all our revenues in China and we have a laboratory in the United States. The outbreak of this virus has caused wide-ranging business disruptions and traffic restrictions in China and the United States in 2020, and with its growing spread globally, the virus' adverse impact on business activities, travels and overall GDP in China, the United States and other parts of the world is expected to continue in the foreseeable future. While the Chinese government's efforts have slowed down the virus' spread, there is no assurance that the situation will not worsen with the virus' continued spread around the world. As the pandemic expands globally, the world economy is suffering a noticeable slowdown. Commercial activities throughout the world have been and could continue to be curtailed with decreased consumer spending, business operation disruptions, interrupted supply chains, difficulties in travel, and reduced workforces.

As a result of the pandemic of COVID-19 in China, the United States and the world, our operations have been, and may continue to be, adversely impacted by disruptions in business activities, commercial transactions and general uncertainties surrounding the duration of the outbreaks and the various governments' business, travel and other restrictions. These adverse effects could include our ability to market and conduct our tests in China, commercialize our tests in the United States and carry out research studies and activities in China and the United States, temporary closures of our laboratory facilities and offices in China and the United States and our customers' and suppliers' facilities, the delay in construction of our new Philadelphia laboratory, delayed supply of products and services from our suppliers, and delayed or cancelled orders from our customers (such as due to temporary decreased demand for disease screening and detection or physical checkup services or generally due to reduced commercial activities). In addition, our business operations could be disrupted if any of our employees is suspected of contracting the coronavirus or any other epidemic disease, since our employees could be quarantined and/or our offices be shut down for disinfection. In particular, the closing of blood sampling points countrywide in China since the Chinese New Year, as a measure by the Chinese government to contain the spread of COVID-19, has significantly reduced the number of samples that we could collect for our CDA tests. Despite partial recovery of the blood sampling points in April this year, the number of blood samples that we can collect is still limited. There have also been delays of orders and cancellation of some orders for planned CDA tests and physical checkups from our customers. As a result, we expect that our revenues in the first half of 2020 will decrease significantly and our revenues for the year of 2020 will also decrease compared to the first half of 2019 and full year of 2019, respectively. While we strive to bring in new customers and launch new tests to mitigate the negative impact of COVID-19, we have no control over the development of the COVID-19 situations in China, the United States or around the world and therefore cannot assure you that we will be able to achieve a revenue growth or maintain our historical revenue level in future periods. Moreover, our plan to commercialize our CDA test in the United States has been delayed (as indicated by the delay in construction of our new Philadelphia laboratory), and will likely continue to be adversely affected, by the COVID-19 outbreak in the United States. Considering the limited manpower and resources that we have to deal with the impact of COVID-19, we have decided to not prepare and announce our unaudited financial statements for the first quarter of 2020. We will, however, prepare and announce our interim unaudited financial statements for the first six months of 2020 in due course.

The downturn brought by and the duration of the coronavirus pandemic is difficult to assess or predict and actual effects will depend on many factors beyond our control, including the increased world-wide spread of COVID-19 and the relevant governments' actions to contain COVID-19 or treat its impact. The extent to which COVID-19 impacts our results remains uncertain, and we are closely monitoring its impact on us. Our business, results of operations, financial condition and prospects could be adversely affected directly, as well as to the extent that the coronavirus or any other epidemic harms the Chinese and the United States' economies in general.

Our ability to grow our China business is substantially dependent on our ability to penetrate the Chinese hospital market.

In China, we currently can only conduct our cancer screening and detection tests on our devices in our own certified laboratories. Given these restrictions, our customer base is primarily direct customers such as corporations and life insurance companies, as well as sales agents such as health management companies and medical device dealers. But China's largest market for cancer screening and detection tests is the hospital market, in which patients go to Chinese hospitals for cancer screening and other medical tests. Currently we cannot conduct our tests in hospitals. We have applied for an NMPA Class III medical device registration certificate for our CDA devices to assist in multi-cancer diagnosis. If we receive this certificate, together with an updated medical device manufacture license, we would be permitted to place our devices within Chinese hospitals' laboratories to conduct commercial tests there or sell our devices to the hospitals for the purposes of assisting in physicians' diagnosis of specified multiple cancers. The timing for us to obtain this certificate or license is uncertain, but we expect it to take at least three years. Even if we obtain the certificate and license, we will need to successfully market our CDA device and test to Chinese hospitals. Our ability to grow our China business depends substantially on our ability successfully to penetrate the Chinese hospital market, and we cannot assure you as to when or whether we will be able to do so.

Our plans to enter the U.S. market may not be successful.

Currently, we conduct commercial operations only in China, and the substantial majority of our business, assets, management and employees are located in China. We have only recently started our efforts to enter the U.S. market. We have obtained a California state laboratory license, accreditation by the College of American Pathologists, or CAP, and a Certificate of Accreditation under the Clinical Laboratory Improvement Amendments of 1988, or CLIA, for our laboratory in San Jose, California. Our U.S. operations are currently focused on collaborating with U.S. health organizations to conduct research tests of our CDA technology.

We plan to open a new laboratory in Philadelphia, Pennsylvania around the second quarter of 2020, and have obtained a CLIA Certificate of Registration for this laboratory. We have applied for a Pennsylvania state laboratory permit and will seek accreditation from CAP for this new laboratory. Although our strategy is to expand our U.S. operations and eventually commence commercial sales of our CDA-based tests in the United States, this strategy is subject to a number of risks and uncertainties, including:

- our ability to secure research agreements with reputable U.S. hospitals, medical institutions and other health organizations to conduct research studies for our test;
- our ability to obtain sufficient blood samples for our planned research tests;
- the substantial costs and time required for U.S. research tests and clinical studies;
- positive outcomes of our U.S. research tests sufficient to support the clinical validity, safety, and effectiveness of our test in the U.S. market;
- U.S. federal and state regulatory risks, including our ability to commence marketing of our CDA test as a laboratory developed test, or LDT, without premarket clearance, market authorization or approval from the United States Food and Drug Administration, or the FDA, and our ability to comply with all applicable laws and other regulations, and costs and timing of obtaining relevant approvals;
- development of a U.S. infrastructure, including sales and marketing resources, sufficient to commercialize our test;
- substantial competition in the U.S. cancer screening and detection market, including from companies with substantially greater resources than we have; and
- market acceptance of our test in the U.S.

Our ability to successfully address these factors and penetrate the U.S. market, as well as the costs and timing of these efforts, are highly uncertain. We expect that our commercial activities and revenues will continue to be derived solely from China for the foreseeable future.

Our industry is subject to rapid change, and other companies or institutions may develop and market novel or improved early cancer screening and detection methods, which may make our CDA technology less competitive or obsolete.

Our CDA-based tests depend on the effectiveness of our CDA technology, and we may be unable to maintain the competitiveness of this technology. Our industry is characterized by rapid changes, including technological and scientific breakthroughs, frequent new product introductions and enhancements and evolving industry standards, all of which could make our current CDA-based test obsolete. In recent years, there have been numerous advances in technologies relating to the diagnosis and treatment of cancer. We must continuously enhance our CDA technology and develop new tests to keep abreast of evolving standards of early cancer screening and detection. Other companies and institutions may possess significantly greater financial and other resources and research and development capabilities than we do. These other companies and institutions may devote significant resources to develop new methods of detecting cancers and pre-cancer symptoms, and these methods and related tests could represent significant competition for our CDA technology and cancer screening and detection test, or even render our CDA technology obsolete.

We may be unable to compete effectively against our competitors because their products and services may be superior. They may also have more expertise, experience, financial resources or stronger business relationships in developing and marketing their products and services, more mature technologies and products, greater market adoption and greater brand recognition than we do. Further, even if we do develop new marketable tests or services, our current and future competitors may develop tests and services that are more commercially attractive than ours and they may bring those tests and services to market sooner than we are able to.

We require substantial funding for our operations. If we cannot raise sufficient capital on acceptable terms, our business, financial condition and prospects may be materially and adversely affected.

We require substantial capital to expand our business, pursue strategic investments and for other reasons, including to:

- increase our sales and marketing efforts to drive market adoption of our cancer screening and detection tests and address competitive developments;
- expand our technologies into other types of cancer screening and detection products, such as our CDA test’s application in assistance in diagnosis, prognosis and recurrence;
- acquire or invest in technologies;
- seek regulatory and marketing approvals for our cancer screening and detection tests and devices;
- conduct research studies for our CDA test and any additional cancer screening and detection tests;
- maintain, expand and protect our intellectual property portfolio;
- hire and retain additional personnel, such as scientific, quality control and marketing personnel;
- develop, acquire and improve operational, financial and management information systems, including personnel to support our product development and help us comply with our obligations as a public company;
- add equipment and physical infrastructure to support our research and development programs; and
- finance general and administrative expenses.

We will be required to obtain further funding through public or private equity offerings, debt financings or other sources. Further financing may not be available to us on acceptable terms, or at all. If we fail to raise capital as and when needed it would have a negative impact on our financial condition and our ability to pursue our business strategy. In addition, if we raise funds by issuing debt securities or incurring additional borrowings, the terms of the debt securities issued or borrowings could impose significant restrictions on our operations, and we may be unable to repay the indebtedness when due. If we raise funds by issuing equity securities, your investment in our company could be diluted.

As of December 31, 2019, we had short-term debt of RMB38.6 million (US$5.5 million), including our convertible loans from our related party, Zhijun. We believe that our cash and cash equivalents on hand, borrowings, and our anticipated cash flows generated from our operating activities will be sufficient to meet our current and anticipated needs for general corporate purposes for at least the next 12 months. However, our estimate as to how long we expect these financial resources to be sufficient to fund our operations is based on assumptions that may prove to be wrong. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate. Our present and future funding requirements will depend on many factors, including:

- the scope, progress, timing, costs and results of the development of our CDA technology and our other product candidates;
- the costs of expanding our laboratory operations and offerings, including our sales and marketing efforts;
- our rate of progress in, and costs of the sales and marketing activities associated with, encouraging adoption of our cancer screening and detection tests;
- our rate of progress in, and cost of research and development activities associated with, our CDA test and any additional cancer screening and detection tests;
- the impact of competing technological and market developments;
- costs related to entering the U.S. market;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims;
- the costs, timing and outcome of obtaining regulatory approvals and changes in regulatory policies or laws that may affect our operations; and
- the costs of operating as a public company.

We have recorded net current liabilities and negative cash flows from operating activities and may continue to do so.

We had net current liabilities of RMB17.4 million, RMB50.6 million and RMB44.0 million (US$6.3 million) as of December 31, 2017, 2018 and 2019, respectively. We cannot assure you that we will not continue to have net current liabilities positions in the future, which would expose us to liquidity risk. Our future liquidity and ability to make the 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 have such cash from operating activities or that we will be able to renew existing loan facilities or obtain other sources of financing.

We have experienced significant cash outflow from operating activities since our inception. We had net cash used in operating activities of RMB21.6 million, RMB31.1 million and RMB48.6 million (US$7.0 million) in 2017, 2018 and 2019, respectively. Our 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 we have available to meet the cash needs for operating our business and to fund our investments in our business expansion.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including:

- the level of demand for our cancer screening and detection tests, which may vary significantly;
- the timing and cost of, and level of investment in, research, development, regulatory approval and commercialization activities relating to our CDA technology and our cancer screening and detection tests and device, which may change from time to time;
- the volume, customer mix and product mix for our cancer screening and detection tests;
- the introduction of new cancer screening and detection tests and services by us or others in our industry;
- expenditures that we may incur to acquire, develop or commercialize additional tests, devices and technologies;
- coverage and reimbursement policies with respect to our cancer screening and detection tests and tests that compete with our test;
- changes in government regulations or in the status of our regulatory approvals or applications;
- future accounting pronouncements or changes in our accounting policies; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The cumulative effects of the factors discussed above could result in large fluctuations and unpredictability in our annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

If our cancer screening and detection tests or our competitors' comparable tests do not meet customer expectations, our operating results, reputation and business could suffer.

Our success depends on the market's confidence in our ability to provide reliable, high-quality cancer screening and detection tests. We believe that our customers are likely to be particularly sensitive to defects or errors in our tests, in particular if our tests fail to accurately detect the risk of pre- and early-stage cancers from blood samples, and we cannot guarantee that our test will meet their expectations. We may be subject to legal claims arising from any defects or errors in our tests. Furthermore, if comparable tests offered by competing companies fail to perform to expectations, consumers may have lower confidence in cancer screening and detection tests in general. As a result, the failure of our tests or our competitors' tests to perform as expected could significantly impair our operating results, business prospects and reputation.

We do not carry product liability or professional liability insurance. If we were to be sued for product liability or professional liability, we could face substantial liabilities that exceed our resources.

We could face product liability claims if someone alleges that our cancer screening and detection tests gave inaccurate or misleading information regarding the patient's risk of cancer or otherwise failed to perform as designed. A claimant could allege that our test results caused unnecessary treatment or other costs or resulted in the patient missing the best opportunity or timing for treatment. A patient could also allege other mental or physical injury or that our testing provided inaccurate or misleading information concerning the screening and detection, assistance in diagnosis, prognosis or recurrence of, or available therapies for, a cancer or other diseases. 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. Product liability or professional liability claims could result in substantial damages and be costly and time-consuming for us to defend and could divert our management's attention.

We do not carry product liability or professional liability insurance. Even if we purchase these kinds of insurance, the insurance may not fully protect us from the financial impact of defending against product liability or professional liability claims. Any product liability or professional liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage. Additionally, any product liability or professional liability lawsuit could damage our reputation, or cause our research partners to terminate existing agreements and cause potential research partners to seek other partners, or cause us to lose our current or potential customers. Any of these developments could adversely impact our results of operations, business prospects and financial condition.

We may be subject to liability claims for defective services provided by third-party physical checkup centers, which could harm our reputation and adversely impact our results of operations.

In addition to our CDA-based tests, we also provide annual physical checkup packages to our customers. We typically outsource the physical checkup services in these packages (other than CDA-based tests) to third-party physical checkup centers. As a result, the administration of the physical checkup services by these third parties may subject us to litigation and liability for personal damages to consumers. Potential judgments, settlements or costs relating to these claims, complaints or lawsuits could subject us to significant fees and costs in defending ourselves, adversely affecting our results of operations. In addition, our business, reputation and growth prospects could suffer if we face negative publicity in connection with these liability claims.

We may be unable to support demand for our cancer screening and detection tests and manage our future growth effectively, which could make it difficult to execute our business strategy.

Since our inception, we have experienced rapid growth, and we anticipate further growth in our business operations. Our growth could strain our organizational, administrative and operational infrastructure. As the sales volume of our cancer screening and detection tests grows, we will face increased demands on our capacity and efficiency for sample intake, testing results analysis and other laboratory operations, quality control, customer service, and general workflow management processes. To effectively manage our future growth, we plan to continue to improve our technology, as well as our operational, financial and management controls. We also plan to hire, train and manage additional qualified scientists, laboratory technicians and sales and customer service personnel. We will also need to maintain the quality and expected turnaround time of our tests. The time and resources required for these improvements, and failure to achieve them in a timely and effective manner, could adversely affect our operations, making it difficult for us to execute our business strategy.

We have limited selling and marketing resources and limited sales, marketing, customer support, manufacturing and commercial laboratory experience, which may restrict our success in commercializing our cancer screening and detection tests.

To grow our business as planned, we must expand our sales, marketing, customer support, manufacturing and commercial laboratory management capabilities, which will require developing and administering our commercial infrastructure and/or collaborative commercial arrangements and partnerships. We have limited experience in these respects, and we may encounter difficulties in retaining and managing the specialized workforce that these activities require. For example, our customer base is large and diverse, which requires us to retain a sales team with established industry expertise and experience. We rely on third-party suppliers for the supply of blood samples for our tests and for reagents that we use in the auxiliary biomarker-based tests that form part of our combination tests. We engaged third-parties to conduct substantially all of the biomarker-based tests as part of our combination tests in 2017 and 2018. We have recently phased out this outsourcing arrangement and are performing our combination tests entirely in-house. We also rely on contract manufacturers that manufacture key components of our CDA device. While we primarily rely on our own sales and marketing personnel to market our tests, we also engage sales agents, including companies we invested in. However, we may not be able to effectively manage and maintain our relationships with these third parties, including ensuring their compliance with our controls and procedures. Our future growth will also impose significant added responsibilities on our management. If we fail to meet these demands, it would negatively affect our business growth and profitability. We may seek to partner with others to assist us with our sales, marketing and manufacturing functions. However, we may be unable to find appropriate third parties that meet our requirements, in a timely manner or on terms acceptable to us. In addition, our third-party business partners may not perform as we expect or our arrangements with them may otherwise prove to be detrimental to our results. Our third-party arrangements may also be terminated prematurely, including due to factors out of our control. As a result of such developments, our business and prospects may be harmed.

If we are unable to attract and retain qualified key management, scientists, staff and consultants, our ability to implement our business plan may be adversely affected.

We are highly dependent upon certain of our key management, scientists, staff and consultants, particularly Dr. Chris Yu, our founder and chief executive officer, and Dr. He Yu, our co-founder and chief medical officer. Dr. Chris Yu, Dr. He Yu and each of our key management and scientific personnel may terminate his or her employment with us. If we lose any of our key management and scientific personnel, we may be unable to find replacements suitable to us. The loss of their services could significantly delay or prevent our achievement of our technology development, sales and other business objectives. We do not carry any key-man life insurance. In addition, we face intense competition for qualified individuals from numerous biotechnology and pharmaceutical companies, universities, governmental entities and other research institutions. Our limited operating history and the uncertainties attendant to being a development-stage biotechnology company with limited capital resources could limit our ability to attract and retain personnel. We may be unable to attract and retain suitably qualified individuals, and our failure to do so could have an adverse effect on our ability to implement our business plan.

Our future success depends on our ability to promote our brand and protect our reputation.

We believe that enhancing and maintaining awareness of our "AnPac" brand is critical to achieving widespread acceptance of our cancer screening and detection tests, gaining trust for our testing services and attracting new customers. Successful promotion of our brand depends largely on the quality of the services we offer and the effectiveness of our branding and marketing efforts. Currently, we rely primarily on our own sales and marketing team to promote our brand and our cancer screening and detection tests, and we also engage sales agents, including companies we invested in. We expect our branding and marketing efforts will require us to incur significant expenses and devote substantial resources. We cannot guarantee that our marketing efforts will be successful. Brand promotion activities may not yield increased revenue in the near term, and, even if they do, any revenue increases may not offset the expenses we incur to promote our brand. Our failure to establish and promote our brand and any damage to our reputation will hinder our growth.

In addition, some companies that we established in China together with third parties and some of our sales agents for our CDA test—over which we do not have effective control—share with us the "AnPac" trading name and its Chinese characters that we use. Given this shared use, any negative publicity related to these companies as well as their products and services, whether with merit or not and whether or not related to us, could adversely impact our brand and reputation. Furthermore, negative publicity about other market players or isolated incidents such as fraudulent behaviors, whether or not factually correct, may result in negative perception of the early cancer screening and detection industry as a whole and undermine the credibility we have established, which may negatively affect our business and results of operations.

If we are unable to effectively protect our intellectual property, our business would be harmed.

We rely on patent protection as well as trademark, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary devices, tests and technologies, all of which provide limited protection and may not adequately protect our rights. If we fail to effectively protect and/or maintain our patented devices, tests and technologies, our competitive position and prospects could be adversely affected. Furthermore, we could incur substantial litigation costs in our attempts to recover or restrict use of our patents and other intellectual property.

We cannot assure investors that any of our currently pending or future patent applications will result in granted patents, and we cannot predict how long it will take for such patents to be issued, if at all. It is possible that, for any of our patents that have been issued or that may be issued in the future, our competitors may design their products around our patented technologies. Further, we cannot assure you that other persons will not challenge any patents granted to us or that courts or regulatory agencies will hold our patents to be valid, enforceable, and/or infringed. We cannot guarantee you that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge or challenges to our patents could result in the unenforceability or invalidity of these patents, or these patents being interpreted narrowly and/or in a manner adverse to our interests. Our ability to establish or maintain a technological or competitive advantage over our competitors and/or market entrants may be diminished because of these uncertainties. For these and other reasons, our intellectual property may not provide us with any competitive advantage. For example:

- we might not have been the first to make the inventions claimed or disclosed by our pending patent applications or issued patents;
- we might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, which could result in substantial costs to us, and could possibly result in a loss or narrowing of our patent rights. We cannot assure you that our patent applications or granted patents will have priority over any other patent or patent application involved in such a proceeding, or will be held valid as an outcome of the proceeding;
- other persons may independently develop similar or alternative products and technologies or duplicate any of our products and technologies, which can potentially impact our market share and revenue, regardless of whether our intellectual property rights are successfully enforced against these other persons;
- it is possible that our pending patent applications will not result in granted patents, and even if these pending patent applications are issued as patents, they may not provide intellectual property protection of commercially viable products or product features, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties, patent offices, and/or the courts;
- we may be unaware of or unfamiliar with prior art and/or interpretations of prior art that could potentially impact the validity or scope of our patents or pending patent applications, or patent applications that we intend to file;
- we take efforts and enter into agreements with employees, consultants, collaborators, and advisors to confirm ownership and chain of title in intellectual property rights. However, an inventorship or ownership dispute could arise that may permit one or more third parties to practice or enforce our intellectual property rights, including possible efforts to enforce rights against us;
- we may elect not to maintain or pursue intellectual property rights that, at some point in time, may be considered relevant to or enforceable against a competitor;
- we may not develop additional proprietary products and technologies that are patentable, or we may develop additional proprietary products and technologies that are not patentable;
- the patents or other intellectual property rights of others may have an adverse effect on our business; and
- we apply for patents relating to our devices, tests and technologies, as we deem appropriate. However, we or our representatives or their agents may fail to apply for patents on important devices, tests and technologies in a timely fashion or at all, or we or our representatives or their agents may fail to apply for patents in potentially relevant jurisdictions.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct or indirect competition. If our intellectual property does not provide adequate coverage over our competitors' products, our competitive position and our business could be adversely affected.

In addition to patent protections, we also try to protect our trade secrets, know-how and other proprietary information through non-disclosure and confidentiality provisions in our agreements with parties who have access to them, such as our employees, consultants and research partners. These agreements may not be enforceable or may not provide meaningful protection for our trade secrets, know-how and/or other proprietary information in the event of unauthorized uses or disclosure or other breaches of the provisions, and we may not be able to prevent such unauthorized uses or disclosure. Moreover, if a party having an agreement with us has an overlapping or conflicting obligation to a third party, our rights in and to certain intellectual property could be undermined. In addition, monitoring unauthorized disclosure and uses of our trade secrets is difficult, and we do not know whether the steps we have taken to prevent such disclosure and uses are, or will be, adequate. If we were to enforce a claim that a third-party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, and the outcome would be unpredictable, and any remedy may be inadequate. In addition, courts outside the United States may be less willing to protect trade secrets.

In addition, competitors could purchase our devices and tests and attempt to replicate and/or improve some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, and design their devices and tests around our protected technologies or develop their own competitive technologies that fall outside of our intellectual property rights. If our intellectual property does not adequately protect our market share against competitors' devices and tests, our competitive position could be adversely affected, as could our business.

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

Competitors may infringe our patents. In the event of infringement or unauthorized use, we may file one or more infringement lawsuits, which can be expensive and time-consuming. An adverse result in any such litigation proceedings could put one or more of our patents at risk of being invalidated, being found to be unenforceable, and/or being interpreted narrowly. Adverse results of these types could also put our patent applications at risk of not being issued and/or impact the validity or enforceability positions of our other patents. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that part of our confidential information could be compromised by disclosure.

Many of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations, continue our internal research programs, pursue, obtain or maintain intellectual property rights, or enter into research and development partnerships that would help to validate and commercialize our tests.

In addition, patent litigation can be very costly and time-consuming. An adverse outcome in such litigation or proceedings may expose us or any of our future development partners to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all.

We may be subject to intellectual property infringement or misappropriation claims by third parties, which may force us to incur substantial legal expenses and, if determined adversely against us, could materially disrupt our business.

The validity, enforceability and scope of intellectual property rights protection in biotechnology industries, particularly in China, are uncertain and still evolving. We cannot be certain that our devices, tests and technologies do not or will not infringe patents, copyrights or other intellectual property rights held by third parties. From time to time, we may be subject to legal proceedings and claims alleging infringement of patents, trademarks or copyrights, or misappropriation of creative ideas or formats, or other infringement of proprietary intellectual property rights. Any such proceeding and claims could result in significant costs to us and divert the time and attention of our management and technical personnel from the operation of our business. These types of claims could also potentially adversely impact our reputation and our ability to conduct business and raise capital, even if we are ultimately absolved of all liability. Moreover, third parties making claims against us may be able to obtain injunctive relief against us, which could block our ability to offer one or more devices or tests and could result in a substantial award of damages against us. In addition, since we may indemnify customers or collaboration partners, we may have additional liability in connection with any infringement or alleged infringement of third party intellectual property. Intellectual property litigation can be very expensive, and we may not have the financial means to defend ourselves or our customers or collaboration partners.

Because patent applications can take many years to issue, there may be pending applications, some of which are unknown to us, that may result in issued patents upon which our devices, tests or proprietary technologies may infringe. Moreover, we may fail to identify issued patents of relevance or incorrectly conclude that an issued patent is invalid or not infringed by our technology or any of our devices or tests. There is a substantial amount of litigation involving patents and other intellectual property rights in our industry. If a third-party claims that we or any of our customers or collaboration partners infringe upon a third-party's intellectual property rights, we may have to:

- seek to obtain licenses that may not be available on commercially reasonable terms, if at all;
- abandon any product alleged or held to infringe, or redesign our products or processes to avoid potential assertion of infringement;
- pay substantial damages including, in exceptional cases, treble damages and attorneys' fees, if a court decides that the device, test or proprietary technology at issue infringes upon or violates the third-party's rights;
- pay substantial royalties or fees or grant cross-licenses to our technology; and
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of our financial and management resources.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties.

Some of our employees were previously employed at other life science companies, including our potential competitors. Although we try to ensure that our employees, consultants, and independent contractors do not use the proprietary information or know-how of others in their work for us, and we are not currently subject to any claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties, we may in the future be subject to such claims. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

If our laboratories and other facilities become damaged or inoperable, our ability to conduct our laboratory analysis and our research and development efforts may be jeopardized.

We currently derive substantially all of our revenue from cancer screening and detection tests conducted at our laboratory located in Lishui, Zhejiang Province, China. We also intend to sell our CDA device in China after obtaining relevant approvals from the NMPA. We use our own facilities in Lishui to assemble our CDA device, in addition to engaging third-party contract manufacturers to manufacture its key components. In the United States, we plan to market our CDA test initially as an LDT, and we intend to perform all our research and commercial tests in our laboratory in San Jose, California as well as in our new laboratory in Philadelphia, Pennsylvania. Our facilities and equipment, or those of our third-party contract manufacturers, could be harmed or rendered inoperable by natural or man-made disasters, including fire, earthquake, power loss, communications failure or terrorism. These types of developments could render it difficult or impossible for us to operate our cancer screening and detection tests and assemble our device for some period of time. If we are unable to perform our tests or to reduce the backlog of analysis that could develop if our facilities are inoperable, for even a short period of time, it could result in a loss of customers or harm to our reputation, and we may be unable to regain those customers or repair our reputation. We have purchased property insurance, but not any business interruption insurance. Damages to, or interruptions in the operations of, our laboratories and other facilities could have a material adverse impact on our results of operations and financial condition. Furthermore, our facilities and the equipment we use to perform our research and development work could be unavailable or costly and time-consuming to repair or replace. It would be difficult, time-consuming and expensive to rebuild our facilities and purchase our equipment, to locate and qualify a new facility or equipment or to license or transfer our proprietary technology to a third-party, particularly in light of licensure and accreditation requirements. Even in the unlikely event that we are able to find a third party with such qualifications to enable us to conduct our test, we may be unable to negotiate commercially reasonable terms.

Security threats to our information technology infrastructure could expose us to liability and damage our reputation and business.

Because our testing services and research and development activities enable us to access customers' and research partners' proprietary information, it is essential to our business strategy that our information technology infrastructure remains secure and is perceived by our customers and research partners to be secure. Despite our security measures, we may face cyber-attacks that attempt to penetrate our network security, sabotage or otherwise disable our research, tests and services, misappropriate our or our customers' and research partners' proprietary information, which may include personally identifiable information, or cause interruptions of our internal systems and services. We have not purchased any cyber insurance. Any cyber-attacks could negatively affect our reputation, damage our network infrastructure and our ability to deploy our products and services, harm our relationship with customers and research partners that are affected, and expose us to significant financial liabilities.

We depend on third-party suppliers, sales agents, service providers and research partners for different aspects of our business.

We depend on third parties for different aspects of our business, including supplying blood samples for our research studies and reagents required for biomarkers used in our combination tests, performing a portion of auxiliary biomarker-based tests in our combination tests, sales of our cancer screening and detection tests to our customers, and collecting blood samples for our commercial cancer screening and detection tests. Selecting, managing and supervising these third-party suppliers, sales agents and service providers requires significant resources and expertise. Poor performance by these third parties, including their failure to provide services or products according to applicable legal and regulatory requirements, the terms of our contracts or otherwise below standard, could significantly and negatively affect the quality of our cancer screening and detection tests and damage our reputation. Decreases in the level of sales agents' purchases of tests from us for resale to the end-customers could adversely affect our revenue growth. In addition, the service or cooperative agreements we have with third-party suppliers, sales agents and service providers are subject to a term, and are not on an exclusive basis. If these third parties do not continue to maintain or expand their cooperation with us, we would be required to seek new suppliers and sales agents, which could cause delays in services to us and negatively affect the quality and availability of our cancer screening and detection tests. Any of the above factors could adversely impact our results of operations and financial position.

In addition, certain of our research partners in China, which are primarily renowned hospitals and medical institutions, collaborate with us and provide blood samples that we use to conduct various research studies. These partners may cease cooperation with us in the future, especially if they enter into similar agreements or arrangements with our competitors. If we are unable to readily access sufficient blood samples to conduct our commercial tests and research studies, we may be unable to compete effectively with other laboratories that have greater access to blood samples, and our business, financial condition and results of operations may be harmed.

We rely on third-party contract manufacturers for the manufacturing of key components of our CDA devices.

We design and configure all of the key components of our CDA device and have outsourced the manufacturing of these components of our CDA devices to third-party contract manufacturers. Our revenue is generated primarily from our CDA tests conducted using our CDA devices. Our contract manufacturers may fail to deliver these key components for reasons beyond our control. For example, they may encounter financial difficulties or experience disruptions in their manufacturing operations due to equipment breakdowns, labor disputes or shortages, raw material shortages, cost increases or other similar reasons. If they fail to timely deliver those key components for us to assemble our CDA device or maintain the quality of their products, our ability to conduct our commercial CDA-based tests could be adversely affected. Currently, we do not have any long-term or exclusive supply contracts with any of our contract manufacturers. Our contract manufacturers may cease to provide us with the key components of our CDA devices. Since qualifying a new contract manufacturer could be costly and time-consuming, the termination of a contract manufacturer could cause disruption to our business and adversely impact our results of operations.

We rely on commercial courier delivery services to transport blood samples to our laboratory facilities in a timely and cost-efficient manner, and if these delivery services are disrupted, our business will be harmed.

Our business depends on our ability to quickly and reliably deliver test results to our customers. We rely on commercial courier delivery services to transport blood samples to our laboratory facilities timely and cost efficiently. Blood samples are typically received within a few days in China for analysis in our laboratories. Disruptions in third-party delivery service, whether due to labor disruptions, bad weather, natural disaster, health epidemics, terrorist acts or threats or for other reasons, could adversely affect specimen integrity and our ability to process blood samples and conduct tests in a timely manner and to service our customers satisfactorily, and ultimately our reputation and our business. In addition, if we are unable to continue to obtain expedited delivery services on commercially reasonable terms, our operating results may be adversely affected.

Two material weaknesses in our internal control over financial reporting have been identified, and if we fail to implement and maintain an effective system of internal controls over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud.

Prior to our initial public offering, 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 is not required to conduct an audit of our internal control over financial reporting due to a transition period established by the rules of the SEC for newly public companies. However, in connection with the audit of our consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019, we and our independent registered public accounting firm identified two material weaknesses in our internal control over financial reporting, or ICFR. As defined in standards established by the United States Public Company Accounting Oversight Board, or the PCAOB, a “material weakness” is a deficiency, or a combination of deficiencies, in ICFR, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The material weaknesses identified were our company’s lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience in application of U.S. GAAP and the Securities and Exchange Commission, or SEC, rules, and a lack of financial reporting policies and procedures that are commensurate with U.S. GAAP and SEC reporting requirements. Following the identification of the material weaknesses, we have taken measures and are continuing to take measures to timely remediate these material weaknesses. For details about remediation, refer to “Item 15—Management Report on Internal Control over Financial Reporting—Internal Control over Financial Reporting.” However, the implementation of these measures were not able to fully address the material weakness in our ICFR, and our management has concluded that the material weaknesses still existed as of December 31, 2019. While we are still working to remediate these findings, we cannot assure you that we will not identify additional material weaknesses or significant deficiencies in the future. Our failure to correct the material weakness or our failure to discover and address any other material weakness or control deficiencies 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. As a result, our business, financial condition, results of operations and prospects, as well as the trading price of our ADSs, may be materially and adversely affected. Additionally, ineffective ICFR 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 may also be required to restate our financial statements from prior periods. In addition, our internal controls over financial reporting will not prevent or detect all errors or fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

Furthermore, had our independent registered public accounting firm conducted an audit of our ICFR, it might have identified additional material weaknesses and deficiencies. We are a public company in the United States subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, requires that we maintain effective ICFR and include a report from management on the effectiveness of our ICFR in our annual report on Form 20-F beginning with our annual report for the fiscal year ending December 31, 2020. 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 ICFR. Our management may conclude that our ICFR is not effective. Moreover, even if our management concludes that our ICFR is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue an adverse opinion 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, after we 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. In addition, we may not be able to timely file our periodic reports as a public company under U.S. securities laws, which could limit the amount of information that investors receive about our company in the future and adversely affect the price of our ADSs, our business and our reputation.

In documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404, we may identify other weaknesses and deficiencies in our ICFR. In addition, if we fail to maintain the adequacy of our ICFR, 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 ICFR in accordance with Section 404. 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.

Our business may suffer if we are unable to collect payments from our corporate customers on a timely basis.

We typically offer credit terms of one to three months to our sales agents and other corporate customers. Any downturn in the businesses of our sales agents and other corporate customers could reduce their willingness or ability to pay us. The failure of any of our sales agents or other corporate customers to make timely payments could require us to recognize an allowance for doubtful accounts, For example, we had allowance for doubtful accounts receivable of RMB18,000, RMB198,000 and RMB24,000 (US$3,000) as of December 31, 2017, 2018 and 2019, respectively. We cannot guarantee that we will be able to collect these doubtful accounts. As a result, our results of operations and financial condition may be adversely affected.

We have granted, and may continue to grant, stock incentive awards, which may result in increased share-based compensation expenses.

We have adopted our 2019 share incentive plan, or 2019 Plan, so that we can grant share-based compensation awards to our directors, officers, employees and consultants to incentivize their performance and align their interests with ours. The maximum number of Class A ordinary shares that may be issued pursuant to all awards under our 2019 Plan is 1,105,300. We have also separately issued options to our directors, officers, employees and consultants outside of our 2019 Plan. As of March 31, 2020, options to purchase 1,163,500 Class A ordinary shares had been granted and were outstanding.

We believe the granting of stock incentive awards is of significant importance to our ability to attract and retain our management, employees and consultants, and we will continue to grant stock incentive awards to our management, employees and consultants 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. In addition, the granting, vesting and exercise of the awards under these stock incentive plans will have a dilutive effect on your shareholding in our company.

We may be subject to litigation and other claims and legal proceedings, and may not always be successful in defending ourselves against these claims or proceedings.

We are subject to lawsuits and other claims in the ordinary course of our business. We have been, and may in the future be, subject to lawsuits and other legal proceedings brought by our customers, competitors, employees, business partners, investors, other shareholders of the companies we invest in, or other entities against us, in matters relating to intellectual property rights, contractual disputes, competition claims and employment disputes, among others. We may also be subject to regulatory proceedings, such as any non-compliance with licensing requirements, advertising practices, and protection of data privacy of the tested individuals. We may not be successful in defending ourselves, and the outcomes of these lawsuits and proceedings may be unfavorable to us. Lawsuits and regulatory proceedings against us may also generate negative publicity that significantly harms our reputation, which may adversely affect our customer base, market position and our relationships with our research partners and other business partners. In addition to the related costs, managing and defending litigation and other legal proceedings and related indemnity obligations can significantly divert our management's attention from operating our business. We may also need to pay damages or settle lawsuits or other claims with a substantial amount of cash, negatively affecting our liquidity. As a result, our business, financial condition and results of operations could be adversely affected.

We have limited business insurance coverage.

Our business insurance is limited, and we do not carry business interruption insurance to cover our operations. We have determined that the costs of insuring for related risks and the difficulties associated with acquiring such insurance on commercially reasonable terms make it impractical. Any uninsured damage to our facilities or technology infrastructures or disruption of our business operations could require us to incur substantial costs and divert our resources, which could have an adverse effect on our business, financial condition and results of operations.

Risks Relating to Government Regulations

PRC

As a biotechnology company, we are required to comply with extensive regulations and obtain and maintain a number of permits and licenses to carry on our business in China; future government regulation may place additional burdens on our efforts to commercialize our cancer screening and detection tests and device.

As a biotechnology company, we are subject to extensive government regulation and supervision in China. Violation of applicable laws and regulations may materially and adversely affect our business. For example, we are required to obtain a medical institution practice license from the PRC National Health Commission, or the NHC, for our laboratories to conduct cancer screening and detection tests in China. We also need to obtain a medical device manufacture license and a medical device registration certificate from the NMPA for the manufacturing and commercial use and sale of our CDA device.

Each of our current NHC medical institution practice licenses and our NMPA Class II medical device manufacture license and registration certificate has a five-year term. We are applying for a Class III medical device registration certificate from the NMPA. After we obtain this license, we will apply to update our medical device manufacture license to include the manufacture of Class III medical devices. If we are unable to renew our existing licenses and certificates or obtain the Class III medical device license or update our medical device manufacture license, or obtain or renew any other material permits or approvals required for our operations, we may be unable to continue to sell our cancer screening and detection tests or to commercialize our CDA device in China and, as a result, our business may be adversely affected.

In addition, China's regulatory framework governing biotechnology companies is subject to change and amendment from time to time. Any such change or amendment could materially and adversely impact our business, financial condition and prospects. The PRC government has introduced various reforms to the Chinese healthcare system in recent years and may continue to do so, with an overall objective of expanding basic medical insurance coverage and improve the quality and reliability of healthcare services. The specific regulatory changes under the reforms still remain uncertain. The implementing measures to be issued may not be sufficiently effective to achieve the stated goals, and as a result, we may not be able to benefit from these reforms to the level we expect, if at all. Moreover, the reforms could give rise to regulatory developments, such as more burdensome administrative procedures, which may have an adverse effect on our business and prospects.

If we are unable to maintain our medical device or laboratory related licenses and certificates, our growth strategy may be compromised.

Pursuant to the Regulation on the Supervision and Administration of Medical Devices as amended by the PRC State Council in May 2017, medical devices are classified into three classes according to their risk levels. Class II medical devices are medical devices with moderate risks that must be strictly controlled and regulated to ensure their safety and effectiveness. Class III medical devices are medical devices with relatively high risks that must be strictly controlled and regulated through special measures to ensure their safety and effectiveness. In addition, the Measures for the Supervision and Administration of the Operation of Medical Devices as promulgated by the NMPA's predecessor, the China Food and Drug Administration, or the CFDA, in November 2017 regulate entities that engage in business activities involving medical devices in the PRC in accordance with the medical devices' risk levels. The Class II medical device registration certificate and the Class III medical device registration certificate are required for an entity to conduct business activities involving these medical devices.

We have obtained the Class II medical device registration certificate from the NMPA, which allows us to conduct our tests in our licensed laboratories. To perform our CDA test outside of our laboratories and market them to Chinese hospitals, in December 2018, we applied for a Class III medical device registration certificate from the NMPA for our CDA device. We believe it will likely take at least three years for us to obtain this license from the NMPA. After we obtain this license, we will update our medical device manufacture license, which we believe is a relatively straightforward procedure. However, there is no assurance that we will receive this NMPA approvals on a timely basis, or at all. If we fail to maintain and renew our Class II medical device registration certificate or if we are unable to obtain the Class III medical device license and update our medical device manufacture license, our ability to grow our business could be adversely affected.

We believe our NHC medical institution practice license and NMPA Class II medical device registration certificate and manufacture license are effective and cover our current commercialized CDA test, which provides a cancer risk assessment. However, the PRC laws and regulations governing cancer screening and detection devices and tests are subject to uncertainties and regulatory discretion, including changes in interpretation and application, such as in respect of restrictions on foreign investments in clinical laboratories. There is also a risk that the relevant regulatory authorities could disagree with our assessment of the commercial activities permitted by our certificates and licenses. For more information on this, see "Item 4. Information on the Company—B. Business Overview—PRC Regulations—Other Significant PRC Regulations Affecting Our Business Activities in China." Moreover, if we begin to commercialize our CDA test for other purposes such as assisting in diagnosis, prognosis and recurrence, this regulatory uncertainty and risk would be greater. If the relevant regulatory authorities were to assert that our current or future commercial cancer screening and detection tests were not permitted by our licenses or revoke any of our NMPA or NHC licenses and certificates and require us to take remedial actions to their satisfaction, or if we were unable to obtain amended or additional required licenses or approvals, then our business and financial results would be adversely affected.

We are subject to ongoing obligations and continued regulatory review and to future changes in laws, regulations or enforcement policies in China.

We are subject to ongoing obligations and continued regulatory review in relation to our laboratories and our medical devices. Even if the NMPA grants our application for a Class III medical device registration certificate and allows us to update our medical device manufacture license accordingly, or if we successfully maintain and renew our Class II medical device manufacture license and registration certificate, our CDA device will be subject to extensive and ongoing regulatory requirements.

In addition, there could be a subsequent discovery of previously unknown problems with our device (including problems with third-party manufacturers or manufacturing processes) or failure to comply with existing or future regulatory requirements (including in respect of our conducting of cancer screening and detection tests). For example, if we were found to have conducted any of these tests in premises other than a licensed laboratory, we could be subject to confiscation of revenue from the relevant tests as well as other penalties. For more information on this, see "Item 4. Information on the Company—B. Business Overview—PRC Regulations—Regulation on Medical Devices and Medical Institutions—Medical Institutions Laws and Regulations." Any government investigation of alleged violations of law could require us to expend significant time and resources and could result in adverse government actions (including penalties on us) and negative publicity on our brand.

Moreover, laws, regulations and enforcement policies in China, including those regulating medical institutions, devices and supplies, are evolving. Changes in these areas could impose more stringent requirements on us, including fines or other penalties, and increase our compliance and other operating costs. Changes in government regulations could also prevent, limit or delay regulatory approvals in relation to our CDA device. If we are unable to maintain regulatory compliance, any regulatory approval that has been obtained may be lost and we may not be able to achieve or sustain profitability. In addition, regulatory changes may relax certain requirements that could benefit our competitors or lower market entry barriers and increase competition. Further, regulatory agencies in China may periodically, and sometimes abruptly, change their enforcement practices. Any litigation or governmental investigation or enforcement proceedings against us in China may be protracted and may result in substantial costs and diversion of resources and management attention, negative publicity, damage to our reputation and decline in the price of our ADSs.

The absence of patent linkage, patent term extension and data and market exclusivity for NMPA-approved medical products could increase the risk of early generic competition against our tests in China.

The life of a patent and the protection it affords are limited under PRC law. Currently, while certain foreign laws regulate patent term extension, patent linkage to products to delay generic entry, or extension of data exclusivity (often referred to as regulatory exclusivity) in certain circumstances, China does not have any effective law or regulation in these aspects. Chinese regulators have set out a framework for delaying generic launches by adding patent linkage and data exclusivity into the Chinese regulatory regime, as well as for establishing a pilot program for patent term extension. However, these measures will require the adoption of specific regulations, and to date, no such regulations have been adopted. If we are unable to obtain patent term extension or if such extension is shorter in length than requested, our competitors may obtain approval of competing products prior to or following our patent expiration, and our business, financial condition, results of operations and prospects could be materially harmed.

Any change in the regulations governing the use of personal data in China, which are still under development, or any data leakage or unauthorized use of data by third parties could adversely affect our business and reputation.

We provide early cancer screening and detection services to tens of thousands of individuals in China. As a result, we have access to these tested individuals' personal data, including their age, gender, disease status and medical records. We use this personal data internally to expand our test database and improve the clinical utility of our CDA technology. Chinese regulations governing the collection and use of personal data are still under development. We believe that there is no PRC legal restriction on our internal use of such data. Any change in the regulatory regime in this regard could potentially affect our ability with regard to the collection and use of these personal data, which in turn could have a material adverse effect on our business, financial condition and results of operations.

Moreover, we may not be able to prevent third parties from illegally obtaining and misappropriating personal data of the tested individuals that we collect. Concerns about data leakage or unauthorized use of data by third parties, even if unfounded, could damage our reputation and negatively affect our results of operations.

United States

We conduct our business in a heavily regulated industry, and changes in regulations or violations of regulations may, directly or indirectly, reduce our revenue, adversely affect our results of operations and financial condition and harm our business.

The U.S. life sciences industry is highly regulated, and the regulatory environment in which we operate may change significantly and adversely to us in the future. Areas of the regulatory environment that may affect our ability to conduct business in the United States include, U.S. federal and state laws relating to:

- laboratory testing, including the CLIA and state laboratory licensing laws;
- the development, testing, use, distribution, promotion and advertising of research services, kits and clinical diagnostics, including certain LDTs which are regulated by the FDA under the U.S. Federal Food, Drug, and Cosmetic Act, or the FDCA;
- test ordering, documentation of tests ordered, billing practices and claims payment under the U.S. Centers for Medicare & Medicaid Services, or CMS, and the U.S. Department of Health and Human Services, or HHS, Office of the Inspector General, enforcing those laws and regulations;
- medical device and in vitro diagnostic, or IVD, clearance, marketing authorization or approval;
- FDA's enforcement discretion to not regulate the majority of LDTs as IVDs;
- laboratory anti-mark-up laws (which are laws or regulations that can limit the prices of medical tests);
- the handling and disposal of medical and hazardous waste;
- fraud and abuse laws such as the U.S. Federal False Claims Act, or FCA, the Federal Health Care Program Anti-Kickback Statute, or AKS, the Criminal Health Care Fraud Statute and Stark Law (defined below), and state equivalents;
- Occupational Safety and Health Administration rules and regulations;
- the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and other U.S. federal and state medical data privacy and security laws;
- the Genetic Information Non-discrimination Act and similar state laws; and
- coverage and restrictions on coverage and reimbursement for research services, kits, clinical diagnostics and cellular therapies and Medicare, Medicaid, other governmental payers and private insurers reimbursement levels.

In particular, the laws, regulations and policies governing the marketing of an LDT and clinical diagnostic tests and services are extremely complex, and in many instances there are no significant regulatory or judicial interpretations of these laws and regulations. Among other things, pursuant to the FDCA and its implementing regulations, the FDA regulates the research, design, testing, manufacturing, safety, labeling, storage, recordkeeping, premarket clearance, authorization or approval, marketing and promotion and sales and distribution of medical devices in the United States to ensure they are safe and effective. Medical devices are defined by the FDCA to include, among other things, instruments and in vitro reagents or other similar or related articles, which are intended for use in the diagnosis of disease or other conditions. In addition, the FDA regulates the import and export of medical devices. Most LDTs, however, are not currently regulated as medical devices under FDA's current regulatory framework, although components of LDTs, including, for example, instruments, reagents, and sample collection devices, may be regulated as medical devices. If we are subject to these FDA requirements and do not comply, or later become subject to these requirements and fail to adequately comply, our business operations may be harmed. These requirements may additionally cause delays in our ability to market and sell our products or services, which may, directly or indirectly, reduce our revenue, adversely affect our results of operations and financial condition and harm our business.

We plan to market our CDA test initially as an LDT, and future changes in the FDA's enforcement discretion for LDTs could subject our operations to much more significant regulatory requirements.

We plan to initially market our CDA test in the United States as an LDT. LDTs have generally been considered to be tests that are designed, developed, validated and used within a single laboratory. The FDA has a policy of enforcement discretion with respect to LDTs, whereby the FDA does not actively enforce its medical device regulatory requirements for these tests. However, in July 2014, the FDA notified Congress of its intent to modify, in a risk-based manner, its policy of enforcement discretion with respect to LDTs. In October 2014, the FDA issued two draft guidance documents stating that it 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. The FDA halted finalization of the draft guidance documents in November 2016 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. It is unclear if Congress or the FDA will modify the current approach to the regulation of LDTs in a way that would subject our CDA test to the enforcement of FDA regulatory requirements. The former FDA Commissioner and the Director of the Center for Devices and Radiological Health, or CDRH, have expressed significant concerns regarding disparities between LDTs and IVDs that have been reviewed and cleared, authorized or approved by the FDA. The FDA has also determined that certain LDTs do not qualify for enforcement discretion because these tests pose higher risk to the public health. If we market our test initially as an LDT in the United States and the FDA were to determine that our test is not within the enforcement discretion policy for LDTs for any reason, including as a result of new rules, policies or guidance, or due to changes in law, our laboratory and test may become subject to extensive FDA requirements or otherwise impact our business. These types of changes could reduce our revenue or increase our costs and adversely affect our business, prospects, results of operations or financial condition. If required, the regulatory marketing authorization process required to bring our LDT into compliance may involve, among other things, successfully completing additional clinical validations and submitting to and obtaining from the FDA pre-market clearance (510(k)), authorization for a de novo petition, or approval of a Premarket Approval Application, or PMA. Furthermore, pending legislative proposals, if enacted, such as the Verifying Accurate, Leading-edge IVCT Development Act of 2020, or VALID Act, could create new or different regulatory and compliance burdens on us and could have a negative effect on our ability to keep products on the market or develop new products, which could have a material effect on our business. In the event that we market our test initially as an LDT in the United States and then the FDA requires marketing authorization of our LDT in the future, the FDA ultimately may not grant any clearance, authorization or approval requested by us in a timely manner, or at all.

Our proprietary CDA device is an analytical instrument used as part of our CDA test, which may increase our risk that the FDA concludes that our test does not qualify as an LDT.

While the FDA has historically exercised enforcement discretion over the majority of LDTs, there are certain factors that have led to increased regulatory oversight. One such factor is the use of customized equipment and reagents. If the FDA were to conclude that our CDA device requires clearance, market authorization, or approval to be used as part of an LDT, it could prevent us from being able to offer our test. Even if we submit our CDA device for clearance, authorization, or approval, the FDA ultimately may not grant such clearance, authorization or approval requested by us in a timely manner, or at all.

Offering our proprietary cancer screening and detection test from more than one laboratory may increase our risk that the FDA concludes that our test does not qualify as an LDT.

While the FDA has historically exercised enforcement discretion over the majority of LDTs, it has narrowly defined an LDT as a test that is designed, manufactured and used within a single laboratory. However, the FDA has not historically taken enforcement action against laboratories with multiple facilities that offer the same test. If we offer our CDA test from more than one of our laboratories, the FDA could conclude that our test no longer qualifies as an LDT because it is not used within a single laboratory. If the FDA were to conclude that our cancer screening and detection test is not an LDT, that could prevent us from being able to offer our test until we receive appropriate FDA clearance, authorization or approval. Even if we submit for clearance, authorization or approval, the FDA may not ultimately grant such clearance, authorization or approval requested by us in a timely manner, or at all.

Failure to comply with U.S. federal or state laboratory licensing requirements and the applicable requirements of the FDA or any other regulatory authority or accrediting body, could cause us to lose the ability to perform our CDA test in the United States, experience disruptions to our business, or become subject to administrative or judicial sanctions.

We are subject to CLIA, a U.S. federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. Any testing subject to CLIA regulation must be performed in a CLIA-certified laboratory. CLIA certification is also required in order for us to be eligible to bill U.S. state and federal healthcare programs, as well as commercial payers, for our tests. We have passed inspection and received accreditation of our laboratory in San Jose, California from CAP, and have obtained a CLIA Certificate of Accreditation for this laboratory. We also plan to open a new laboratory in Philadelphia, Pennsylvania around the second quarter of 2020 and have obtained a CLIA Certificate of Registration for this new laboratory. We will seek to obtain CAP accreditation for this new laboratory. To maintain our CAP accreditation and CLIA certification, we are subject to survey and unannounced inspection every two years.

We are required to maintain a California clinical laboratory license for our San Jose laboratory to conduct testing. We will be required to maintain a Pennsylvania clinical laboratory permit for our new Philadelphia laboratory to conduct testing. In addition, some other states may require our California and Philadelphia laboratories to be licensed there in order to accept blood samples from those states or may have such requirements in the future. To maintain our state licenses, we may be subject to survey and inspection.

Failure to comply with applicable clinical laboratory certification and licensure requirements, including proficiency testing, may result in a range of enforcement actions, including suspension, limitation or revocation of our CAP accreditation, CLIA certificates and/or state licenses, imposition of a directed plan of corrective action, onsite monitoring, civil monetary penalties, criminal sanctions and revocation of the laboratory's approval to receive Medicare and Medicaid payment for its services. Any of these enforcement actions or our failure to renew our CLIA certificates, a state license or other accreditation could have a material adverse effect on our business, financial condition and results of operations. Even if we were able to bring our laboratory back into compliance, we could incur significant expenses and potentially lose revenue in doing so.

If we are unable to obtain or maintain regulatory clearance or approvals in the United States, or if we experience delays in receiving clearance or approvals, our growth strategy may not be successful.

In the United States, we plan to initially offer our CDA test for clinical use as an LDT in our laboratory in San Jose, California. Because we developed this test and will offer this test solely for use within our laboratory, we believe that we may market the test as an LDT. Under current FDA enforcement policies, the FDA does not enforce its premarket clearance or approval requirements for certain LDTs before commercialization. The FDA could disagree with this assessment, however, in which case we would be required to obtain clearance, authorization, or approval for our device and/or test to continue marketing.

In addition, a key element of our longer term business strategy is to place our CDA device in other laboratories to broaden access to our technology and increase demand for our tests and any future tests that we may develop. In order to distribute our cancer screening and detection test and device outside of our laboratory, we will need to obtain FDA clearance, authorization, or approval for our test and device.

The FDA regulates medical devices, including IVDs, that are sold and distributed in U.S. interstate commerce. Unless an exemption applies, generally, before a new medical device or a new use for a medical device may be sold or distributed in the United States, the medical device must receive either a 510(k) premarket notification clearance, de novo marketing authorization, or a PMA approval from the FDA. As a result, before we can market or distribute our device and test in the United States for use by other clinical testing laboratories, we must first obtain 510(k) clearance, de novo marketing authorization, or PMA approval from the FDA. We have not yet applied for clearance, marketing authorization, or approval from the FDA, and need to complete additional validations before we are ready to apply. We believe it would likely take two years or more to conduct the clinical studies and trials necessary to obtain clearance, marketing authorization, or approval from the FDA to commercially launch our tests outside of our clinical laboratory. Once we apply, we may not receive the FDA clearance, marketing authorization, or approval for the commercial use of our device and test on a timely basis, or at all.

The FDA can delay, limit or deny clearance, authorization or approval of a device for many reasons, including:

- inability to demonstrate to the satisfaction of the FDA that the products are safe or effective for their intended uses;
- the FDA's disagreement with the design, conduct or implementation of the clinical studies or the analysis or interpretation of data from preclinical studies, analytical studies or clinical studies;
- serious and unexpected adverse device effects experienced by participants in clinical studies;
- the data from preclinical studies, analytical studies and clinical studies may be insufficient to support clearance, authorization or approval, where required;
- the inability to demonstrate that the clinical and other benefits of the device outweigh the risks;
- an advisory committee, if convened by the FDA, may recommend against approval of a PMA or other application or may recommend that the FDA require, as a condition of approval, additional preclinical studies or clinical studies, limitations on approved labeling or distribution and use restrictions, or even if an advisory committee, if convened, makes a favorable recommendation, the FDA may still not approve the product;
- the FDA may identify deficiencies in our marketing application, and in our or our suppliers' manufacturing processes, facilities or analytical methods;
- the potential for policies or regulations of the FDA to change significantly in a manner rendering clinical data or regulatory filings insufficient for clearance, authorization or approval; and
- the FDA may audit clinical study data and conclude that the data are not sufficiently reliable to support a PMA application.

There are numerous FDA personnel assigned to review different aspects of marketing submissions, and uncertainties can be presented by their ability to exercise judgment and discretion during the review process. During the course of review, the FDA may request or require additional data and information, and the development and provision of these data and information may be time-consuming and expensive. The process of obtaining regulatory clearances, authorizations or approvals to market a medical device can be costly and time-consuming, and we may not be able to obtain these clearances, authorizations or approvals on a timely basis or at all for our proposed products. If we are unable to achieve clearance or approval or if other laboratories do not accept our device and test, our ability to grow our business could be compromised.

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

In order to receive FDA clearance, marketing authorization, or approval for the commercialization of our CDA test and/or device in the United States, we must conduct, at our own expense, extensive analytical testing and clinical studies to demonstrate safety and effectiveness of our device and test for the intended indication of use. Clinical testing is expensive, can take many years to complete, if at all, and its outcome is uncertain. Failure can occur at any time during the clinical study process. Also, our CDA device and test may not prove to be safe and efficacious in the clinical studies, and they may not meet all the applicable regulatory requirements needed to receive FDA clearance, authorization, or approval. The results of our clinical studies may not support the clinical validation needed to offer our cancer screening and detection test in the U.S. In addition, clinical claims for our test that are supported by the clinical studies results may not be commercially viable.

If we receive FDA clearance, marketing authorization, or approval of our CDA device and test, we will continue to be subject to extensive FDA regulatory oversight.

Medical devices are subject to extensive regulation by the FDA in the United States. If our CDA device is cleared, authorized, or approved by the FDA, we will need to comply with the applicable regulatory requirements and our failure to do so could result in enforcement action by the FDA or state agencies. Any of these enforcement actions could also result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, results of operations and financial condition.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action in the United States. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of executive orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance and review and approval of marketing applications. It is difficult to predict how these executive actions will be implemented and the extent to which they will affect the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

Our employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees. Misconduct by our employees could include intentional failures to comply with the regulations of the FDA or non-U.S. regulators, to comply with healthcare fraud and abuse laws and regulations in the United States and abroad, or to report financial information or data accurately or to 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 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, possible exclusion from participation in Medicare, Medicaid and other U.S. federal healthcare programs, 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.

If we fail to comply with healthcare regulations, we could face substantial enforcement actions, including civil and criminal penalties and our business, operations and financial condition could be adversely affected.

We could be subject to healthcare fraud and abuse laws and patient privacy laws of both the U.S. federal government and the states in which we conduct our business. The laws include, but are not limited to:

- the AKS, which prohibits, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual for an item or service or the purchasing or ordering of a good or service, for which payment may be made under U.S. federal healthcare programs such as the Medicare and Medicaid programs;

- the FCA which prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other payers that are false or fraudulent, and which may apply to entities like us which provide coding and billing information to customers;

- HIPAA, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information; and

- state law equivalents of each of the above U.S. federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by U.S. federal laws, thus complicating compliance efforts.

If our operations are found to be in violation of any of the laws described above or any governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. 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 management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable U.S. federal and state privacy, security and fraud laws may prove costly.

Our collection, use and disclosure of individually identifiable information, including health and/or employee information, is subject to U.S. state, U.S. federal, and foreign privacy and security regulations, and our failure to comply with those regulations or to adequately secure the information we hold could result in significant liability or reputational harm.

The privacy and security of personally identifiable information stored, maintained, received or transmitted, including electronically, is a major issue in the United States and abroad. While we strive to comply with all applicable privacy and security laws and regulations, as well as our own posted privacy policies, legal standards for privacy, including but not limited to "unfairness" and "deception," as enforced by the FTC and state attorneys general, continue to evolve, and any failure or perceived failure to comply may result in proceedings or actions against us by government entities or others, or could cause us to lose customers, which could have a material adverse effect on our business. Recently, there has been an increase in public awareness of privacy issues in the wake of revelations about the activities of various government agencies and in the number of private privacy-related lawsuits filed against companies. Concerns about our practices with regard to the collection, use, retention, disclosure or security of personally identifiable information or other privacy-related matters, even if unfounded and even if we are in compliance with applicable laws, could damage our reputation and harm our business.

Numerous foreign, U.S. federal and state laws and regulations govern the collection, dissemination, use and confidentiality of personally identifiable health information, or PHI, including state privacy and confidentiality laws (including state laws requiring disclosure of breaches); U.S. federal and state consumer protection and employment laws; HIPAA; and European and other foreign data protection laws. These laws and regulations are increasing in complexity and number, may change frequently and sometimes conflict.

HIPAA establishes a set of national privacy and security standards for the protection of individually identifiable health information, including PHI by health plans, healthcare clearinghouses and healthcare providers that submit certain covered transactions electronically, or covered entities, and their business associates, which are persons or entities that perform certain services for, or on behalf of, a covered entity that involve creating, receiving, maintaining or transmitting PHI.

Penalties for violations of these laws vary. For instance, penalties for failure to comply with a requirement of HIPAA and the Health Information Technology for Economic and Clinical Health Act, or HITECH, vary significantly, and can include civil monetary penalties of up to $59,522 per violation, not to exceed $1.79 million per calendar year for each provision that is violated. A single breach incident can result in findings of violations of multiple provisions, leading to possible civil penalties in excess of $1.78 million in a single year. Violations of HIPAA may also result in criminal penalties. For example, a person who knowingly obtains or discloses individually identifiable health information in violation of HIPAA may face a criminal penalty of up to $50,000 and up to one-year imprisonment. In certain circumstances, criminal fines up to $250,000 per violation and/or up to ten years' imprisonment may be imposed. The criminal penalties increase if the wrongful conduct involves false pretenses or the intent to sell, transfer, or use identifiable health information for commercial advantage, personal gain, or malicious harm. Responding to government investigations regarding alleged violations of these and other laws and regulations, even if ultimately concluded with no findings of violations or no penalties imposed, can consume company resources and impact our business and, if public, harm our reputation.

Further, various states, such as California and Massachusetts, have implemented similar privacy laws and regulations that impose restrictive requirements regulating the use and disclosure of health information and other personally identifiable information. These laws and regulations are not necessarily preempted by HIPAA, particularly if a state affords greater protection to individuals than HIPAA. Where state laws are more protective, we may have to comply with the stricter provisions. In addition to fines and penalties imposed upon violators, some of these state laws also afford private rights of action to individuals who believe their personal information has been misused. The interplay of U.S. federal and state laws may be subject to varying interpretations by courts and government agencies, creating complex compliance issues for us and our clients and potentially exposing us to additional expense, adverse publicity and liability. Further, as regulatory focus on privacy issues continues to increase and laws and regulations concerning the protection of personal information expand and become more complex, these potential risks to our business could intensify. Changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as PHI, or personally identifiable information along with increased customer demands for enhanced data security infrastructure, could greatly increase our cost of providing our services, decrease demand for our services, reduce our revenue and/or subject us to additional liabilities.

We may be exposed to liabilities under the United States 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 China. Our current customers include state-owned enterprises and, after we obtain the Class III medical device registration certificate, we plan to sell our CDA tests and devices to hospitals in China, many of which are state-owned. As a result, we may engage with Chinese officials or persons of equivalent status during the ordinary course of our business. We do not fully control the interactions that our employees and sales agents have with those officials or persons, and they may try to increase sales volumes of our tests through means that constitute violations of the FCPA, the PRC anti-bribery laws or other related laws. As our business expands, the applicability of the FCPA and other anti-bribery laws to our operations will increase. Our procedures and controls to monitor anti-bribery compliance may fail to protect us from reckless or criminal acts committed by our employees or sales 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.

Risks Relating to Doing Business in China

We are subject to many of the economic and political risks associated with emerging markets due to our operations in China. Changes in China's economic, political or social conditions or government policies and the current tensions in international economic relations could have an adverse effect on our business and operations.

Most of our assets and operations are located in China, the world's largest emerging market. In light of our operations in an emerging market, we may be subject to risks and uncertainties including fluctuations in GDP, unfavorable or unpredictable treatment in relation to tax matters, expropriation of private assets, exchange controls, restrictions affecting our ability to make cross-border transfer of funds, regulatory proceedings, inflation, currency fluctuations or the absence of, or unexpected changes in, regulations and unforeseeable operational risks. Accordingly, our business, financial condition, results of operations and prospects may be influenced to a significant degree by political, economic and social conditions in China. The Chinese economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange, allocation of resources, evolving regulatory system and lack of sufficient transparency in the regulatory process.

The economies of emerging markets are typically more vulnerable to market downturns and economic slowdowns elsewhere in the world. While the Chinese economy has experienced significant growth over past decades, growth has been uneven, both geographically and among various sectors of the economy, and the rate of growth has been slowing since 2012. Any adverse changes in economic conditions in China, in the policies of the Chinese government or in the laws and regulations in China could have a material adverse effect on China's overall economic growth. Such developments could adversely affect our business and operating results, lead to a reduction in demand for our cancer screening and detection test and adversely affect our competitive position. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall Chinese economy, but may also have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations that are applicable to us.

Recently there have been heightened tensions in economic relations between the United States and China. The U.S. government has recently 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 United States. Although the United States and China reached a Phase One trade deal in January 2020, the lasting impact of these trade conflicts on the PRC economy remains uncertain. As a biotechnology company with operations primarily based in China as well as the United States, our plan to commercialize our CDA test in, and export our CDA device to, the United States after obtaining relevant approvals from the FDA could be adversely affected by these or future trade developments. In addition, increased protectionism and the risk of global trade war, which result in weaker global trade and lower levels of economic activity, could reduce the demand for our tests and adversely affect our business.

Uncertainties with respect to China's legal system could have a material adverse effect on our business and operations.

We conduct our businesses in China primarily through our PRC subsidiaries. Our operations in China are governed by PRC laws and regulations. Our PRC subsidiaries are subject to laws and regulations applicable to foreign investment in China. The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but have limited precedential value. The PRC legal system is evolving rapidly, and the interpretation of many laws, regulations and rules may contain inconsistencies, and the 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. Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. 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. These uncertainties may impede our ability to enforce the contracts we have entered into and could materially and adversely affect our business and results of operations. 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, but which may have retroactive effect. As a result, we may not always be aware of any potential violation of these policies and rules. Such unpredictability towards our contractual, property and procedural rights could adversely affect our business and impede our ability to continue our operations.

Uncertainties exist with respect to the interpretation and implementation of the PRC Foreign Investment Law, which may impose new burdens on us.

The PRC Foreign Investment Law, or the FIL, was enacted by the National People's Congress of the PRC on March 15, 2019 and became effective on January 1, 2020, which replaces the trio of previous 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, together with their implementation rules and ancillary regulations. This law has become the legal foundation for foreign investment in the PRC. The FIL embodies an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. The Implementation Rules to the Foreign Investment Law were promulgated by the State Council on December 26, 2019 and became effective on January 1, 2020. However, uncertainties exist with respect to interpretation and implementation of the FIL and its Implementation Rules, which may adversely impact our corporate governance practice and increase our compliance costs. For instance, we might be required by governmental interpretations or implementing rules of the FIL to adjust the corporate governance of certain of our PRC subsidiaries in a five-year transition period. In addition, the FIL imposes information reporting requirements on foreign investors or foreign invested enterprises. Failure to take timely and appropriate measures to cope with any of these or other regulatory compliance requirements under the FIL may lead to rectification obligations, penalties, or other regulatory sanctions on us.

PRC regulations of loans and direct investment by offshore holding companies to PRC entities may delay or prevent us from using the proceeds of our offshore equity and debt offerings 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. We may make loans to our PRC subsidiaries or we may make additional capital contributions to our wholly foreign-owned subsidiaries in China. Any loans by us to our wholly foreign-owned subsidiaries in China to finance their activities cannot exceed statutory limits and must be registered with the local counterpart of the PRC State Administration of Foreign Exchange, or SAFE. In addition, a foreign invested enterprise shall use its capital pursuant to the principle of authenticity and self-use within its business scope.

In March 2015, SAFE promulgated the Circular on Reforming the Administration Measures on Conversion of Foreign Exchange Registered Capital of Foreign-invested Enterprises, or SAFE Circular 19, which took effect and replaced certain previous SAFE regulations from June 1, 2015. SAFE further promulgated the Circular of the SAFE on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular 16, which took effective on June 9, 2016 and, among other things, amended certain provisions of SAFE Circular 19. According to SAFE Circular 19 and SAFE Circular 16, the flow and use of Renminbi capital converted from foreign currency-denominated registered capital of a foreign-invested company is regulated such that Renminbi capital may not be used for business beyond its business scope, or to provide loans to persons other than affiliates, unless otherwise permitted under its business scope. SAFE Circular 19 and SAFE Circular 16 may limit our ability to transfer the net proceeds from our offshore equity and debt offerings to our PRC subsidiaries and convert the net proceeds into RMB.

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 to our PRC subsidiaries or future capital contributions by us to our wholly foreign-owned subsidiaries in China. As a result, uncertainties exist as to our ability to provide prompt financial support to our PRC subsidiaries when needed. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds we expect to receive from our offshore equity and debt offerings 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 rely on dividends paid by our subsidiaries for our cash needs, and any limitation on the ability of our subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business.

As a holding company, we conduct most of our business through our subsidiaries incorporated in China. We may rely on dividends paid by these PRC subsidiaries for our cash needs, including the funds necessary to pay any dividends and other cash distributions to our shareholders, to service any debt we may incur and to pay our operating expenses. The payment of dividends by entities established in China is subject to limitations. Regulations in China currently permit payment of dividends only out of accumulated profits as determined in accordance with accounting standards and regulations in China. As a result, our PRC subsidiaries are restricted in their ability to transfer a portion of their net assets to us in the form of dividends. In addition, if any of our PRC subsidiaries incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us. Any limitations on the ability of our PRC subsidiaries to transfer funds to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends and otherwise fund and conduct our business.

Our business benefits from certain financial incentives and discretionary policies granted by local governments. Expiration of, or changes to, these incentives or policies would have an adverse effect on our results of operations.

In the past, local governments in the PRC granted certain financial incentives from time to time to our PRC subsidiaries as part of their efforts to encourage the development of local businesses. The timing, amount and criteria of government financial incentives are determined within the sole discretion of the local government authorities and cannot be predicted with certainty before we actually receive any financial incentive. We generally do not have the ability to influence local governments in making these decisions. Local governments may decide to reduce or eliminate incentives at any time. In addition, some of the government financial incentives are granted on a project basis and subject to the satisfaction of certain conditions, including completion of the specific project therein. We cannot guarantee that we will satisfy all relevant conditions, and if we do not, we may be deprived of the relevant incentives. We cannot assure you of the continued availability of the government incentives currently enjoyed by us. Any reduction or elimination of incentives would have an adverse effect on our results of operations. Government grants and subsidies we recognized for the years ended December 31, 2017, 2018 and 2019 was RMB1.4 million, RMB5.9 million and RMB2.8 million (approximately US$418,000), respectively.

Under the PRC Enterprise Income Tax Law, or the EIT Law, we may be classified as a PRC resident enterprise for PRC income tax purposes, which could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders, and have a material adverse effect on our results of operations and the value of your investment.

Under the EIT Law and its implementation rules, an enterprise established outside China may be considered as a PRC resident enterprise provided that its “de facto management body” is located within China. According to the implementation rules, “de facto management body” is interpreted as a body that exercises substantial and overall management and control over the business, personnel, accounts and properties of an enterprise. In April 2009, the PRC State Administration of Taxation, or the SAT, issued the Circular of the SAT on Issues Relating to Identification of PRC-Controlled Overseas Registered Enterprises as Resident Enterprises in Accordance With the De Facto Standards of Organizational Management, or SAT Circular 82, which provides certain specific criteria for determining whether the “de facto management body” of a PRC-controlled enterprise 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 SAT’s general position on how “de facto management body” rule 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 is in China; (ii) decisions relating to the enterprise’s financial and human resource matters are made or are subject to approval by organizations or personnel in China; (iii) the enterprise’s primary assets, accounting books and records, company seals, and board and shareholder minutes, are located or maintained in China; and (iv) at least 50% of voting board members or senior executives habitually reside in China.

According to these rules and regulations, we may be considered as a PRC resident enterprise by the PRC tax authorities for tax purposes and a number of unfavorable tax consequences could follow. 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 PRC tax at a rate of 25% on our worldwide income, which could materially reduce our net income, and we may be required to withhold tax from dividends we pay at a rate of 10% in case to non-PRC enterprise shareholders (including ADS holders) or 20% in case to non-PRC individual shareholders (including ADS holders); in addition, gains realized on the sale or other disposition of our ordinary shares or ADSs may be subject to PRC tax, at a rate of 10% in case of non-PRC enterprise shareholders (including our ADS holders) or 20% in case of non-PRC individual shareholders (including ADS holders), if such dividends or gains are deemed to be from PRC sources. Any such PRC tax liability may be reduced under an applicable tax treaty. However, it is unclear whether non-PRC shareholders (including our ADS holders) of our company would be able to claim 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. Any such tax may reduce the returns on your investment in the ADSs.

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

In February 2015, the SAT issued the Public Notice Regarding Certain Enterprise Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises, or SAT Public Notice 7. SAT Public Notice 7 extends its tax jurisdiction to not only indirect transfers but also transactions involving transfer of other taxable assets, through the offshore transfer of a foreign intermediate holding company. In addition, SAT Public Notice 7 provides certain criteria on how to assess reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Public Notice 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of the taxable assets. Where a non-resident enterprise conducts an "indirect transfer" by transferring the taxable assets indirectly by disposing of the equity interests of an overseas holding company, 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 other 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. However, according to the aforesaid safe harbor rule, the PRC tax would not be applicable to the transfer by any non-resident enterprise of ADSs of our company acquired and sold on public securities markets.

In October 2017, the SAT issued the Public Notice on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Public Notice 37, which took effect on December 1, 2017. According to SAT Public Notice 37, where the non-resident enterprise fails to declare the tax payable pursuant to Article 39 of the EIT 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. If the non-resident enterprise voluntarily declares and pays the tax payable before the tax authority orders it to do so, it shall be deemed that such enterprise has paid the tax payable in time.

We face uncertainties on the reporting and consequences of future private equity financing transactions, share exchanges or other transactions involving the transfer of shares in our company by investors that are non-PRC resident enterprises. The PRC tax authorities may pursue such non-resident enterprises with respect to a filing or the transferees with respect to withholding obligation and request our PRC subsidiaries to assist in the filing. As a result, we and non-resident enterprises in such transactions may become at risk of being subject to filing obligations or being taxed under SAT Public Notice 7 and SAT Public Notice 37, and may be required to expend valuable resources to comply with them or to establish that we should not be taxed under these regulations, which may have a material adverse effect on our financial condition and results of operations.

Fluctuations in exchange rates could adversely affect our business and the value of our securities.

Changes in the value of the RMB against the U.S. dollar, Euro and other foreign currencies are affected by, among other things, changes in China's political and economic conditions. Since July 2005, the RMB is no longer pegged to the U.S. dollar, and the RMB may appreciate or depreciate significantly in value against the U.S. dollar in the medium to long term. Any significant revaluation of the RMB may have a material adverse effect on our revenues and financial condition, and the value of, and any dividends payable on, our shares in U.S. dollar terms. For example, to the extent that we need to convert U.S. dollars we receive from any equity or debt offerings into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on RMB amount we would receive from the conversion. Conversely, if we decide to convert our RMB into U.S. dollars for the purpose of paying dividends on our ordinary shares or for other business purposes, appreciation of the U.S. dollar against the RMB would have a negative effect on the U.S. dollar amount available to us.

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 holding company incorporated in the BVI primarily relies on dividend payments from our PRC subsidiaries to fund our cash and financing requirements. 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 cash generated from the operations of our PRC subsidiaries 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.

In light of the flood of capital outflows, the PRC government may from time to time impose more restrictive foreign exchange policies and increase scrutiny of major outbound capital movements. More restrictions and substantial vetting processes may be required by SAFE or other government authorities to regulate cross-border transactions falling under the capital account. 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 our ADSs.

PRC laws and regulations have more complex procedures for some acquisitions of Chinese companies by foreign investors, which could make it more difficult for us to pursue growth through acquisitions in China.

PRC laws and regulations, such as the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, Anti-Monopoly Law of the PRC and the Rules of the PRC Ministry of Commerce, or the MOFCOM, on Implementation of the Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the MOFCOM Security Review Rules, established additional procedures and requirements that are expected to make merger and acquisition activities in China by foreign investors more time-consuming and complex, including requirements in some instances that the MOFCOM be notified in advance of any change of control transaction in which a foreign investor takes control of a PRC domestic enterprise, or that the approval from the MOFCOM be obtained in circumstances where offshore companies established or controlled by PRC enterprises or residents acquire affiliated domestic companies. PRC laws and regulations also require certain merger and acquisition transactions to be subject to merger control review or security review.

According to these laws and regulations, a security review is required for mergers and acquisitions by foreign investors having "national defense and security" concerns, and for mergers and acquisitions by which foreign investors may acquire the "de facto control" of domestic enterprises that have "national security" concerns. In addition, when deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to the security review, the MOFCOM will look into the substance and actual impact of the transaction. The MOFCOM Security Review Rules further prohibit foreign investors from bypassing the security review requirement by structuring transactions through proxies, trusts, indirect investments, leases, loans, control through contractual arrangements or offshore transactions.

We might grow our business in part by acquiring other companies operating in our industry. Complying with the requirements of the relevant regulations to complete such transactions could be time-consuming, and any required approval processes, including approval 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 offshore investment activities by PRC residents may limit our PRC subsidiaries' ability to change their registered capital or distribute profits to us or otherwise expose us or our PRC resident beneficial owners to liability and penalties under PRC law.

SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Administration on Domestic Resident's Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular 37, in July 2014 that requires PRC residents to register with SAFE or its local branch in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing, referred to as "offshore special purpose vehicle." In addition, such PRC residents must update their SAFE registrations when the offshore special purpose vehicle undergoes any change of basic information (including change of such PRC residents, name and operation term), increases or decreases in investment amount, transfers or exchanges of shares, or mergers or divisions. According to the Notice on Further Simplifying and Improving the Foreign Exchange Administration Policies on Direct Investment, or SAFE Notice 13, released on February 2015 by the SAFE, local banks will examine and handle foreign exchange registration for overseas direct investment, including the foreign exchange registration under SAFE Circular 37 from June 2015.

Due to the inherent uncertainty in the implementation of regulatory requirements by the PRC governmental authorities, SAFE Circular 37 registration might not be always practically available under all circumstances as prescribed in those regulations. In addition, we may not at all times be fully aware or informed of the identities of all the PRC residents holding direct or indirect interest in our company. We cannot assure you that all of our PRC resident registered or beneficial owners are in compliance and will comply with SAFE regulations, including those requiring them to make necessary applications, filings and amendments. To our knowledge, certain of our PRC resident individual shareholders who hold an insignificant number of our shares have not completed their SAFE Circular 37 registration yet. The failure or inability of our PRC resident shareholders to comply with the SAFE registrations, or failure by us to update the foreign exchange registrations of our PRC subsidiaries, may subject us to fines and legal sanctions, such as restrictions on our cross-border investment activities, the ability of our wholly foreign-owned subsidiaries in China to distribute dividends and proceeds from any reduction in capital, share transfer or liquidation to us. Moreover, failure to comply with the various foreign exchange registration requirements described above could result in liability under PRC laws 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.

Failure to comply with PRC regulations regarding the registration requirements for stock ownership plans or share option 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 Stock Incentive Plans of Overseas Publicly-Listed Companies, or the Stock Option Rules. Under the Stock Option Rules and other relevant rules and regulations, PRC residents who participate in stock incentive plan in an overseas publicly-listed company are required to register with SAFE or its local branches and complete certain other procedures. Participants of a stock incentive plan who are PRC residents must retain a qualified PRC agent, which could be a PRC subsidiary of such overseas publicly listed company or another qualified institution selected by such PRC subsidiary, to conduct the SAFE registration and other procedures with respect to the stock incentive plan on behalf of its participants. Such participants must also retain an overseas entrusted institution to handle matters in connection with their exercise of stock options, the purchase and sale of corresponding stocks or interests and fund transfers. In addition, the PRC agent is required to amend the SAFE registration with respect to the stock incentive plan if there is any material change to the stock incentive plan, the PRC agent or the overseas entrusted institution or other material changes. Certain of our directors, executive officers, employees and consultants who are PRC residents may participate in our 2019 Plan, and therefore are subject to these regulations. Failure of these PRC stock option holders to complete their SAFE registrations may subject these PRC residents to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limit our PRC subsidiaries' ability to distribute dividends to us, or otherwise materially adversely affect our business.

In addition, the SAT has issued certain circulars concerning employee share incentives. Under these circulars, our employees working in the PRC who exercise share options or are granted restricted shares will be subject to PRC individual income tax. Our PRC subsidiaries have obligations to file documents related to employee share options or restricted shares with relevant tax authorities and to withhold individual income taxes of those employees who exercise their share options. If our employees fail to pay or we fail to withhold their income taxes according to relevant laws and regulations, we may face sanctions imposed by the tax authorities or other PRC government authorities.

Our business and our profitability may be negatively affected by the rising labor costs and potential obligations to make additional contributions of social insurance premium and housing funds.

In recent years, labor costs in China have continued to increase, driven by increased inflation, as well as enactment of new labor laws. As a result, we expect our labor costs, including wages and employee benefits, to continue to increase in the foreseeable future. Unless we are able to pass on these increased labor costs to our customers by increasing the prices of our products and services, our financial condition and results of operations may be adversely affected.

In addition, we are required by PRC laws and regulations to participate in various employee social security plans that are organized by municipal and provincial governments, including housing, pension, medical insurance, work-related injury insurance, employment injury insurance, maternity insurance and unemployment insurance. 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. The relevant government agencies may examine whether an employer has made adequate payments of these requisite statutory employee benefits, and those employers who fail to make adequate payments may be subject to late payment fees, fines and/or other penalties. We have historically failed to promptly make social insurance and housing fund contributions in full with respect to our employees. If the relevant PRC authorities determine that we shall make supplemental social insurance and housing fund contributions, and that we are subject to fines and legal sanctions, our business, financial condition and results of operations may be adversely affected.

Proceedings instituted by the SEC against five China-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 five China-based accounting firms, including our independent registered public accounting firm, were affected by a conflict between U.S. and Chinese law. Specifically, for certain U.S.-listed companies operating and audited in 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 Chinese 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 CSRC.

In December 2012, the SEC instituted proceedings under Rule 102(e)(1)(iii) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against five China-based accounting firms, including our independent registered public accounting firm, alleging that these firms had violated U.S. securities laws and the SEC's rules and regulations thereunder by failing to provide to the SEC the firms' work papers related to their audits of certain China-based companies that are publicly traded in the U.S. Rule 102(e)(1)(iii) grants the SEC the authority to deny to any person, temporarily or permanently, the ability to practice before the SEC who is found by the SEC, after notice and opportunity for a hearing, to have willfully violated any such laws or rules and regulations. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and suspending four of the five firms, including our independent registered public accounting firm, from practicing before the SEC for a period of six months. Four of these China-based accounting firms appealed to the SEC against this decision and, on February 6, 2015, each of the four China-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The firms' ability to continue to serve all their respective customers is not affected by the settlement. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the China Securities Regulatory Commission, or the CSRC. If the firms do not follow these procedures, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings. The settlement did not require the firms to admit to any violation of law and preserves the firms' legal defenses in the event the administrative proceeding is restarted.

If 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 ordinary shares may be adversely affected.

In December 2018, the SEC and the PCAOB issued a joint statement on regulatory access to audit and other information internationally that cites the ongoing challenges faced by them in overseeing the financial reporting of companies listed in the United States with operations in China, the absence of satisfactory progress in discussions on these issues with Chinese authorities and the potential for remedial action if significant information barriers persist.

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, in June 2019, a bipartisan group of lawmakers introduced bills in both houses of the U.S. Congress that would require the SEC to maintain a list of issuers for which the PCAOB is not able to inspect or investigate an auditor report issued by a foreign public accounting firm. The Ensuring Quality Information and Transparency for Abroad-Based Listings on our Exchanges (EQUITABLE) Act prescribes increased disclosure requirements for these issuers and, beginning in 2025, the delisting from U.S. national securities exchanges such as Nasdaq Global Market of issuers included on the SEC's list for three consecutive years. 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 our ADSs could be adversely affected.

In a statement issued in December 2019, the SEC reiterated concerns over the inability of the PCAOB to conduct inspections of the audit firm work papers with respect to U.S.-listed companies that have operations in China, and emphasized the importance of audit quality in emerging markets, such as China.

On April 21, 2020, the SEC and the PCAOB issued a new joint statement, reminding the investors that in many emerging markets, including China, there is substantially greater risk that disclosures will be incomplete or misleading and, in the event of investor harm, substantially less access to recourse, in comparison to U.S. domestic companies, and stressing again the PCAOB's inability to inspect audit work papers in China and its potential harm to investors. However, it remains unclear what further actions the SEC and PCAOB will take to address the problem.

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 the ADSs from the Nasdaq Global Market or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of the ADSs in the United States.

The audit report included in this annual report is prepared by auditors who are not inspected by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit reports included in this annual report filed with the SEC, as auditors of companies that are traded publicly in the United States and a firm registered with the PCAOB, is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditors are located in the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, our auditors are not currently inspected by the PCAOB. On May 24, 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the CSRC and the Ministry of Finance, which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations in the United States and China. PCAOB continues to be in discussions with the CSRC and the Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with the PCAOB and audit Chinese companies that trade on U.S. exchanges. On December 7, 2018 and February 19, 2020, the SEC and the PCAOB issued two joint statements highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statements reflect a heightened interest in an issue that has vexed U.S. regulators in recent years, and expect U.S. audit firms to bring appropriate increased attention and resources to their internal and cross-network quality control processes. However, it remains unclear what further actions the SEC and PCAOB will take to address the problem.

Inspections of other firms that the PCAOB has conducted outside China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. This lack of PCAOB inspections in China prevents the PCAOB from regularly evaluating our auditor's audits and its quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

Risks Relating to the ADSs

The trading price of our ADSs may be volatile regardless of our operating performance.

The trading price of our ADSs 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. Furthermore, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies like us. These broad market and industry factors may materially reduce the market price of our ADSs, regardless of our operating performance. In addition to market and industry factors, the price and trading volume for our ADSs may be highly volatile for factors specific to our own operations, including the following:

- variations in our revenues, earnings and cash flow;
- announcements of new investments, acquisitions, business partnerships or joint ventures by us or our competitors;
- announcements of new test and service offerings, solutions and expansions by us or our competitors;
- failure on our part to realize monetization opportunities as expected;
- changes in financial estimates by securities analysts;

- detrimental adverse publicity about us, our technology, our tests or our industry;
- additions or departures of key personnel;
- release of lock-up or other transfer restrictions on our outstanding equity securities or sales of additional equity securities;
- 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 volume and price at which our ADSs will trade, and you may not be able to sell your shares at prices you deem acceptable. 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.

Our dual-class share structure with different voting rights will limit your ability to influence our corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

As of March 31, 2020, our issued ordinary shares consisted of 8,338,260 Class A ordinary shares and 2,863,100 Class B ordinary shares. In respect of matters requiring the votes of shareholders, holders of Class A ordinary shares will be entitled to one (1) vote per share, while holders of Class B ordinary shares will be entitled to ten (10) votes per share. Each Class B ordinary share is convertible into one Class A ordinary share at any time by its holder, while Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment or disposition of Class B ordinary shares by a holder to any person or entity who is not an affiliate of the holder, or upon a change of ultimate beneficial ownership of the holder of any Class B ordinary share to any person or entity who is not an affiliate of the holder, such Class B ordinary shares will be automatically and immediately converted into the same number of Class A ordinary shares. We sold Class A ordinary shares represented by our ADSs in our initial public offering.

All of the issued and outstanding ordinary shares held by Dr. Chris Chang Yu through CRS Holdings Inc. and a portion of our ordinary shares held by Zhangjiang GU KE Company Limited and Zhijun Sihang Holdings Limited, respectively, have been re-designated as Class B ordinary shares. Dr. Chris Chang Yu, Zhangjiang GU KE Company Limited and Zhijun Sihang Holding Limited beneficially owned 61.2%, 11.8% and 8.3%, respectively, of the aggregate voting power of our company as of March 31, 2020, due to the disparate voting powers associated with our dual-class share structure. As a result of the dual-class share structure and the concentration of ownership, these holders of Class B ordinary shares will have considerable influence over matters such as decisions regarding change of directors, mergers, change of control transactions and other significant corporate actions. They may take actions that are not in the best interest of us or our other shareholders. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could have the effect of depriving our other shareholders of the opportunity to receive a premium for their shares as part of a sale of our company and may reduce the price of our ADSs. This concentrated control will limit your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover or other change of control transactions that holders of Class A ordinary shares and ADSs may view as beneficial.

Share ownership has remained as of the date of this annual report, and will remain, concentrated in the hands of our principal shareholders and management, who are and will continue to be able to exercise a direct or indirect controlling influence on us.

Our directors, officers and current five percent or greater shareholders and affiliated entities together beneficially owned approximately 86.4% of the voting power of our ordinary shares issued and outstanding as of March 31, 2020, and this concentration of share ownership will remain in the foreseeable future. As a result, these shareholders, acting together, have significant influence over all matters that require approval by our shareholders, including the election of directors and approval of significant corporate transactions. Corporate action might be taken even if other shareholders, including those who own our ADSs, oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other shareholders may view as beneficial.

If securities or industry analysts do not publish research about our business, or if they adversely change their recommendations regarding our ADSs, the market price for our ADSs and trading volume could decline.

The trading market for our 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 our ADSs, the market price for our 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 our ADSs to decline.

Substantial future sales or perceived potential sales of ADSs or ordinary shares, including upon the exercise of vested options, in the public market could cause the price of ADSs to decline.

Sales of substantial amounts of our ADSs or ordinary shares, including upon the exercise of vested options, in the public market, or the perception that these sales could occur, could adversely affect the market price of our 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 without restriction or further registration under the Securities Act, and shares held by our existing shareholders may be sold in the public market in the future subject to the restrictions in Rule 144 and Rule 701 under the Securities Act and the applicable lock-up agreements. There were 11,201,360 ordinary shares (including 1,333,360 Class A ordinary shares represented by ADSs) outstanding as of March 31, 2020. In connection with our initial public offering, we, our directors, executive officers, and our shareholders holding 1% or more of our ordinary shares outstanding prior to the effective date of our initial public offering have agreed not to sell any ordinary shares or ADSs for 180 days beginning from the date of our initial public offering, without the prior written consent of the underwriters, subject to certain exceptions. However, at the request of the parties subject to the lock-up restriction, the representatives of the underwriters may exercise their discretion to release the lock-up restriction prior to the expiration of the lock-up period, subject to applicable regulations of the Financial Industry Regulatory Authority, Inc. Also, there may be perception that the parties subject to the lock-up restriction will sell the shares after the lock-up period. Sales of substantial amounts of ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of our ADSs.

Our memorandum and articles of association contain anti-takeover provisions that could have a material adverse effect on the rights of holders of our ordinary shares and ADSs.

Our memorandum and articles of association (the “M&A”) contain provisions which may have the effect of limiting the ability of others to acquire control of our company or cause us to engage in change-of-control transactions. These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our dual-class voting structure gives disproportionate voting power to the holders of our Class A and Class B ordinary shares. Our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix their designations, powers, preferences, privileges, and relative participating, optional or special rights and the qualifications, limitations or restrictions, including dividend rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights associated with our ordinary shares, in the form of ADS or otherwise. Preferred shares could be issued quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue preferred shares, the price of our ADSs may fall and the voting and other rights of the holders of our ordinary shares and ADSs may be materially and adversely affected.

As we do not expect to pay dividends in the foreseeable future, you must rely on price appreciation of our 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 our ADSs as a source for any future dividend income. Accordingly, the return on your investment in our ADSs will likely depend entirely upon any future price appreciation of our ADSs. There is no guarantee that our 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 our ADSs and you may even lose your entire investment in our ADSs.

You may not receive dividends or other distributions on our Class A 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 of the ADSs has agreed that if it or the custodian receives any cash dividends or other distributions on Class A ordinary shares or other deposited securities underlying the ADSs, it will pay them to you after deducting its fees and expenses pursuant to the deposit agreement. You will receive these distributions in proportion to the number of Class A ordinary shares your ADSs represent. However, the depositary or the custodian 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 through the mail. Additionally, the value of certain distributions may be less than the cost of mailing 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, Class A 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, Class A ordinary shares, rights or anything else to holders of ADSs. This means that you may not receive distributions we make on our Class A 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.

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 direct the voting of the underlying Class A ordinary shares which are represented by your ADSs.

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of our ADSs, you do not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You are only able to exercise the voting rights which are carried by the underlying Class A ordinary shares represented by your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. Under the deposit agreement, you may vote by giving voting instructions to the depositary. If we instruct the depositary to ask for your instructions, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying Class A 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 instructions you give, but it is not required to do so. You will not be able to directly exercise any right to vote with respect to the underlying Class A ordinary shares represented by your ADSs unless you withdraw the shares, and become the registered holder of such shares prior to the record date for the general meeting. Under our memorandum and articles of association, the minimum notice period required to be given by our company to our registered shareholders to convene a general meeting is seven days. When a general meeting is convened, you may not receive sufficient advance notice of the meeting to withdraw the shares underlying 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 amended and restated 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 Class A ordinary shares underlying 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 instruct the depositary to ask for your instructions, the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary how to vote the underlying Class A 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 shares underlying your ADSs are voted and you may have no legal remedy if the shares underlying your ADSs are not voted as you requested.

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.

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

Your ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may close its books from time to time for a number of reasons, including in connection with corporate events such as a rights offering, during which time the depositary needs to maintain an exact number of ADS holders on its books for a specified period. The depositary may also close its books in emergencies, and on weekends and public holidays. The depositary may refuse to deliver, transfer or register transfers of our ADSs generally when our share register or the books of the depositary are closed, or at any time if we or the depositary thinks that it is 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. As a result, you may be unable to transfer your ADSs when you wish to.

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

The deposit agreement governing the ADSs representing our Class A ordinary shares provides that, subject to the depositary's right to require a claim to be submitted to the U.S. federal or state courts in the City of New York have non-exclusive jurisdiction to hear and determine claims arising under the deposit agreement and in that regard, 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 U.S. state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the U.S. 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. 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 investing in the ADSs.

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 U.S. 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 and/or the depositary. If a lawsuit is brought against us and/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 enforced, to the extent a court action proceeds, it would 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.

We are subject to liability risks stemming from our foreign status, which could make it more difficult for investors to sue or enforce judgments against our company, and the ability of U.S. authorities to bring actions against us or our management may also be limited.

We are a company incorporated under the laws of the British Virgin Islands. We conduct substantially all of our operations in China and substantially all of our assets are located in China, the world's largest emerging market. In addition, certain of our directors and executive officers reside within China for a significant portion of a year or are PRC nationals and a substantial portion of their assets are within China. As a result, it could 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 United States federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the British Virgin Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers. In addition, due to jurisdictional limitations, matters of comity and various other factors, the SEC, Department of Justice ("DOJ") and other U.S. authorities may be limited in their ability to take enforcement actions, including in instances of fraud, against us or our directors and officers in China. In addition, shareholder claims that are common in the United States, including class action securities law and fraud claims, generally uncommon in China.

In addition, BVI companies may not have standing to initiate a shareholder derivative action in a federal court of the United States. The circumstances in which any such action may be brought, and the procedures and defenses that may be available in respect to any such action, may result in the rights of shareholders of a BVI company being more limited than those of shareholders of a company organized in the United States. Accordingly, shareholders may have fewer alternatives available to them if they believe that corporate wrongdoing has occurred. For more information, see "Item 10—B. Memorandum and Articles of Association—Differences in Corporate Law—Shareholders' Suits". The BVI courts are also unlikely to recognize or enforce against us judgments of courts in the United States based on certain liability provisions of U.S. securities law, and to impose liabilities against us, in original actions brought in the BVI, based on certain liability provisions of U.S. securities laws that are penal in nature. There is no statutory enforcement in the BVI of judgments obtained in the United States, although the courts of the BVI will in certain circumstances recognize such a foreign judgment and treat it as a cause of action in itself which may be sued upon as a debt at common law so that no retrial of the issues would be necessary. This means that even if shareholders were to sue us successfully, they may not be able to recover anything to make up for the losses suffered.

Lastly, under the provisions of the BVI Act, the memorandum and articles of association of a company are binding as between the company and its members and between the members. In general, members are bound by the decision of the majority or special majorities as set out in the articles of association or in the Act. As for voting, the usual rule is that with respect to normal commercial matters members may act from self-interest when exercising the right to vote attached to their shares.

If the majority members have infringed a minority member's rights, the minority may seek to enforce its rights either by derivative action or by personal action. The BVI Act provides that any member of a company is entitled to payment of the fair value of his shares upon dissenting from certain matters. For more information, see "Item 10—B. Memorandum and Articles of Association—Differences in Corporate Law—Shareholders' Suits."

Generally any other claims against a company by its members must be based on the general laws of contract or tort applicable in the BVI or their individual rights as members as established by the company's memorandum and articles of association, which are more limited than the rights afforded investors under the laws of many states in the United States.

You may have difficulty enforcing judgment against us or our directors and officers.

We are a BVI holding company and most of our assets are located outside of the United States. In addition, certain of our directors and executive officers are residents of the PRC, and substantially all of their assets and our assets are located in the PRC. As a result, you may not be able to effect service of process upon us or these directors and executive officers, or to enforce against them judgments obtained in courts 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 BVI and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

We will 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 SEC and the Nasdaq, 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 in the assessment of the emerging growth company's ICFR. The JOBS Act also permits an emerging growth company to delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of such extended transition period for complying with new or revised accounting standards as required when they are adopted for public companies.

We may take advantage of the aforesaid exemptions for so long as we remain an emerging growth company until the fifth anniversary from the date of our initial listing. 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 and the other rules and regulations of the SEC. For example, as a result of becoming a public company, we may need to increase the number of independent directors and will need to adopt policies regarding internal controls and disclosure controls and procedures. In addition, operating as a public company makes 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 may 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 amount of additional costs we may incur or the timing of such costs.

As we are a foreign private issuer and are exempt from certain Nasdaq corporate governance standards applicable to U.S. issuers, you have less protection than you would have if we were a domestic issuer.

The Nasdaq listing rules require listed companies to have, among other things, a majority of their board members be independent. As a foreign private issuer, however, we are permitted to, and we will, follow home country practice in lieu of the above requirements. The corporate governance practice in our home country, the BVI, does not require a majority of our board to consist of independent directors. Since a majority of our board of directors will not consist of independent directors, fewer board members may be exercising independent judgment and the level of board oversight on the management of our company may decrease as a result. In addition, the Nasdaq listing rules also require U.S. domestic issuers to have a compensation committee, a nominating/corporate governance committee composed entirely of independent directors, and an audit committee with a minimum of three members each of whom must be an independent director (unless any exception under the Nasdaq listing rules applies). We, as a foreign private issuer, are not subject to these requirements, except for the aforesaid independence requirement for audit committee members (unless any exception under the Nasdaq listing rules applies). The Nasdaq listing rules may require shareholder approval for certain corporate matters, such as requiring that shareholders be given the opportunity to vote on all equity compensation plans and material revisions to those plans, certain ordinary share issuances. We are not required to and may not comply with the requirements of the Nasdaq listing rules in determining whether shareholder approval is required on such matters. While we have appointed a compensation committee and a nominating and corporate governance committee, we have followed home country practice to not have all members of our compensation committee and nomination and corporate governance committee composed entirely of independent directors. In addition, we may consider following home country practice in lieu of the requirements under the Nasdaq listing rules with respect to certain other corporate governance standards which may afford less protection to investors.

We are 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 United States domestic public companies.

Because we are a foreign private issuer under the Exchange Act, 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: (i) the rules under the Exchange Act requiring the filing of quarterly reports on Form 10-Q or current reports on Form 8-K with the SEC; (ii) the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act; (iii) 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 (iv) the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are 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 for the first six months of 2020 in due course and, after that, publish our results on a quarterly basis through press releases, distributed pursuant to the rules and regulations of Nasdaq Stock Market LLC. 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, which 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 U.S. federal income tax purposes for any taxable year, which could subject U.S. Holders of our Class A ordinary shares or ADSs to adverse U.S. federal income tax consequences.

A non-U.S. corporation will be a PFIC, if, in any particular year, either (i) 75% or more of its gross income for such year consists of certain types of "passive" income or (ii) the average percentage of the value of its assets that produce or are held for the production of passive income, based on the average of four quarterly testing dates, is at least 50% (the "asset test"). Because the PFIC tests must be applied each year, and the composition of our income and assets and the value of our assets may change, it is possible that we may be a PFIC in the current or a future year. In particular, because the value of our assets for purposes of the asset test may be determined by reference to the market price of our ADSs, fluctuations in the market price of our ADSs may cause us to become a PFIC.

If we are a PFIC in any taxable year, a U.S. Holder (as defined in "Taxation—United States Federal Income Tax Considerations") may incur significantly increased U.S. federal income tax on gain recognized on the sale or other disposition of our Class A ordinary shares or ADSs and on the receipt of distributions on our Class A ordinary shares or ADSs to the extent such gain or distribution is treated as an "excess distribution" under the U.S. federal income tax rules, and such U.S. Holder may be subject to burdensome reporting requirements. Further, if we are a PFIC for any year during which a U.S. Holder holds our Class A ordinary shares or ADSs, we will generally continue to be treated as a PFIC for all subsequent years during which such U.S. Holder holds our Class A ordinary shares or ADSs, unless we cease to be a PFIC and the U.S. Holder makes a special "purging" election on IRS Form 8621.

See "Item 9. The Offering and Listing—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Status" for more details regarding the foregoing.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

We began our operations by incorporating AnPac Bio in January 2010 as a BVI business company limited by shares under the BVI Act. AnPac Bio was established primarily as a holding company and has established our operating subsidiaries in China and the United States.

In March 2010, we established Changhe Bio-Medical Technology (Yangzhou) Co., Ltd., or AnPac Yangzhou, as our wholly foreign owned subsidiary in the PRC to market and sell our cancer screening and detection tests and conduct biology related research and development activities.

In March 2011, we established Changwei System Technology (Shanghai) Co., Ltd., or AnPac Changwei, as our wholly foreign owned subsidiary in the PRC as our global research and development center.

In October 2012, we established AnPac Bio-Medical Technology (Lishui) Co., Ltd. or AnPac Lishui, as our wholly foreign owned subsidiary in the PRC as our headquarters and to manufacture our CDA devices.

in October 2013, we established Shanghai Xinshenpai Technology Co., Ltd., or Shanghai Xinshenpai as our wholly owned subsidiary in the PRC to market and sell our cancer screening and detection tests.

In April 2014, we established AnPac Shanghai as our wholly owned subsidiary in the PRC to market and sell our cancer screening and detection tests.

In September 2015,we established AnPac Technology USA Co., Ltd., or AnPac US, as our wholly owned subsidiary in the United States to conduct research studies and clinical studies for our research on cancer screening and detection tests.

In July 2016, we established Lishui AnPac Medical Laboratory Co., Ltd., or Lishui Laboratory, as our wholly owned subsidiary in the PRC to conduct cancer screening and detection tests.

In November 2017, we established Shiji (Hainan) Medical Technology Limited, or Shiji Hainan, as our wholly owned subsidiary in the PRC, which we acquired from third parties to conduct cancer screening and detection tests.

In May 2018, we established Penghui Health Management (Shanghai) Co., Ltd., or Penghui Health Management, as our wholly owned subsidiary in the PRC to market and sell our cancer screening and detection tests.

Our principal executive offices are located at 801 Bixing Street, Bihu County, Lishui, Zhejiang Province 323006, People’s Republic of China. Our telephone number at this address is +86-578-2051-666. Our registered office in the BVI is located at the office of Maples Corporate Services (BVI) Limited at Kingston Chambers, P.O. Box 173, Road Town, Tortola, BVI. Our agent for service of process in the United States is AnPac US, located at 2260 Clove Drive, Suite 127, San Jose, CA 95128.

Investors should submit any inquiries to the address and telephone number of our principal executive offices. Our main website is www.anpacbio.com. The information contained on our website is not a part of this annual report.

SEC maintains an Internet site (http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding us that file electronically with the SEC. See “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures” for a discussion of our capital expenditures.

B. Business Overview

We are a biotechnology company focusing on early cancer screening and detection. We market and sell a multi-cancer screening and detection test that uses our innovative, patented CDA technology and our proprietary CDA device. In addition to early cancer screening and detection, our CDA technology has demonstrated potential to assist physicians in cancer diagnosis, prognosis and recurrence.

Our CDA technology provides a comprehensive platform, on which we have developed our CDA test and our proprietary CDA device. Our CDA test can detect and assess an individual's overall cancer risk with high accuracy, including early stage cancer. We also offer combination tests that combine our CDA test with auxiliary tests based on other cancer screening and detection technologies, such as biomarker-based tests, to detect the risk of specific cancer types. When we refer to our technology or tests as a "cancer screening and detection" technology or test in this annual report, we refer to the detection and assessment of the risk of cancer occurrence, not to cancer diagnosis.

Our CDA technology focuses on biophysical properties in human blood. Recent studies have shown that there is a correlation between certain biophysical properties, including acoustical, electrical, magnetic, nano-mechanical and optical properties, and cancer occurrence. These studies have revealed that biophysical properties could be important non-genetic aspects of the micro-environment regulating the balance between normal cell growth and carcinogenesis (cancerous growth), which may lead to cancer occurrence. Biophysical properties' physical expressions of information in the blood can indicate risks of pre-cancerous states and cancers. These biophysical signals change over time as cancer occurs, progresses or regresses. Our proprietary CDA device uses an integrated sensor system to detect certain biophysical signals in blood samples. After collecting data on these signals, we use our CDA technology and proprietary algorithm to measure and analyze these signals at multiple biological levels (including the protein, cellular and molecular levels) and with multiple parameters (including the overall CDA value, the PTF value and the CTF value). According to Frost & Sullivan, we are one of the first biotechnology companies worldwide to focus on the detection and measurement of cancers' biophysical properties. In our industry and related research fields, our CDA technology, as well as CTCs, ct-DNA, exosome, mRNAs and other emerging technologies, are known as "next-generation" cancer screening and detection technologies.

Our CDA technology provides a highly accurate, early-stage risk assessment of the occurrence of cancer. As of December 31, 2019, our CDA technology had been shown in numerous retrospective validation studies to be able to detect the risk of 26 cancer types with high sensitivity and specificity rates. These 26 cancers accounted for over 80% of the cancer incidences in China from 2013 to 2018, according to Frost & Sullivan. Our CDA technology requires only a standard blood sample from a tested individual, which minimizes the inconvenience and invasive procedures and avoids the harmful side effects that are inherent to many other technologies.

We have established a test database that as of March 31, 2020, consisted of over 169,800 blood samples of various age, sex and disease groups. Our database included over 127,500 samples from our commercial CDA-based tests and approximately 42,300 samples from our research studies. According to Frost & Sullivan, we ranked first in China and second worldwide among companies offering next-generation early cancer screening and detection technologies in terms of the number of clinical samples for cancer screening and detection as of June 30, 2019. For purposes of these rankings, we had approximately 35,000 clinical samples as of June 30, 2019, which represented the historical aggregate number of participants enrolled in our research studies that were developed in clinical sites qualified by competent authorities, such as the NMPA. In addition, among companies offering next-generation early cancer screening and detection technologies in China, in 2018 we ranked first in terms of volume of commercial cancer screening and detection tests conducted and fifth in terms of revenue from commercial cancer screening and detection tests, according to Frost & Sullivan.

We have established two clinical laboratories in China and one clinical laboratory in the United States. Our principal laboratory is a licensed biomedical clinical laboratory located in Lishui, Zhejiang Province, China, where we perform our commercial CDA-based tests (including our CDA tests and combination tests), as well as a variety of other tests (including immunological and biochemical tests). Our laboratory in Haikou, Hainan Province, China is a licensed genomics clinical laboratory where we perform gene sequencing tests. In addition to these two clinical laboratories, we also have a research and development center located in Shanghai, China, where we develop our next-generation cancer screening and detection technology and tests. In the United States, we have a California-licensed clinical laboratory located in San Jose, California for which we obtained CAP accreditation and a CLIA Certificate of Accreditation in March 2020. Our San Jose laboratory is equipped to perform our CDA tests and biochemical tests. We have entered into research agreements with U.S. universities and academic medical centers, and we are in discussions with other U.S. hospitals, medical institutions, CROs, managed care companies and other health organizations, to conduct research studies on our CDA technology at this laboratory. We also plan to open a second U.S. clinical laboratory in Philadelphia, Pennsylvania around the second quarter of 2020, and have obtained a CLIA Certificate of Registration for this new laboratory. We have applied for a Pennsylvania state laboratory permit and plan to seek accreditation from CAP for this new laboratory.

As of December 31, 2019, we had filed 210 patent applications globally; among these, 121 patents had been granted, including 55 in greater China (including seven in Taiwan) and 16 in the United States, and 89 patent applications were pending in China, the United States and nearly 20 other countries and regions. Our patent applications broadly cover apparatus and methods for early stage disease detection, and they strategically encompass important specific embodiments of these apparatus and methods.

We performed our first commercial CDA-based test in China in 2015. Since then, we have generated revenue in China for four consecutive years. The number of commercial CDA-based tests (inclusive of CDA tests and combination tests) we sold increased significantly from 19,336 in 2017 to 41,607 in 2018 and further to 52,428 in 2019. Our revenue from sales of cancer screening and detection tests increased by 83.7% from RMB5.2 million in 2017 to RMB9.6 million in 2018 and increased by 8.6% from 2018 to RMB10.4 million (US$1.5 million) in 2019. Our total revenues increased by 80.3% from RMB5.7 million in 2017 to RMB10.3 million in 2018 and increased by 5.8% from 2018 to RMB10.8 million (US$1.6 million) in 2019. In the United States, we plan to commence marketing our CDA test as an LDT in the future.

Our CDA Technology

Our CDA technology provides an innovative and comprehensive platform for us to develop multi-cancer screening and detection tests with high sensitivity, specificity and cost-efficiency.

Principal Mechanism

Focus on Biophysical Properties

Our CDA technology is a liquid-based technology. The critical difference between our CDA technology and other liquid-based cancer screening and detection technologies is that our technology focuses on biophysical properties rather than conventional biochemical or genomic properties. Specifically, our CDA technology is based on the correlations between biophysical properties and cancer occurrence. Recent studies have shown that there is a correlation between certain biophysical properties and cancer occurrence. These studies have revealed that certain biophysical properties could be important non-genetic aspects of the micro-environment regulating the balance between normal cell growth and carcinogenesis (cancerous growth), which may lead to cancer occurrence. Biophysical properties exist in all human beings, including healthy individuals, and the signals they express can be detected before a tumor has formed. Biophysical properties increase or decrease progressively in a statistically significant way from healthy state to non-cancerous disease, pre-cancer disease, early- and late-stage cancer states. The change in biophysical properties is a potential cause for the loss of immunity and increased occurrence of cancer. On the other hand, the strength of biophysical signals expressed by these biophysical properties—which our CDA technology is designed to detect—increase progressively from healthy through late-stage cancer states.

We have collected testing data on 26 types of cancer, including data on biophysical properties measured in multiple serial samples collected from the same person over time and corresponding pathological data. Our proprietary algorithm is based on this database, and it uses the testing data collected by our CDA device to determine the PTF value, CTF value and overall CDA value of a blood sample. The overall CDA value determined through our test factors in the PTF and CTF value, as well as other biophysical property characteristics of the blood sample. The overall CDA value, as the principal parameter for our CDA technology, is proportional to the cancer risk.

Based on the progressive changes of biophysical properties and their signals from healthy through late-stage cancer states, we believe that our CDA technology is ideally suited for early cancer screening and detection, as well as assistance in cancer diagnosis, prognosis and reoccurrence. Through tracking CDA values, we can obtain both static and dynamic (progression) of information on cancer risk.

Multi-level and Multi-parameter

Our CDA technology is designed to analyze biophysical properties that potentially influence body functions at multiple biological levels, including cellular, protein and molecular levels. By comparison, some other liquid-based cancer screening and detection technologies are based on detection signals that exist at only one of the cellular, protein and molecular levels—for example, conventional biomarkers at the protein level and CTCs at the cellular level. As a result of this multi-level analysis, we believe that our CDA technology is more comprehensive and that it can provide more dimensions of information, potentially making it more accurate in detecting cancers.

Our CDA technology quantitatively measures biophysical properties that are collectively possessed by a biological specimen. These properties may vary by health status at the cellular, protein and molecular levels. At the cellular level, biophysical properties may not only change with a cell's surface properties, but they may also alter when interactions occur between cells (for example, intercellular repulsions and attractions) as well as possibly cell-to-cell signaling. At the protein and molecular levels, certain biophysical properties may modify proteins' surface phases and structures and affect the molecular mechanism that maintains the nuclear and genomic integrity of normal cells. Shifts and aberrations in these biophysical properties may potentially lead to alterations in cell interactions and possibly affect functioning and replication of DNA. These shifts and aberrations could therefore cause increased mistakes in gene replications and even increased frequency of gene mutations that result in various diseases, including cancer. In addition, different cancers may share certain common biophysical properties, and our CDA technology captures and quantifies the biophysical signals of malignant cells that are in general distinct from those in normal cells. As a result of these measurements, our CDA technology can detect the risk of multiple cancers in one test. In contrast, certain other liquid-based cancer signals only exist at one of the above three levels (cellular, protein or molecular) and normally a specific signal corresponds to only one cancer. For instance, AFP tumor marker, a protein biomarker, is typically used to screen exclusively for liver cancer; and PSA, another protein biomarker, is typically only used to detect prostate cancer.

Our CDA technology, together with our CDA device, deploys various measurement parameters, primarily PTF, CTF and CDA values, by detecting certain biophysical properties in blood. After testing a blood sample, our CDA device generates a series of testing data, including the PTF value, the CTF value and the overall CDA value. The PTF value refers to the measured level of protein cancer-related factor in the blood. The CTF value refers to the measured level of cellular cancer-related factors in the blood. Using our proprietary algorithm, we arrive at the overall CDA value based on the PTF and CTF values, as well as other biophysical property characteristics of the blood. This overall CDA value is the principal analysis parameter that we use to assess an individual's overall cancer risk. Based on the results of these parameters, we assess the risk of cancer to be low (normal), medium or high.

Analytical Validation

We have conducted numerous research studies on our CDA technology's utility and accuracy. Since 2015, we have completed 25 research studies on our CDA technology with hospitals and medical institutes in China. Among them, the results of 15 research studies on which we collaborated with five Chinese hospitals and medical institutes have been published at ASCO annual meetings and other medical conferences and in medical journal supplements. We have also completed an additional ten unpublished research studies with nine hospitals and medical institutes in China. As of March 31, 2020, we had tested more than 169,800 blood samples collected from various age, sex and disease groups, including over 127,500 samples from our commercial CDA-based tests and over 42,300 samples from our research studies.

Our research studies have demonstrated that our CDA technology can detect the risk of multiple cancers with high sensitivity and specificity rates. We have used meta-analysis to analyze the resulting data of all completed research studies for a specific cancer type up to December 31, 2019 and calculated our CDA technology's sensitivity and specificity rates for that cancer type. Meta-analysis is a statistical analysis of a large collection of analysis results from individual studies for the purpose of integrating the findings. The following table sets forth the sensitivity and specificity rates of our CDA technology in detecting 26 cancers based on our completed research studies up to December 31, 2019:

Cancer Type	Aggregate Sample Size	Sensitivity	Specificity	Publication Information[1]
Lung Cancer	2,277	82.4%	83.0%	2015 ASCO Annual Meeting, J Clin Oncol 33, e12578, 2015 (co-author: Cancer Hospital of Chinese Academy of Medical Sciences); 2015 Nobel Prize Laureate Summit on Biomedical Sciences (co-authors: Shanghai Changhai Hospital and School of Life Science of Fudan University); 2015 Annual Congress of Chinese Thoracic Society; 2017 ASCO Annual Meeting, J Clin Oncol 35, e23131, 2017 (co-authors: Shanghai Changhai Hospital and School of Life Science of Fudan University); 2019 ASCO Annual Meeting, J Clin Oncol 37, e20673, 2019 (co-authors: Shanghai Changhai Hospital and Lishui Central Hospital)
Cerebral Cancer	93	89.2%	89.9%	2019 ASCO Annual Meeting, J Clin Oncol 37, 2019 (suppl; abstr 2040)
Nasopharyngeal Cancer	188	86.6%	89.1%	N/A
Oral Cancer	60	78.3%	90.8%	N/A
Laryngeal Cancer	61	93.4%	88.0%	N/A
Thyroid Cancer	39	100.0%	83.6%	N/A
Esophageal Cancer	2,253	85.8%	93.0%	2015 ASCO Annual Meeting, J Clin Oncol 33, e15059, 2015(co-author: Shanghai Changhai Hospital); 2015 Nobel Prize Laureate Summit on Biomedical Sciences (co-authors: Shanghai Changhai Hospital and Fudan University Shanghai Cancer Center); 2017 Gastrointestinal cancers Symposium (San Francisco), J Clin Oncol 35, 2017 (suppl 4S; abstract 42)
Lymphoma	528	87.1%	92.4%	N/A
Breast Cancer	493	74.6%	92.2%	2015 San Antonio Breast Cancer Symposium(10.1200/JCO.2015.33.28_Suppl.13)
Liver Cancer	804	92.3%	93.2%	2015 ASCO Annual Meeting, J Clin Oncol 33, e12578, 2015 and e22171, 2015 (co-author: Lishui Central Hospital, the Fifth Affiliated Hospital of Wenzhou Medical University)
Bile Duct Cancer	26	87.5%	94.0%	N/A
Gallbladder Cancer	28	100.0%	63.4%	N/A
Pancreatic Cancer	162	89.3%	90.6%	N/A
Gastric Cancer	1,438	88.7%	93.8%	N/A
Kidney Cancer	55	88.9%	77.7%	N/A
Bladder Cancer	29	72.4%	88.3%	N/A
Colon Cancer	884	89.4%	91.2%	2015 ASCO Annual Meeting, J Clin Oncol 33, e12578, 2015 (co-author: Lishui Central Hospital, the Fifth Affiliated Hospital of Wenzhou Medical University); 2017 Gastrointestinal cancers Symposium (San Francisco), J Clin Oncol 35, 2017 (suppl 4S; abstract 564)
Rectum Cancer	653	89.2%	88.0%	N/A
Duodenal Cancer	32	84.4%	87.5%	N/A
Prostatic Cancer	46	90.7%	93.2%	N/A
Cervical Cancer	401	87.0%	90.2%	2019 Shenzhen New Horizons in Cancer Research
Ovarian Cancer	474	90.5%	90.1%	2019 Shenzhen New Horizons in Cancer Research
Uterine Cancer	164	87.2%	92.3%	N/A
Leukemia	196	77.6%	88.0%	N/A
Bone Cancer	12	91.7%	91.0%	N/A
Skin Cancer	18	88.9%	93.7%	N/A

Note:

(1) For each specific cancer type shown in the table above, the references in this column "Publication Information" indicate the medical conferences and medical journal supplements where we have published any research results for that cancer type up to December 31, 2019, while "N/A" means that none of our completed research studies of that cancer type had been published up to December 31, 2019.

Early Cancer Screening and Detection

Research studies

A number of our research partners, including hospitals and medical institutions in China, have validated our CDA technology's ability to detect the risk of multiple cancers. This validation has been done through their un-blinding of our single- or double-blinded testing results for tested individuals in their institutions. Single-blinded test refers to the testing process in which we do not know, but our research partners know, about the pathological or clinical information of the tested samples or the makeup of the patient and control groups during the course of testing. By comparison, in double-blinded tests, neither us nor our research partners have this information until the un-blinding step. Un-blinding refers to the disclosure of the previously withheld information to us by our research partners in single-blinded tests, or the publication of this information by a third-party study administrator or by our research partners after they otherwise acquire the information. Set forth below are several representative examples of validation studies on our CDA technology that we have completed with Chinese hospitals:

· *Shanghai Changhai Hospital*

Since 2015, we have cooperated with Shanghai Changhai Hospital to research various cancers, including lung cancer. We have published six papers under this project. The latest paper was published at the 2019 ASCO Annual Meeting. In this study, 832 blood samples collected from patients with non-small cell lung cancer, or NSCLC, and 642 blood samples from healthy individuals (as the control group) were tested using our CDA technology. The results indicated that our CDA technology had good sensitivity and specificity rates even for lung cancer at stage I—85.2% and 93.0%, respectively.

· *A Cancer Hospital in Beijing*

This hospital is one of the first hospitals that has cooperated with us in conducting research studies. At the 2015 ASCO Annual Meeting, we published a paper evaluating our multi-level, multi-parameter CDA detection method for digestive system cancer diagnosis based on one of our joint research studies with this hospital. Although the sample size was limited, this was the earliest paper comparing our CDA technology with conventional biomarkers.

In this study, the hospital collected blood samples from nine HCC patients and six colorectal cancer patients, as well as from a control group of 20 healthy individuals. These blood samples were tested by both our CDA technology and methods based on conventional biomarkers, including AFP and carcinoembryonic antigen, or CEA. The results showed that there was a significant statistical difference in the measured overall CDA value between each of the HCC and colorectal cancer patient groups and the control group. Specifically, in the HCC group, our CDA technology had a sensitivity rate of 77.0% compared to the AFP-based method's 33.0%, while the specificity rates of both methods were similar. In the colorectal cancer group, our CDA technology had a sensitivity rate of 83.0% compared to the CEA-based method's 33.0%, while the specificity rates of both methods were similar.

· *Lishui Central Hospital, the Fifth Affiliated Hospital of Wenzhou Medical University*

We have collaborated with Lishui Central Hospital, the Fifth Affiliated Hospital of Wenzhou Medical University, or Lishui Central Hospital, primarily in liver and lung cancer studies. We published two papers, one on HCC and one on NSCLC, at the 2015 ASCO Annual Meeting.

In the HCC study, blood samples were collected from 485 HCC patients, 64 cirrhosis patients and 44 patients with benign liver diseases, or BLD, as well as from a control group of 75 healthy individuals. All the samples were tested using our CDA technology. The results indicated that there was a significant statistical difference in the measured overall CDA value between the HCC patient group and each of the control, BLD, and cirrhosis groups.

In the NSCLC study, three groups of blood samples were tested using our CDA technology, which included 383 samples collected from NSCLC patients, 103 samples from patients with non-cancerous lung diseases and a control group of 149 healthy individuals. The results indicated that our CDA technology can detect NSCLC with the sensitivity of 87.7% and specificity of 79.9%.

Follow-up phone consultations

We conduct follow-up phone consultations with individuals for whom we have conducted commercial CDA-based tests, to validate our CDA technology's utility in detecting the risk of cancer. These individuals were generally asymptomatic at the time they took our tests. We began our first follow-up call in 2017 and plan to do these follow-up phone consultations for five years. We have obtained preliminary results from this initiative.

We typically call a tested individual for the first time within 15 days (for individuals with high risk results), three months (for those with medium risk results) or six months (for those with low risk results), after issuing a cancer risk assessment report for a tested individual. We also have subsequent phone consultations with the tested individuals on an annual basis. During these consultations, our customer support and service personnel typically ask the tested individuals with medium or high risks of cancer about, among other things, their health conditions, whether or not they have taken follow-up checkup tests as we suggested in the cancer risk assessment reports, and the relevant follow-up diagnoses or test results, if any. As of March 31, 2020, we had contacted over 21,000 tested individuals, of whom 13,030 individuals gave us substantive feedback regarding their health conditions and disease development, and among them, 524 were previously tested as having high risk of cancer, 10,768 with medium risk of cancer and the rest with low risk of cancer. Based on the feedback from these calls, 1,741 of the tested individuals had been diagnosed with various major diseases or cancers by third-party hospitals and medical institutions within two years of taking our CDA-based tests, including 182 cases with cancers, 877 with pre-cancer diseases or benign tumors, and 682 with major non-cancerous diseases. All of these 1,741 individuals were previously tested as having medium or high risk of cancer, and none were previously tested as having low risk of cancer. Among those 524 and 10,768 individuals tested with high and medium risk of cancer, respectively, 195 (or 37.2%) and 1,546 (or 14.4%) had been diagnosed with cancers, pre-cancer diseases or major non-cancerous diseases, respectively. As it may take years for diseases to progress into cancers or pre-cancer or major non-cancerous diseases, we expect that the percentage of cancer occurrence among these 13,030 cases will likely increase over time.

Assistance in Diagnosis, Prognosis and Recurrence

Assistance in diagnosis

Oncologists typically use tissue biopsy as the "gold standard" method for cancer diagnosis, and they also utilize multiple technologies to provide multi-dimensional input to a cancer diagnosis. These technologies can be used for "assistance in diagnosis" because they provide input complementary to pathologic information drawn from a tissue biopsy, which helps physicians to ensure that their cancer diagnoses are comprehensive and unbiased. For example, a CT scan, in conjunction with the detection of CEA and other tumor markers, is often used to assist in diagnosing lung cancer.

Since 2015, we have collaborated with third-party oncologists and hospitals in utilizing our CDA technology to assist in the diagnosis of multiple cancer types in a number of research studies. These research studies are designed to evaluate the performance of our CDA technology in predicting cancer occurrence in a population with cancer symptoms or abnormal test results. To date, ten of these studies have been published at ASCO annual meetings and other medical conferences and medical journal supplements. The results of these studies demonstrated our CDA technology's effectiveness in assisting in the diagnosis of multiple cancers—particularly lung and esophageal cancers. For example, in our joint study on NSCLC with Shanghai Changhai Hospital in 2017 (2017 ASCO Annual Meeting; J Clin Oncol 35, e23131, 2017), our CDA technology successfully detected NSCLC with sensitivity of 68.7%, higher than those of CT scans for all NSCLC stage groups. This indicates that compared to a CT scan, our CDA test provides more accurate and reliable diagnostic information and data for oncologists in diagnosing lung cancer.

In another study with Shanghai Changhai Hospital in 2015 (2015 ASCO Annual Meeting; J Clin Oncol 33, e15059, 2015), our CDA technology detected esophageal cancer with relatively high sensitivity of 70.0% and specificity of 90.0%. These results indicated our CDA technology's effectiveness in assisting in the diagnosis of esophageal cancer.

Prognosis and recurrence

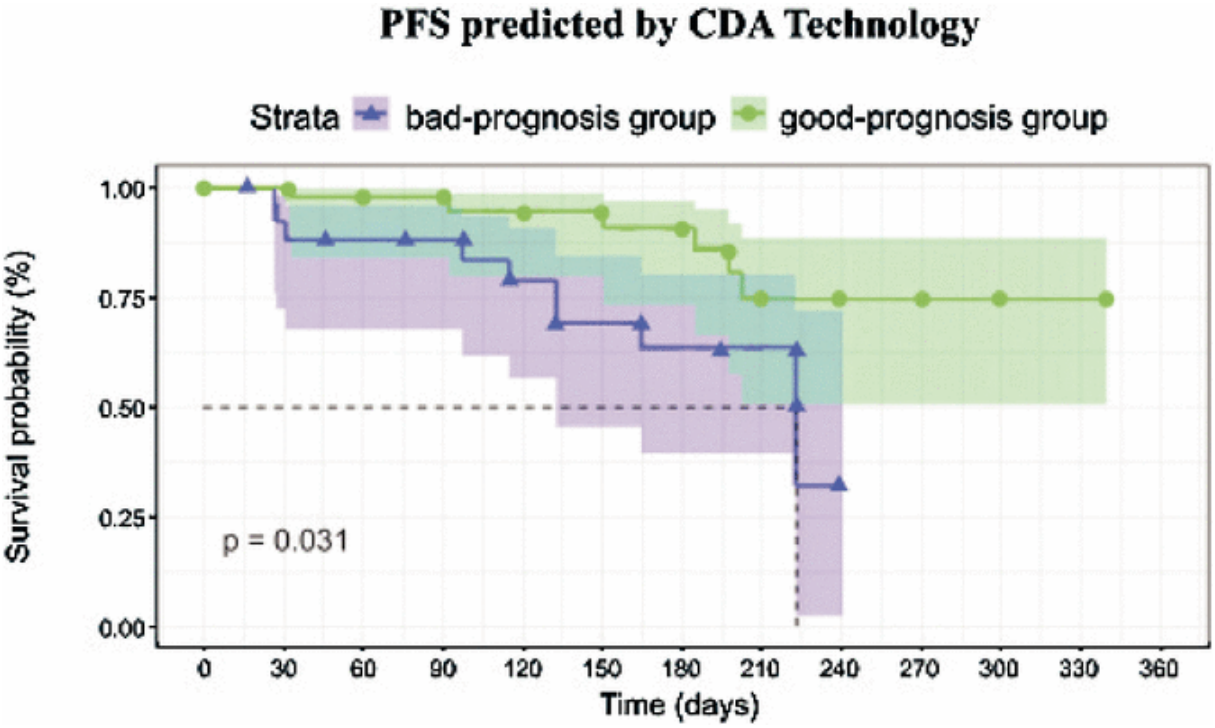
Prognosis refers to an assessment of whether and how a patient responds to cancer treatment. Effective prognostic tools can help oncologists dynamically monitor cancer treatment progression, make necessary and timely adjustments to cancer treatment, and correctly predict a patient's treatment outcome, such as the survival rate—the percentage of people in a patient group who will be alive for a period of time, the survival time—life expectancy after diagnosis, and whether or not they will go into remission. In some circumstances, prognosis can be effective even before the cancer treatment starts. Recurrence means return of cancer after the patient has been treated and has gone into remission, and happens more frequently for certain cancer types. Patients who have gone into remission have a substantially higher risk of cancer recurrence than the general population. It is therefore important to have technologies to detect cancer recurrence timely, cost-effectively and without side effects. Because biophysical properties in the blood increase or decrease progressively in a statistically significant way from healthy state to late-stage cancer states, we believe that our CDA technology can be used for prognosis of cancer treatment outcomes and for detecting the risk of cancer recurrence.

In a study published at the 2016 ASCO Annual Meeting (2016 ASCO Annual Meeting, J Clin Oncol 34, 2016 (suppl; abstr e23176)), we investigated our CDA technology's potential for breast cancer prognosis by testing the blood samples collected from three breast cancer patients. The CDA data for each patient's blood samples were grouped into three categories, namely before, during and after any post-operative treatment. Two of these patients showed favorable responses to the post-operative treatment and their average overall CDA values declined after the treatment. The third patient did not respond well to the post-operative treatment and their average overall CDA values remained high after the treatment. These results indicated that our CDA technology may be useful for monitoring a breast cancer patient's response to the post-operative treatment, although this utility of our CDA technology needs more validation studies.

Since 2015, we have been working with multiple hospitals in China, including Shanghai Changhai Hospital, Lishui Central Hospital, a cancer hospital in Beijing and a cancer center in Shanghai, in a number of research studies. These studies are designed to explore our CDA technology's effectiveness as a prognostic tool for lung cancer treatment.

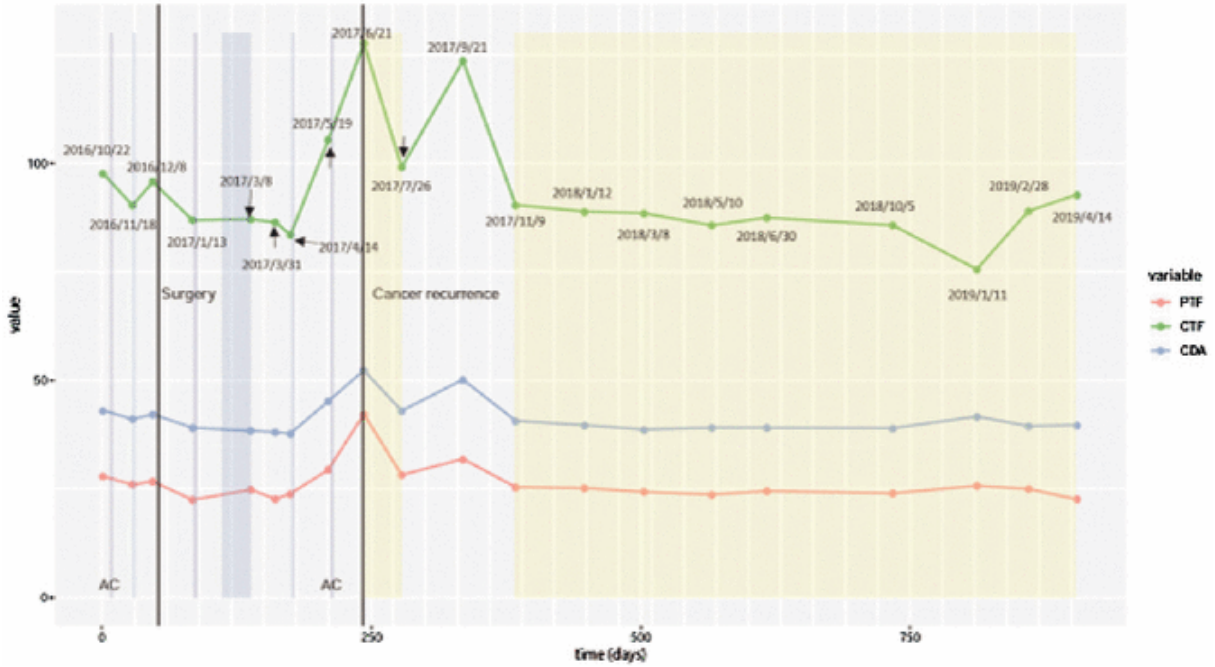
In one of these studies in 2016, we collaborated with Shanghai Changhai Hospital and tested and collected the overall CDA values from 86 lung cancer patients. These patients were divided into two groups: the "good prognosis" group (with each member having an overall CDA value below 47) and the "bad prognosis" group (those with values above 47). We predicted that the "good prognosis" group would have a higher survival rate than that of the "bad prognosis" group due to their relatively low overall CDA values. After the grouping, both groups went through chemotherapy to treat their lung cancers. Two years after the chemotherapy, the survival rate of the "bad prognosis" group dropped below 50%, while that of the "good prognosis" group stayed at the level of 75%. The differences in those two outcomes are statistically significant and meaningful. The results of this clinical study demonstrate our CDA technology's strong ability in predicting the outcome of lung cancer treatment and validate that it can predict treatment outcomes even before the treatment starts.

The following graph provides a comparison of the predicted progression-free survival rates (the percentage of the measured population that did not demonstrate worsening in their condition over a specified period), or PFS, for those two lung cancer patient groups in this study.



In another study, we tracked a number of patients throughout their approximately three years of cancer treatment. The following graph illustrates the changes of a representative patient's CDA values throughout the tracking period.

CDA in Long-Term Cancer Monitoring (Stage IIA with Surgery)



This patient is a middle-aged man diagnosed with a stage IIA lung cancer. As illustrated in the graph above,

- At the beginning of the tracking period, namely Day zero, the patient's overall CDA value was relatively high, which corroborated the oncologist's diagnosis that the individual had a cancer;

- From Day 7 to Day 28, as the cancer treatment progressed, the patient's overall CDA value, as well as PTF and CTF values, continued dropping;

- After his surgery (around Day 52) and during his chemo-therapy treatment, the patient's overall CDA value dropped below the cut-off value, indicating that by that time, the patient's stage IIA lung cancer had been effectively controlled and he went into remission;

- However, after a period of remission (around Day 212), the patient's overall CDA value went up again, which predicted a recurrence of cancer. Shortly after this uptick in the overall CDA value, the oncologists diagnosed that the patient's cancer had come back and further spread to the liver, corroborating our CDA test's prediction;

- Subsequently, the patient went through chemotherapy for liver cancer. Following this treatment (around Day 277), the patient showed an overall CDA value below the cut-off value, indicating that the patient responded positively to the chemotherapy and went into remission again; and

- From Day 383 to Day 904, the patient's overall CDA value, as well as PTF and CTF values, remained relatively low, indicating that he was in remission. This was also confirmed by the oncologists' clinical observations.

To summarize, this representative example has shown that our CDA test can (i) dynamically monitor a patient's treatment progression, indicating when the cancer is under control (namely, when the overall CDA value drops below the cut-off value) and when the patient enters the remission phase (namely, after the overall CDA value stays below the cut-off value for a period of time); and (ii) correctly predict cancer recurrence ahead of time (namely, when the overall CDA value resurges and exceeds the cut-off value).

Our CDA Device

Our proprietary CDA device, which we designed in-house and is covered by numerous patents, is used to conduct cancer screening and detection tests based on our proprietary CDA technology. This device uses an integrated, multi-level and multi-parameter sensor system to detect multiple biophysical properties in one single blood test. We believe that we are one of the first biotechnology companies worldwide to use such a sensor system to detect cancers' biophysical properties.

Working Mechanism

Our CDA device consists of a blood sample input unit, a sample transport unit, a sample mixing chamber, a testing unit and a data storage unit. Because our CDA technology detects biophysical properties, our CDA device's sensors play a dominant role in biophysical signal detection.

Our CDA device uses a microfluidic device, which is connected to a fluid delivery line inside the testing unit. This microfluidic device contains three primary components: micro-channels, micro-sensors and measurement instruments with automated data recording capabilities. After a blood sample goes into the micro-channels of the microfluidic device, the sensors will probe the blood and measure the relevant data. The measurement instrument that interfaces with the sensors applies a constant input to the blood and records the corresponding biophysical responses as a function of time. The resulting raw data contains both dynamic and static information, which is fed into our proprietary algorithm for further analysis.

Our CDA device is much less costly to manufacture than the equipment used by many of our competitors, especially the complex and expensive gene sequencing machines used in ct-DNA-based tests and micro-electrical mechanical devices used in CTC-based tests. As a result, we can offer our customers cancer screening and detection tests with high accuracy at prices significantly lower than many of our competitors' tests.

Operation

Our CDA device is a fully-automated system requiring minimal human involvement. After collecting blood samples from the individuals, all our testing personnel needs to do is to properly place these blood samples on the test-tube racks and station the racks inside the sample input unit of our device. Our device will then automatically complete the subsequent test as programmed, including:

- heating the blood samples to prepare them for testing;
- deploying multiple sensors inside the microfluidic device to detect relevant biophysical properties in each blood sample and obtain multi-level information;
- discharging the tested blood samples and cleaning the used test tubes; and
- transferring the testing data collected by the microfluidic device (including PTF and CTF values) to the computer connected to our CDA device, which will process this testing data with our proprietary algorithm and convert it into an overall CDA value. A series of CDA itemized values will also be generated, if we conduct biomarker-based tests in combination with our CDA test while offering our cancer-positioning services.

Based on the resulting CDA values, our professionals can assess a tested individual's likelihood of having or developing cancers and issue the corresponding cancer risk assessment report.

We design and configure all the key components of our CDA device and outsource production of these components to a number of qualified contract manufacturers. We assemble these components into our CDA devices in-house. We have implemented a strict selection process for our contract manufacturers and evaluate our contract manufacturers' qualifications on an ongoing basis. We do not disproportionately rely on any particular contract manufacturer and have not entered into any long-term or exclusive supply contract with any of them. For our CDA device, we obtained a Class II medical device manufacture license in June 2013 (renewed in 2018) and a Class II medical device registration certificate April 2015 from the NMPA, Zhejiang Branch. These licenses, along with our clinical laboratory license, allow us to manufacture our device in Lishui, Zhejiang and use the device commercially in our licensed clinical laboratories in China. While conducting the final assembly, testing and packaging of our devices at our plant in Lishui, Zhejiang Province, we thoroughly inspect the key components of our devices sourced from contract manufacturers and closely follow applicable PRC regulations and recognized international quality control standards.

Our CDA-based Tests

Unlike conventional cancer screening and detection approaches such as imaging technology and tissue biopsy, our CDA test uses liquid-based technology to detect the risk of cancer and non-cancerous diseases based on our CDA technology. It is minimally invasive, side effect-free and highly automated. Because it focuses on changes in cancer-related biophysical properties as a disease progresses, we believe that our CDA test can be used for multiple purposes, including early cancer screening and detection, as well as assistance in cancer diagnosis, prognosis and recurrence.

We maintain a comprehensive and flexible test menu to meet different customers' needs. Our CDA test can detect and assess an individual's overall risk of having or developing cancer, and we deliver a cancer risk assessment report as the final product of this test. This report presents the analytical parameters that our CDA test uses, including the PTF, CTF and overall CDA values. We set cut-off values for the PTF, CTF and overall CDA values based on the pathological data from our retrospective validation studies and the intended cancer screening and detection objectives. PTF or CTF values in excess of the specified cut-off values indicate a risk of cancer. In addition, we set two cut-offs to divide the overall CDA value into three categories: low risk (healthy), medium risk and high risk. These values, collectively, indicate a tested individual's overall risk level of having or developing cancer, without identifying the specific types of cancer that the individual may have. For tested individuals with medium or high cancer risks as indicated by the overall CDA value, we normally suggest in our reports that they get follow-up medical examinations on the relevant organs.

In addition to our CDA test, a tested individual can pay a premium for our combination tests, which also include cancer-positioning services to identify the specific type(s) of cancer that he or she has a medium or high risk of having or developing. Our combination tests combine our CDA tests and, on an auxiliary basis, biomarker-based cancer screening and detection tests performed either by us or by third-party clinical laboratories that we engage. These combination tests typically use two cubic centimeters of blood from the tested individual to perform our CDA test and another three cubic centimeters of blood to perform the biomarker-based test. In the combination tests our CDA technology plays a dominant role in identifying the risk of cancer, while biomarkers provide auxiliary information on the types of cancer that may be involved. We integrate the results of these two separate tests using our proprietary algorithm and translate them into a series of itemized CDA values. We then analyze these itemized CDA values to identify the cancer type(s) that a tested individual has a medium or high risk of having or developing. These identified cancer types and the tested individual's corresponding risk levels of having or developing them will also be included in that individual's cancer risk assessment report.

Currently, we offer seven standardized tests (with or without cancer positioning services). Generally, the more cancer types a standardized test with cancer positioning services can identify, the higher it is priced. In each standardized test with cancer-positioning services, the specific cancer types that can be identified vary between males and females. For instance, our popular CDA six-cancer test with positioning services identifies lung, liver, stomach and colon cancers for both genders, as well as rectal and prostate cancers for males and breast and ovarian cancers for females.

Commercialization

China

In China, we have established clinical laboratories in Lishui, Zhejiang Province and Haikou, Hainan Province. We obtained the medical institutional practice license from the NHC in 2016 and 2015, respectively, for these two laboratories to conduct medical tests, each for a five-year term. Our Lishui laboratory conducts substantially all of our commercial CDA-based tests (including our CDA tests and combination tests), as well as a variety of other tests (including immunology and biochemical tests). We performed our first commercial CDA-based test in 2015 and have generated revenue in China for four consecutive years. The number of our commercial CDA-based tests we sold increased significantly from 19,336 in 2017 to 41,607 in 2018, and further to 52,428 in 2019.

In addition to our CDA-based tests, we design annual physical checkup plans for certain of our corporate and life insurance company customers as value-added services and to facilitate these customers to procure physical checkup services from third-party physical checkup service providers. We also sell annual physical checkup packages to our customers, which are designed to include our CDA-based tests as part of the physical checkup services. We outsource a substantial portion of these checkup services in these packages to qualified physical checkup institutions. As of December 31, 2019, we had completed total sales of over 140,000 physical checkup packages.

We have been piloting our genomics tests in our Haikou laboratory operated by our subsidiary Shiji Hainan, which we acquired in November 2017. Our genomics tests primarily consist of genetic testing for the purpose of targeted therapy selection and pharmacogenomics, and ct-DNA mutation testing for multiple purposes, including early cancer screening and detection and prognosis.

Supported by our diverse tests and services, we intend to further expand our customer base in China. To achieve this objective, we plan to market our tests to Chinese hospitals. In December 2018, we applied to the NMPA for a Class III medical device registration certificate for our CDA device to assist in multi-cancer diagnosis. We expect that it would take us at least three years to obtain this registration certificate. After we obtain this license, we will apply to update our medical device manufacture license to include the manufacture of Class III medical devices. With these Class III medical device licenses, we will be permitted to place our devices within Chinese hospitals' laboratories to conduct commercial tests there or sell our devices to the hospitals for the purposes of assisting in physicians' diagnosis of specified multiple cancers. We expect our business in China to expand substantially following the commencement of this commercial cooperation with Chinese hospitals.

United States

In the United States, we have established a clinical laboratory in San Jose, California. We have obtained a California state laboratory license, CAP accreditation and a CLIA Certificate of Accreditation for this laboratory. We currently are permitted to conduct our CDA test for research use in the United States. We have entered into research agreements with U.S. universities and academic medical centers, and we are in discussions with U.S. hospitals, medical institutions, CROs, managed care companies and other health organizations, to conduct research studies on our CDA technology in the U.S. To commercialize our CDA test in the United States, we intend to initially market it to U.S. customers as an LDT. As an LDT, pursuant to the FDA's current LDT enforcement discretion policy, we do not expect that our CDA test will require premarket clearance, market authorization, or approval from the FDA prior to marketing. We may begin marketing our test as soon as we complete our validation studies and obtain any state laboratory licenses or other approvals that we are required to hold in order to offer our CDA test in the corresponding states. Under CLIA, CAP, and state licensing requirements, we are required to validate our CDA test with analytical and clinical studies prior to marketing the test as an LDT. These studies are designed to demonstrate the performance of the test. We have entered into research agreements with U.S. universities and academic medical centers, and we are in discussions with other health organizations, to conduct these studies.

After we complete our validation studies for the CDA test, we will be able to market our CDA test following the completion of an administrative process to update our test menu with the CAP, CLIA, and those states in which we are required to hold state laboratory licenses (with the exception of New York State). Assuming that our CDA test falls within one of the disciplines included in the CAP accreditation and CLIA certification that our San Jose laboratory has already received, after we complete our validation studies for the CDA test, we will be able to update our test menu with the CAP electronically, and then immediately offer our CDA test in those states that do not require us to hold state laboratory licenses. In those states where we are required to hold state laboratory licenses, we will need to submit applications to update our test menu. The timeline for these updates is uncertain and will likely depend on the number of applications received by each state at any particular time. Upon completion of this process, we will be able to offer our CDA test throughout the U.S. with the exception of New York State. For more information about the state laboratory license for New York State and its application process, see "Item 4. Information on the Company—B. Business Overview—U.S. Regulations—Federal and State Laboratory Licensing Requirements."

Research and Development

The development of our CDA technology and device (together with our proprietary algorithm) is largely attributable to our integrated research and development team that comprises talent from both China and the United States. In our research and development center based in Shanghai, we conduct various ongoing research studies on our CDA technology and continue to improve our CDA device.

We believe that our research and development team possesses industry-leading expertise in the early cancer screening and detection field. As of December 31, 2019, this team had 23 members, including four with M.D. degrees and three with Ph.D. degrees. Our research and development team has a multi-disciplinary background, and most members of this team specialize in areas related or helpful to the development of our CDA technology and device, including mechatronics, physics, biomedical science or computer science. Our founder and chairman, Dr. Chris Chang Yu, our vice president in charge of R&D, Mr. Xuedong Du, and our chief medical officer, Dr. He Yu, have led our research and development team since our inception, leveraging their multi-disciplinary expertise and industry experience. These key members have spearheaded our research and development team in achieving a number of technological breakthroughs, including the design and fabrication of the microfluidic device—the key functioning component of our CDA device—and the testing of multiple cancers in a single blood test. Since 2015, our research and development team had published 15 articles on ASCO and other medical conferences and medical journal supplements to demonstrate our CDA technology's clinical utility.

We have invested significantly in research and development since our inception. Our research and development expenses were RMB11.4 million, RMB10.1 million and RMB9.7 million (US$1.4 million) in 2017, 2018 and 2019, respectively.

Our Ongoing Research Studies on CDA Technology

In recent years, we have collaborated with a number of Chinese hospitals and medical institutions in conducting clinical studies on our CDA technology. These collaborations have enabled us to validate the effectiveness and utility of our CDA-based test in a clinical setting, explore new applications of our CDA technology, and provide us access to clinically well-characterized patient data. In addition, we have entered into research agreements with U.S. universities and academic medical centers, and we are in discussions with other U.S. hospitals, medical institutions, CROs, managed care companies and other health organizations, to conduct research studies on our CDA technology in the United States. Currently, our ongoing clinical studies on our CDA technology mainly focus on: (i) improving our CDA technology's utility in detecting early-stage cancers with high incidences in China and the United States, as well as certain cancer types that have been considered difficult for liquid-based technology to detect; (ii) exploring this technology's potential to dynamically monitor cancer progression and for assistance in cancer diagnosis, prognosis and recurrence; (iii) expanding this technology's application to different oncological areas, including veterinary cancer screening and detection; and (iv) validating this technology's ability to detect the risk of major non-cancerous diseases. The following table summarizes our ongoing research studies on CDA technology.

Commencement Date	Research Partner	Cancer Type	Estimated Sample Size	Study Purpose
September 2019	University of Pittsburgh Medical Center	esophageal cancer	100	for early cancer screening and detection
August 2019	University of Pittsburgh Medical Center	gynecologic cancers	40	for early cancer screening and detection
May 2019	A university in Shanghai	multiple cancers (with no specification of cancer types)	15,000	for early cancer screening and detection, as well as assistance in diagnosis, prognosis and recurrence
July 2017	A cancer center in Shanghai	multiple cancers (with no specification of cancer types)	200	for early cancer screening and detection
July 2017	University of California, Davis	sarcoma and carcinoma cancer	186	for CDA technology's application to canine cancer areas
May 2017	Shanghai Changhai Hospital	lung and esophageal cancer	5,000	for early cancer screening and detection
May 2017	A hospital in Shanghai	lung, colorectal, gastric, breast and pancreatic cancers	1,600	for assistance in diagnosis, prognosis and recurrence, as well as early cancer screening and detection

These ongoing research studies can be categorized into the following three groups by study purpose:

Studies for Early Cancer Screening and Detection

Our current ongoing research studies in collaboration with Shanghai Changhai Hospital are based on our research agreement dated April 2017. These research studies are designed to validate our CDA technology for the screening and detection of early-stage lung and esophageal cancers. According to Frost & Sullivan, in 2018 there were approximately 867,500 and 271,600 new incidences of lung cancer and esophageal cancer in China, respectively, and lung cancer ranked first among the five most frequent cancers in China. These two cancers are also generally considered difficult for liquid-based technologies to detect with high accuracy, according to Frost & Sullivan. In this project, Shanghai Changhai Hospital is required to provide us with approximately 5,000 blood samples for research studies. Certain preliminary published testing results have shown that our CDA technology can detect the risk of NSCLC with a sensitivity rate of 85.2% and a specificity rate of 93.0% (2019 ASCO Annual Meeting; J Clin Oncol 37, e20673, 2019).

We and a cancer center in Shanghai executed a research project agreement in July 2017. In this ongoing research project, this cancer center is required to provide us with approximately 200 blood samples for the research study to validate our CDA technology's ability to detect the risk of multiple cancer types. These cancer types include certain cancers that are generally considered difficult for liquid-based technologies to detect, such as esophageal cancer.

We also entered into a research project agreement with a university in Shanghai in May 2019. In this ongoing research project, this university will provide us with approximately 15,000 blood samples for our research studies for multiple purposes, including early cancer screening and detection of multiple cancer types (including lung and esophageal cancers), as well as assistance in diagnosis, prognosis and recurrence.

In addition, in August 2019, we and University of Pittsburgh Medical Center entered into two research agreements. Under the first of these agreements, we retained this university to perform a retrospective, blinded research study to validate our CDA technology for gynecologic cancer screening. This university is required to provide us with at least 20 samples from healthy women and at least 20 samples from ovarian cancer patients for the research study. Under the second agreement, we retained the university to conduct a single-blind research study to validate our CDA technology for esophageal cancer screening. This university is required to provide us with 50 samples for the control group and 50 samples from cancer patients for the research study.

Studies for Assistance in Diagnosis, Prognosis and Recurrence

Since May 2017, we have been working with a hospital in Shanghai on a research study on our CDA technology primarily for assistance in diagnosis, prognosis and recurrence. Under this ongoing study, this hospital is expected to provide us with approximately 1,600 blood samples. These blood samples are collected from patients diagnosed with different subtypes of lung, colorectal, gastric, breast and pancreatic cancers and at different stages of cancer development. By analyzing the pre- and post-treatment CDA values of these patients, we have found correlations between the changes in a patient's CDA values and the cancer treatment that the patient has received.

Studies for CDA Technology's Application to Different Oncological Areas

We have been collaborating with the Department of Veterinary Medicine of the University of California, Davis in a study on early cancer screening for canines. Through this study, we plan to expand the application of our CDA technology to veterinary cancer screening and detection.

Studies for Major Non-Cancerous Disease Detection

In addition to the above ongoing studies on our CDA technology's applications in oncological areas, we are also conducting research on our CDA technology's ability to detect the risk of various major non-cancerous diseases, including lung diseases (such as pneumonia and tuberculosis), type II diabetes, heart diseases (such as heart failure and arrhythmia), liver diseases (such as cirrhosis and hepatitis), gastric diseases (such as gastritis and gastric polyp) and biliary diseases (such as calculus of bile duct and cholecystolithiasis). Our preliminary research studies indicate that our CDA technology is able to distinguish individuals with some major non-cancerous diseases from the control group and the cancer group. More studies and further analysis of the study results are needed to validate our findings on our CDA technology's utility in these major non-cancer areas.

Our Research on Improving our CDA Device

We have conducted substantial research to increase the operational efficiency of our CDA device and, in turn, improve our CDA test's signal-to-noise ratio to further elevate its accuracy. Our current research in this aspect primarily focuses on enabling our device to improve our CDA technology's ability to identify cancer types, our CDA technology's signal-to-noise ratio and its testing throughput.

Sales and Marketing

We currently sell our cancer screening and detection tests only in China. We sell our tests primarily to our customers directly, as well as through our sales agents such as health management companies and medical device dealers. We select our sales agents based on their reputation, market coverage, sales experience and the size of their sales force, and we generally conduct credit assessments of our sales agents.

We set the prices of our tests primarily based on the numbers of cancers that they test. However, we do not set the resale prices for our tests, which our sales agents typically have the sole discretion to determine. We typically give our corporate customers and sales agents a credit term of one to three months for the payments.

Our marketing is focused on expanding the market awareness of our cancer screening and detection test and continuously growing our customer base. We primarily deploy our own sales and marketing personnel to market our tests. As of December 31, 2019, we had 19 sales and marketing personnel. In addition to conducting direct sales to our existing customers, our sales and marketing personnel prepare and deliver our brochures and product presentations to potential customers and attend academic conferences and industrial exhibitions to advertise our CDA technology and tests. Our sales and marketing personnel are generally well trained and educated about the complexities of our tests, and they typically have extensive experience in the cancer early screening and detection field or other medical areas. As our business grows, we plan to build up our sales and marketing team and strengthen our own sales network in China.

We also use sales agents to promote our tests. By referring our tests to their customers and inviting us to deliver product presentations at their promotional events, our sales agents have connected us with their quality customers and enabled us to utilize their network resources for marketing purpose.

Our Customers

We believe that our cancer screening and detection tests have significant market potential in China, as there is strong demand among China's large, aging population for early cancer screening and detection services. Our existing customer base in China consists primarily of life insurance companies and other large corporations. Generally, they are frequent and high-volume users of our cancer screening and detection tests, because they provide our tests to their individual customers as value-added services or to their employees as benefits. While the majority of our sales has come from our direct sales to our customers, we expect that a significant portion of our sales will continue to be generated through our sales agents.

We believe our customer base provides a meaningful opportunity for our further growth. In addition, we believe an expansion in our customer base will encourage the market acceptance of our CDA technology and raise the public's awareness of our brand. We plan to acquire additional customers for our CDA-based tests through the annual physical checkup packages we offer. In addition, we plan to further develop our non-CDA cancer screening and detection tests using other technologies, including expanding the genomics tests we currently conduct at our Haikou laboratory. After obtaining the Class III medical device registration certificate and updating our medical device manufacture license, we expect to provide our tests to more individual customers through Chinese hospitals.

Customer Support and Service

We maintain a dedicated team to provide customer support and service for our CDA-based tests. This Shanghai-based team is primarily responsible for operating our service hotline to answer customers' questions regarding their test results and our cancer risk assessments. In addition, this team periodically conducts follow-up phone consultations with the tested individuals to check their current health conditions, diagnosis results and disease development. These consultations provide us valuable feedback to validate our CDA technology utility in detecting the risk of cancer.

Supply Chain and Quality Control

We devote significant attention to ensuring the accuracy and reliability of our cancer screening and detection tests. We have established a comprehensive quality control system for our tests in accordance with applicable PRC regulations and recognized international quality control standards.

Blood samples for our commercial CDA-based tests are typically delivered to us by a third-party commercial courier. We have also engaged third-party nursing service providers to collect blood samples on our behalf for our commercial cancer screening and detection tests. These service providers are generally responsible for any physical harm caused by the nurses to the tested individuals during the blood collection process. In addition, our research partners are responsible for collecting and delivering blood samples for our research studies. As the quality of blood samples directly affects the accuracy of our tests, we have designed a set of standardized blood sample collection and delivery procedures, including those for sample labeling, preservation and transportation. We require the commercial courier company, nurses and our research partners to follow these standardized procedures to minimize the risks of human errors and sample contamination. During the testing process, we strictly control the temperature and humidity in our laboratories. We carefully preserve the blood samples in a temperature-controlled environment. We also use control samples to ensure that our tests are properly performed and the test results are reliable. After the testing process, our designated personnel will verify the testing results before issuing the cancer risk assessment reports to our customers. In addition, because our CDA technology focuses on biophysical signals, our blood samples can remain stable for testing purpose for up to seven days.

We use a relatively small amount of reagents in our biomarker-based cancer screening and detection tests, which are part of our combination tests. We source these reagents from two third-party suppliers. We do not have an exclusive supply agreement with the supplier. The supplier typically engages commercial courier services to deliver the reagents. In addition, we outsourced substantially all the biomarker-based tests in 2017 and 2018 to two third-party clinical laboratories on a non-exclusive basis. These two laboratories are responsible for conducting the biomarker-based tests and delivering the test results to us for our data consolidation using our algorithm. These two laboratories are obligated to keep confidential all documents relating to the tested samples and the test results. We have recently phased out this outsourcing arrangement and are performing our combination tests entirely in-house.

Competition

As early detection of cancer may lead to decreased morbidity with improved survival, more and more biotechnology companies have focused on the immense market opportunities it represents and are attempting to enter the space.

Biotechnology companies worldwide currently use various technologies for early cancer screening and detection. We believe that none of these technologies has yet acquired a dominant market position. As a novel cancer screening and detection technology that focuses on biophysical properties in blood, our CDA technology faces competition primarily from conventional biomarker-based technologies and other next-generation cancer screening and detection technologies, including those based on CTCs and ct-DNA. Recent major advances in CTC- and ct-DNA-based technologies have introduced the possibility of using either or both as tests to screen for cancer, and they have made the possibility for simultaneous screening for multiple primary cancers particularly attractive.

Our major competitors include biotechnology companies that conduct cancer screening and detection using next-generating technologies, such as BGI in China and GRAIL, Guardant Health, and Exact Sciences worldwide. All of these competitors' cancer screening and detection technologies target CTCs and/or genomics such as ct-DNA, cf-DNA and cf-RNA, as opposed to the biophysical properties that our CDA technology focuses on.

We believe that our competitive advantages include the cost-efficiency, high testing accuracy, and broad test coverage of our CDA-based tests, our expansive patent portfolio and our large proprietary test database. However, many of our competitors have more expertise, experience and financial resources, stronger business relationships in developing and marketing their products, more mature technologies and products, greater market adoption among physicians and patients and others in the medical community, broader test menus, larger test databases, or greater brand recognition than we do. We also cannot assure you that our CDA technology will not become obsolete if we cannot keep pace with constantly changing technologies in the cancer screening and detection market.

Intellectual Property

Intellectual property rights are fundamental to our business, and we devote significant time and resources to their development and protection. We rely on a combination of patent, trade secret and trademark laws, as well as confidentiality agreements, to establish and protect our proprietary rights. We do not rely on third-party licenses of intellectual property when developing our CDA technology and CDA device.

We have developed an early and strong patent position related to our CDA technology, and we continuously seek patent coverage over its new applications. As of December 31, 2019, we had filed 210 patent applications globally; among them, 121 patents had been granted, including 16 patents granted in the United States, 55 in greater China (including seven in Taiwan), and 50 in nearly 20 other countries and regions. Our granted patents are expected to expire between 2031 and 2037. As of the same date, we also had 89 pending patent applications, consisting of 19 in the United States, 28 in greater China (including one in Taiwan), 38 in nearly 20 other countries and regions, and four patent cooperation treaty, or PCT, applications.

Our patents and patent applications broadly cover apparatus and methods for detecting diseases at early stages, and they strategically encompass the important specific embodiments of these apparatus and methods. They generally fall into the following categories:

- those relating to our CDA technology, including claims directed to methods for identifying and measuring various biophysical properties in blood samples and methods for detecting major cancer types and/or non-cancerous diseases, such as methods for detecting multiple cancers in a single blood test;
- those relating to our CDA device, including claims directed to its key components, such as the microfluidic device; and
- those relating to the multi-level, multi-parameter concept underlying our CDA technology, as well as our non-CDA early cancer screening and detection technologies, apparatus and methods.

According to our public searches, some of our patents, including our newly issued U.S. patents, have been cited by patent examiners and third parties (including a number of well-known global corporations and Fortune 50 companies). For example, as of October 31, 2019, one of our U.S. patents issued in 2018 had been cited 23 times in patent applications of globally well-known corporations including those based in the U.S. and China.

Our agreements with our employees generally include assignment provisions, providing that all patents, copyrights and other intellectual property rights arising from the course of their employment with us or their using our facilities belong to us, and the employee-inventors are required assign to us all and any of their rights and title to the relevant granted patents or patent applications. In addition, we also try to protect our trade secrets and know-how through confidentiality agreements and non-disclosure provisions in our other agreements with persons who have access to them, such as our employees, consultants and research partners.

As of December 31, 2019, we also had 27 granted trademarks and four pending trademark applications in greater China, and eight granted trademarks and four pending trademark applications in the U.S.

Legal Proceedings

We may be subject to legal proceedings and claims in the ordinary course of business. We cannot predict the results of any such disputes, and despite the potential outcomes, their existence alone may have an adverse material impact on us because of diversion of management time and attention as well as the financial costs related to resolving such disputes. Neither we nor any of our directors or executive officers are currently a party to, nor is any of our properties the subject of, any material legal or arbitration proceedings.

See “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Key Components of Results of Operations—Revenues” for a breakdown of our net revenues by category of activity.

Seasonality

Due to our limited size, we do not expect our operating results and operating cash flows to be subject to seasonal variations. This pattern may change, however, as a result of growth, new market opportunities or new product introductions.

PRC Regulations

In China, we are subject to a variety of PRC laws, rules and regulations affecting many aspects of our business. This section summarizes the principal PRC laws, rules and regulations that we believe are relevant to our business and operations.

Regulation on Medical Devices and Medical Institutions

Regulatory Authorities

In the PRC, the newly formed NMPA is the government authority under the State Administration for Market Regulation that monitors and supervises the administration of pharmaceutical products, medical devices, and cosmetics. The NMPA's predecessor, the CFDA, was established in March 2013 and separated from the Ministry of Health of the PRC, or the MOH, as part of an institutional reform of the State Council. Predecessors of the NMPA also include the former State Food and Drug Administration, or the SFDA, that was established in March 2003 and the State Drug Administration, or the SDA, that was established in August 1998. The primary responsibilities of the NMPA include:

- monitoring and supervising the administration of pharmaceutical products, medical devices, and cosmetics in the PRC;
- formulating administrative rules and policies concerning the supervision and administration of the pharmaceutical, medical device, and cosmetics industry;
- evaluating, registering and approving of new drugs, generic drugs, imported drugs and traditional Chinese medicine;
- approving and issuing permits for the manufacture and export/import of pharmaceutical products, as well as medical devices, and approving the establishment of enterprises to be engaged in the manufacture and distribution of pharmaceutical products; and
- examining and evaluating the safety of pharmaceutical products, medical devices, and cosmetics and handling significant accidents involving these products.

The National Health and Family Planning Commission, or the NHFPC, has been renamed as the NHC. The NHC is an authority at the ministerial level under the State Council and is primarily responsible for national public health. The NHC combines the responsibilities of the former NHFPC, the Leading Group Overseeing Medical and Healthcare Reform under the State Council, the China National Working Commission on Aging, partial responsibilities of the Ministry of Industry and Information Technology in relation to tobacco control, and partial responsibilities from the State Administration of Work Safety in relation to occupational safety. The predecessor of NHFPC is the MOH. Following the establishment of the SFDA in 2003, the MOH was put in charge of the overall administration of the national health in the PRC excluding the pharmaceutical industry.

Medical Institutions Laws and Regulations

The Regulation on the Administration of Medical Institutions as promulgated by the State Council of the PRC on February 1994 and revised in 2016 provides the requirements for the establishment and administration of medical institutions. The establishment of medical institutions must comply with local governments' plans for the establishment of medical institutions and the basic standards for medical institutions. To establish a medical institution, an entity or individual shall be subject to the examination and approval of the health administrative department of the local government at or above the county level and obtain the written approval for the establishment of medical institutions. A medical institution providing relevant services must register and obtain a medical institution practice license. An entity or individual that has not obtained a medical institution practice license may not carry out diagnosis or treatment activities. The revised Rules for Implementation of the Administrative Regulation on Medical Institutions as promulgated by the NHFPC in February 2017 further regulates the approval on establishment, registration, validation, naming and practice of medical institutions.

Our PRC subsidiaries, AnPac Lishui and Shiji Hainan, obtained their medical institution practice licenses in 2016 and 2015, respectively. We historically conducted a number of our CDA tests in premises other than our Lishui and Haikou laboratories, which could result in the relevant authorities confiscating the revenue we generated from these tests as well as other penalties on us. While we have rectified this practice and have not received any notice of relevant disciplinary governmental action, we cannot assure you that we will not be subject to this penalty.

The Measures for the Administration of Clinical Gene Amplification Testing Laboratories in Medical Institutions as promulgated by Ministry of Health in December 2010 provides the requirements for medical institutions to carry out clinical gene amplification test technique. Clinical gene amplification testing laboratory refers to a laboratory that detects specific DNA or RNA by amplification and to perform disease diagnosis, treatment monitoring and prognosis determination. The PRC Ministry of Health is responsible for supervising and administering clinical gene amplification testing laboratories in medical institutions nationwide. The health administrative authorities at the provincial level is responsible for supervising and administering clinical gene amplification testing laboratories in medical institutions within their respective administrative regions. This regulation also provides the examination and establishment of clinical gene amplification testing laboratories, laboratory quality management and laboratory supervision and management.

Our PRC subsidiary, Shiji Hainan, obtained its Certificate of Clinical Gene Amplification Testing Laboratory in 2016.

Medical Devices Administration Laws and Regulations

The Regulation on the Supervision and Administration of Medical Devices as amended by the State Council in May 2017, regulates entities that engage in the research and development, production, operation, use as well as supervision and administration of medical devices in the PRC. Medical devices are classified according to their risk levels. Class I medical devices are medical devices with low risks, the safety and effectiveness of which can be ensured through routine administration. Class II medical devices are medical devices with moderate risks, which are strictly controlled and administered to ensure their safety and effectiveness. Class III medical devices are medical devices with relatively high risks, which are strictly controlled and administered through special measures to ensure their safety and effectiveness. The evaluation of the risk levels of medical devices take into consideration the expected objectives, structural features, methods of use and other factors of medical devices.

The Measures for the Supervision and Administration of the Manufacture of Medical Device, as promulgated by CFDA in November 2017, regulates entities that engage in the manufacturing of medical devices in the PRC. The food and drug administration at or above the county level regulates medical device manufacturing within its administrative region, including manufacturing related licensing and registration, contract manufacturing and manufacturing quality controls.

The Measures for the Supervision and Administration of the Operation of Medical Devices, as promulgated by CFDA in November 2017, regulates entities that engage in business activities involving medical devices in the PRC. Business activities involving medical devices are regulated in accordance with the medical devices' risk levels. No registration or license is required for business activities involving Class I medical devices. Registration is required for business activities involving Class II medical devices. A license is required for business activities involving Class III medical devices.

Our PRC subsidiary, AnPac Lishui, obtained its Class II medical device manufacture license and registration certificate for our CDA device in 2013 (renewed in 2018) and 2015.

Packaging of Medical Devices

The Administrative Rules on Instruction Manuals and Labels of Medical Devices, as promulgated by the CFDA in 2014, provides the requirements for instruction manuals and labeling of any medical device to be sold and used in the PRC. The information contained in the instruction manual and label of a medical device must be scientific, authentic, complete, accurate and consistent with product characteristics. The information contained in the instruction manual and label of a medical device must be consistent with the relevant information registered or filed for record. The information contained in the label of a medical device must be consistent with the relevant information in its instructions.

We believe that we are in compliance with these regulations in all material respects.

Clinical Practice Reform

In October 2017, the Chinese government announced an administrative reform of clinical trial institutions. Certification of clinical trial institutions by the former CFDA and the former NHFPC is no longer required. Under this reform, a clinical trial institution can be engaged by a drug and medical device registration applicant (i.e., a sponsor) to conduct a clinical study after it has been duly recorded with the online platform designated by the NMPA. In November 2017, the CFDA and the NHFPC jointly released the Rules for Administration of the Requirements for and Filing of Medical Devices Clinical Trial Institutions. These rules specify requirements for medical devices clinical-trial institutions and filing procedures. Pursuant to these rules, medical devices clinical-trial institutions shall meet the requirements of the Quality Management Standards for Medical Devices Clinical Trials including corresponding professional technical level, organization and management capabilities and ethics review capability.

Other Significant PRC Regulations Affecting Our Business Activities in China

Regulation on Foreign Investment

Investment activities in the PRC by foreign investors are regulated by the Catalog for the Guidance of Foreign Investment Industry, or the Catalog, which was promulgated and is amended from time to time by the MOFCOM, and the National Development and Reform Commission, or NDRC. The Catalog lays out the basic framework for foreign investment in China, classifying businesses into three categories with regard to foreign investment: “encouraged,” “restricted,” and “prohibited.” Industries not listed in the Catalog are generally deemed as falling into a fourth category “permitted” unless specifically restricted by other PRC laws. In addition, on June 30, 2019 the MOFCOM and the NDRC jointly promulgated the Special Management Measures (Negative List) for the Access of Foreign Investment, or the 2019 Negative List, which became effective on July 30, 2019 to amend the Catalog and the previous negative list thereunder. Investment in medical institutions (such as clinical laboratories) belongs to the “restricted” category. In particular, according to relevant PRC foreign investment regulations, only domestic companies and foreign-invested joint ventures are allowed to hold an NHC medical institution practice license. However, it is unclear under PRC law whether a subsidiary of a wholly foreign owned enterprise is eligible to hold this license. We believe that the risks for the NHC medical institution practice license of each of our Lishui and Haikou laboratories—subsidiaries of AnPac Lishui, a wholly foreign owned enterprise—being held invalid or revoked by the NHC is remote, based on our confirmation with relevant regulatory authorities. However, we cannot assure you that the relevant regulatory authorities would not change their interpretation or position regarding the relevant laws and regulations.

On March 15, 2019, the National People’s Congress promulgated the PRC Foreign Investment Law, or the FIL, which came into effect on January 1, 2020 and replaces the trio of previous 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, together with their implementation rules and ancillary regulations. The FIL embodies an expected regulatory trend in PRC to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. The Implementation Rules to the Foreign Investment Law were promulgated by the State Council on December 26, 2019 and became effective on January 1, 2020. The FIL and its Implementation Rules, by means of legislation, have established the basic framework for the access, promotion, protection and administration of foreign investment in view of investment protection and fair competition.

On December 30, 2019, MOFCOM and the State Administration for Market Regulation jointly promulgated the Measures for Information Reporting on Foreign Investment, which became effective on January 1, 2020. Pursuant to these measures, where a foreign investor carries out investment activities in China directly or indirectly, the foreign investor or the foreign-invested enterprise shall submit the investment information to the competent commerce department.

PRC Regulation of Commercial Bribery

Medical device companies involved in a criminal investigation or administrative proceedings related to bribery are listed in the Adverse Records of Commercial Briberies by its provincial health and family planning administrative department. Pursuant to the Provisions on the Establishment of Adverse Records of Commercial Briberies in the Medicine Purchase and Sales Industry, which became effective on March 1, 2014, provincial health and family planning administrative departments formulate the implementing measures for establishment of Adverse Records of Commercial Briberies. If a company is listed in the Adverse Records of Commercial Briberies for the first time, their products may not be purchased by public medical institutions. A company will not be penalized by the relevant PRC government authorities merely by virtue of having contractual relationships with sales agents or third party promoters who are engaged in bribery activities, so long as such company and its employees are not utilizing the sales agents or third party promoters for the implementation of, or acting in conjunction with them in, the prohibited bribery activities. In addition, a company is under no legal obligation to monitor the operating activities of its sales agents and third party promoters, and will not be subject to penalties or sanctions by relevant PRC government authorities as a result of failure to monitor their operating activities.

We believe that we are in compliance with these regulations in all material respects.

PRC Regulation of Product Liability

In addition to the strict new drug approval process, certain PRC laws have been promulgated to protect the rights of consumers and to strengthen the control of medical products in the PRC. Under current PRC law, manufacturers and vendors of defective products in the PRC may incur liability for loss and injury caused by such products. Pursuant to the General Principles of the Civil Law of the PRC promulgated on April 12, 1986 and amended on August 27, 2009, a defective product which causes property damage or physical injury to any person may subject the manufacturer or vendor of such product to civil liability for such damage or injury.

On February 22, 1993, the Product Quality Law of the PRC, or the Product Quality Law, was promulgated to supplement the Civil Law of the PRC aiming to protect the legitimate rights and interests of the end-users and consumers and to strengthen the supervision and control of the quality of products. The Product Quality Law was revised by the Ninth National People's Congress on July 8, 2000, by the Eleventh National People's Congress on August 27, 2009 and by the Thirteenth National People's Congress on December 29, 2018. Pursuant to the revised Product Quality Law, manufacturers who produce defective products may be subject to civil or criminal liability and have their business licenses revoked.

The Law of the PRC on the Protection of the Rights and Interests of Consumers was promulgated on October 31, 1993 and was amended on August 27, 2009 and October 25, 2013 to protect consumers' rights when they purchase or use goods and accept services. All business operators must comply with this law when they manufacture or sell goods and/or provide services to customers. Under the amendments made on October 25, 2013, all business operators must pay high attention to protecting customers' privacy and strictly keeping confidential any consumer information they obtain during their business operations. In addition, in extreme situations, pharmaceutical product manufacturers and operators may be subject to criminal liability if their goods or services lead to the death or injuries of customers or other third parties.

We are not aware of any material product liability related litigation or other legal proceedings against us arising from the cancer screening and detection tests that we provide to our customers.

PRC Tort Law

Under the Tort Law of the PRC, which became effective on July 1, 2010, if damages to persons are caused by defective products due to the fault of a third party, such as the parties providing transportation or warehousing, the producers and the sellers of the products have the right to recover their respective losses from such third parties. If defective products are identified after they have been put into circulation, the producers or the sellers must take remedial measures such as issuance of a warning or recall of products. in a timely manner. The producers or the sellers will be liable under tort if they fail to take remedial measures in a timely manner or have not made efforts to take remedial measures, thus causing damages. If the products are produced or sold with known defects, causing deaths or severe adverse health issues, the infringed party has the right to claim punitive damages in addition to compensatory damages.

We are not aware of any material torts related litigation or other legal proceedings against us arising from the cancer screening and detection tests that we provide to our customers.

Regulation on Intellectual Property Rights

China has made substantial efforts to adopt comprehensive legislation governing intellectual property rights, including patents, trademarks, copyrights and domain names.

Patents

Pursuant to the PRC Patent Law, most recently amended in December 2008, and its implementation rules, most recently amended in January 2010, patents in China fall into three categories: invention, utility model and design. An invention patent is granted to a new technical solution proposed in respect of a product or method or an improvement of a product or method. A utility model is granted to a new technical solution that is practicable for application and proposed in respect of the shape, structure or a combination of both of a product. A design patent is granted to the new design of a certain product in shape, pattern or a combination of both and in color, shape and pattern combinations aesthetically suitable for industrial application. Under the PRC Patent Law, the term of patent protection starts from the date of application. Patents relating to invention are effective for twenty years, and utility models and designs are effective for ten years from the date of application. The PRC Patent Law adopts the principle of “first-to-file” system, which provides that where more than one person files a patent application for the same invention, a patent will be granted to the person who first files the application.

Existing patents can become narrowed, invalidated or unenforceable due to a variety of grounds, including lack of novelty, creativity, and deficiencies in patent application. In China, a patent must have novelty, creativity and practical applicability. Under the PRC Patent Law, novelty means that before a patent application is filed, no identical invention or utility model has been publicly disclosed in any publication in China or overseas or has been publicly used or made known to the public by any other means, whether in or outside of China, nor has any other person filed with the patent authority an application that describes an identical invention or utility model and is recorded in patent application documents or patent documents published after the filing date. Creativity means that, compared with existing technology, an invention has prominent substantial features and represents notable progress, and a utility model has substantial features and represents any progress. Practical applicability means an invention or utility model can be manufactured or used and may produce positive results. Patents in China are filed with the State Intellectual Property Office, or SIPO. Normally, the SIPO publishes an application for an invention patent within 18 months after the filing date, which may be shortened at the request of applicant. The applicant must apply to the SIPO for a substantive examination within three years from the date of application.

Article 20 of the PRC Patent Law provides that, for an invention or utility model completed in China, any applicant (not just Chinese companies and individuals), before filing a patent application outside of China, must first submit it to the SIPO for a confidential examination. Failure to comply with this requirement will result in the denial of any Chinese patent for the relevant invention. This added requirement of confidential examination by the SIPO has raised concerns by foreign companies who conduct research and development activities in China or outsource research and development activities to service providers in China.

Patent Enforcement

Unauthorized use of patents without consent from owners of patents, forgery of the patents belonging to other persons, or engagement in other patent infringement acts, will subject the infringers to infringement liability. Serious offenses such as forgery of patents may be subject to criminal penalties.

When a dispute arises out of infringement of the patent owner's patent right, Chinese law requires that the parties first attempt to settle the dispute through mutual consultation. However, if the dispute cannot be settled through mutual consultation, the patent owner, or an interested party who believes the patent is being infringed, may either file a civil legal suit or file an administrative complaint with the relevant patent administration authority. A Chinese court may issue a preliminary injunction upon the patent owner's or an interested party's request before instituting any legal proceedings or during the proceedings. Damages for infringement are calculated as the loss suffered by the patent holder arising from the infringement, and if the loss suffered by the patent holder arising from the infringement cannot be determined, the damages for infringement are calculated as the benefit gained by the infringer from the infringement. If it is difficult to ascertain damages in this manner, damages may be determined using a reasonable multiple of the license fee under a contractual license. Statutory damages may be awarded in the circumstances where the damages cannot be determined by the calculation standards described above. The damage calculation methods will be applied in the order described above. Generally, the patent owner has the burden of proving that the patent is being infringed. However, if the owner of an invention patent for manufacturing process of a new product alleges infringement of its patent, the alleged infringer has the burden of proof.

Exemptions for Unlicensed Manufacture, Use, Sale or Import of Patented Products

The PRC Patent Law provides five exceptions for unauthorized manufacture, use, sale or import of patented products. None of following circumstances are deemed an infringement of the patent rights, and any person may manufacture, use, sell or import patented products without authorization granted by the patent owner as follows:

- Any person who uses, promises to sell, sells or imports any patented product or product directly obtained in accordance with the patented methods after such product is sold by the patent owner or by its licensed entity or individual;
- Any person who has manufactured an identical product, has used an identical method or has made necessary preparations for manufacture or use prior to the date of patent application and continues to manufacture such product or use such method only within the original scope
- Any foreign transportation facility that temporarily passes through the territory, territorial waters or territorial airspace of China and uses the relevant patents in its devices and installations for its own needs in accordance with any agreement concluded between China and that country to which the foreign transportation facility belongs, or any international treaty to which both countries are party, or on the basis of the principle of reciprocity;
- Any person who uses the relevant patents solely for the purposes of scientific research and experimentation; or
- Any person who manufactures, uses or imports patented drugs or patented medical devices for the purpose of providing information required for administrative approval, or manufactures, uses or imports patented drugs or patented medical devices for the abovementioned person.

However, if patented drugs are utilized on the ground of exemptions for unauthorized manufacture, use, sale or import of patented drugs prescribed in PRC Patent Law, such patented drugs cannot be manufactured, used, sold or imported for any commercial purposes without authorization granted by the patent owner.

As of December 31, 2019, we had 55 granted patents (including seven in Taiwan) and 28 pending patent applications (including one in Taiwan) in greater China, and 66 granted patents and 61 pending patent applications outside greater China.

Trade Secrets

According to the PRC Anti-Unfair Competition Law, the term "trade secrets" refers to technical and business information that is unknown to the public, has utility and may create business interests or profits for its legal owners or holders, and is maintained as a secret by its legal owners or holders.

Under the PRC Anti-Unfair Competition Law, which was promulgated on September 2, 1993 and was amended on March 23, 2019, business persons are prohibited from infringing others' trade secrets by: (1) obtaining the trade secrets from the legal owners or holders by any unfair methods such as theft, bribery, intimidation, solicitation or coercion; (2) disclosing, using or permitting others to use the trade secrets obtained illegally under item (1) above; or (3) disclosing, using or permitting others to use the trade secrets, in violation of any contractual agreements or any requirements of the legal owners or holders to keep such trade secrets in confidence. If a third party knows or should have known of the fact that an employee or former employee of the right owner of trade secrets or any other entity or individual conducts any of the illegal acts above mentioned, but still accepts, publishes, uses or allows any other to use such secrets, such practice shall be deemed as infringement of trade secrets. The parties whose trade secrets are being misappropriated may petition for administrative corrections, and regulatory authorities may stop any illegal activities and fine infringing parties in the amount of RMB100,000 to RMB500,000, where the circumstance is serious, the fine shall be between RMB500,000 to RMB3,000,000. Alternatively, persons whose trade secrets are being misappropriated may file lawsuits in a Chinese court for loss and damages incurred due to the misappropriation.

The measures to protect trade secrets include oral or written non-disclosure agreements or other reasonable measures to require the employees of, or persons in business contact with, legal owners or holders to keep trade secrets confidential. Once the legal owners or holders have asked others to keep trade secrets confidential and have adopted reasonable protection measures, the requested persons bear the responsibility for keeping the trade secrets confidential.

Trademarks and Domain Names

Trademark. The PRC Trademark Law and its implementation rules protect registered trademarks. The PRC Trademark Office of State Administration of Industry and Commerce is responsible for the registration and administration of trademarks throughout the PRC. The Trademark Law has adopted a "first-to-file" principle with respect to trademark registration.

Domain Name. Domain names are protected under the Administrative Measures on the Internet Domain Names promulgated by the Ministry of Industry and Information Technology. The Ministry of Industry and Information Technology is the main regulatory body responsible for the administration of PRC internet domain names.

As of December 31, 2019, we had 27 granted trademarks and four pending trademark applications in greater China, and eight granted trademarks and four pending trademark applications in the U.S. In addition, as of the same date, we had 15 domain names.

PRC Regulation on Data Protection

The Basic Standards for Clinical Laboratories (for Trial Implementation) as promulgated by the NHFPC in 2016 provides that clinical laboratories must establish information management and patient privacy protection policies. The Measures for the Administration of General Population Health Information (for Trial Implementation) as promulgated by the NHFPC in 2014 sets forth the operational measures for patient privacy protection in medical institutions. The measures regulate the collection, use, management, safety and privacy protection of general population health information by medical institutions. Medical institutions are required to establish information management departments in charge of general population health information and establish quality control procedures and relevant information systems to manage general population health information. Medical institutions must adopt stringent procedures to verify the general population health data collected, timely update and maintain the data, establish policies on the authorized use of general population health information, and establish safety protection systems, policies, practice and technical guidance to avoid divulging confidential or private information.

To comply with these laws and regulations, we have required our customers and research partners to consent to, or obtain consent from the tested individuals to, our collecting and using their personal information for our cancer screening and detection tests. We have also established information security systems to protect the tested individuals' privacy, including data access restrictions and monitoring, data storage, database encryption and backup.

PRC Regulation on Labor Protection

Under the Labor Law of the PRC, effective on January 1, 1995 and subsequently amended on August 27, 2009 and December 29, 2018, the PRC Employment Contract Law, effective on January 1, 2008 and subsequently amended on December 28, 2012 and the Implementing Regulations of the Employment Contract Law, effective on September 18, 2008, employers must establish a comprehensive management system to protect the rights of their employees, including a system governing occupational health and safety to provide employees with occupational training to prevent occupational injury, and employers are required to truthfully inform prospective employees of the job description, working conditions, location, occupational hazards and status of safe production as well as remuneration and other conditions as requested by the Labor Contract Law of the PRC.

Pursuant to the Law of Manufacturing Safety of the PRC effective on November 1, 2002 and amended on August 27, 2009 and August 31, 2014, manufacturers must establish a comprehensive management system to ensure manufacturing safety in accordance with applicable laws, regulations, national standards, and industrial standards. Manufacturers not meeting relevant legal requirements are not permitted to commence their manufacturing activities.

Pursuant to the Administrative Measures Governing the Production Quality of Pharmaceutical Products effective on March 1, 2011, manufacturers of pharmaceutical products are required to establish production safety and labor protection measures in connection with the operation of their manufacturing equipment and manufacturing process.

Pursuant to applicable PRC laws, rules and regulations, including the Social Insurance Law, which became effective on July 1, 2011 and amended on December 29, 2018, the Interim Regulations on the Collection and Payment of Social Security Funds, which became effective on January 22, 1999, Interim Measures concerning the Maternity Insurance of Employees, which become effective on December 14, 1994, and the Regulations on Work-related Injury Insurance, which became effective on January 1, 2004 and was subsequently amended on December 20, 2010, employers are required to contribute, on behalf of their employees, to a number of social security funds, including funds for basic pension insurance, unemployment insurance, basic medical insurance, work-related injury insurance and maternity insurance. If an employer fails to make social insurance contributions timely and in full, the social insurance collecting authority will order the employer to make up outstanding contributions within the prescribed time period and impose a late payment fee at the rate of 0.05% per day from the date on which the contribution becomes due. If such employer fails to make the overdue contributions within such time limit, the relevant administrative department may impose a fine equivalent to one to three times the overdue amount.

Regulations Relating to Foreign Exchange Registration of Offshore Investment by PRC Residents

In July 2014, SAFE issued the SAFE Circular 37, and its implementation guidelines. Pursuant to SAFE Circular 37 and its implementation guidelines, PRC residents (including PRC institutions and individuals) must register with local branches of SAFE in connection with their direct or indirect offshore investment in an overseas special purpose vehicle, or SPV, directly established or indirectly controlled by PRC residents for the purposes of offshore investment and financing with their legally owned assets or interests in domestic enterprises, or their legally owned offshore assets or interests. Such PRC residents are also required to amend their registrations with SAFE when there is a change to the basic information of the SPV, such as changes of a PRC resident individual shareholder, the name or operating period of the SPV, or when there is a significant change to the SPV, such as changes of the PRC individual resident's increase or decrease of its capital contribution in the SPV, or any share transfer or exchange, merger, division of the SPV. Failure to comply with the registration procedures set forth in the Circular 37 may result in restrictions being imposed on the foreign exchange activities of the relevant onshore company, including the payment of dividends and other distributions to its offshore parent or affiliate, the capital inflow from the offshore entities and settlement of foreign exchange capital, and may also subject relevant onshore company or PRC residents to penalties under PRC foreign exchange administration regulations.

Regulations Relating to Employee Stock Incentive Plan

In February 2012, SAFE promulgated the Stock Option Rules. In accordance with the Stock Option Rules and relevant rules and regulations, PRC citizens or non-PRC citizens residing 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 a PRC subsidiary of such overseas listed company, and complete certain procedures. We and our employees who are PRC citizens or who reside in China for a continuous period of not less than one year and who participate in our stock incentive plan will be subject to such regulation. In addition, the SAT has issued circulars concerning employee share options or restricted shares. Under these circulars, employees working in the PRC who exercise share options, or whose restricted shares vest, will be subject to PRC individual income tax, or the IIT. The PRC subsidiaries of an overseas listed company have obligations to file documents related to employee share options or restricted shares with relevant tax authorities and to withhold IIT of these employees related to their share options or restricted shares. If the employees fail to pay, or the PRC subsidiaries fail to withhold, their IIT according to relevant laws, rules and regulations, the PRC subsidiaries may face sanctions imposed by the tax authorities or other PRC government authorities.

Regulations Relating to Dividend Distribution

The principal regulations governing distribution of dividends paid by wholly foreign-owned enterprises include:

- Company Law of the PRC (1993), as amended in 1999, 2004, 2005 and 2013;
- Foreign Investment Enterprise Law of the PRC (1986), as amended in 2000 and 2016; and
- Administrative Rules under the Foreign Investment Enterprise Law (1990), as amended in 2001 and 2014.

Under these laws and regulations, foreign-invested enterprises in China may pay dividends only out of their accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, a wholly foreign-owned enterprise in China is required to set aside at least 10.0% of its after-tax profit based on PRC accounting standards each year to its general reserves until the accumulative amount of such reserves reach 50.0% of its registered capital. These reserves are not distributable as cash dividends. The foreign-invested enterprise has the discretion to allocate a portion of its after-tax profits to staff welfare and bonus funds. A PRC company is not permitted to distribute any profits until any losses from prior fiscal years have been offset. Profits retained from prior fiscal years may be distributed together with distributable profits from the current fiscal year.

Regulations Relating to Foreign Exchange

The principal regulations governing foreign currency exchange in China are the Foreign Exchange Administration Regulations, most recently amended in August 2008. Under the Foreign Exchange Administration Regulations, payments of current account items, such as profit distributions and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval from SAFE by complying with certain procedural requirements. However, approval from or registration with appropriate government authorities is required where RMB is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of foreign currency-denominated loans.

In August 2008, SAFE issued the Circular on the Relevant Operating Issues Concerning the Improvement of the Administration of the Payment and Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular No. 142, regulating the conversion by a foreign-invested enterprise of foreign currency-registered capital into RMB by restricting how the converted RMB may be used. SAFE Circular No. 142 provides that the RMB capital converted from foreign currency registered capital of a foreign-invested enterprise may only be used for purposes within the business scope approved by the applicable government authority and may not be used for equity investments within China. SAFE also strengthened its oversight of the flow and use of the RMB capital converted from foreign currency registered capital of foreign-invested enterprises. The use of such RMB capital may not be changed without SAFE's approval, and such RMB capital may not in any case be used to repay RMB loans if the proceeds of such loans have not been used. In March 2015, SAFE issued SAFE Circular No. 19, which took effective and replaced SAFE Circular No. 142 on June 1, 2015. Although SAFE Circular No. 19 allows for the use of RMB converted from the foreign currency-denominated capital for equity investments in China, the restrictions continue to apply as to foreign-invested enterprises' use of the converted RMB for purposes beyond the business scope, for entrusted loans or for inter-company RMB loans. SAFE promulgated the Notice of the SAFE on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, or Circular 16, effective on June 9, 2016, which reiterates some of the rules set forth in Circular 19, but changes the prohibition against using RMB capital converted from foreign currency-denominated registered capital of a foreign-invested company to issue RMB entrusted loans to a prohibition against using such capital to issue loans to non-associated enterprises. Violations of SAFE Circular 19 or Circular 16 could result in administrative penalties.

In November 2012, SAFE promulgated the Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment which substantially amends and simplifies the current foreign exchange procedure. Pursuant to this circular, the opening of various special purpose foreign exchange accounts (e.g., pre-establishment expenses accounts, foreign exchange capital accounts and guarantee accounts), the reinvestment of lawful incomes derived by foreign investors in China (e.g. profit, proceeds of equity transfer, capital reduction, liquidation and early repatriation of investment), and purchase and remittance of foreign exchange as a result of capital reduction, liquidation, early repatriation or share transfer in a foreign-invested enterprise no longer require SAFE approval, and multiple capital accounts for the same entity may be opened in different provinces, which was not possible before. In addition, SAFE promulgated the Circular on Printing and Distributing the Provisions on Foreign Exchange Administration over Domestic Direct Investment by Foreign Investors and the Supporting Documents in May 2013, which specifies that the administration by SAFE or its local branches over direct investment by foreign investors in the PRC shall be conducted by way of registration and banks shall process foreign exchange business relating to the direct investment in China based on the registration information provided by SAFE and its branches.

In February 2015, SAFE promulgated the Circular on Further Simplifying and Improving the Policies Concerning Foreign Exchange Control on Direct Investment which took effect on June 1, 2015. The Circular on Further Simplifying and Improving the Policies Concerning Foreign Exchange Control on Direct Investment delegates the authority to enforce the foreign exchange registration in connection with the inbound and outbound direct investment under relevant SAFE rules to certain banks and therefore further simplifies the foreign exchange registration procedures for inbound and outbound direct investment.

Regulations on Enterprise Income Tax

Pursuant to the EIT Law effective as of January 2008 and as last amended in December 2018, the income tax rate for both domestic and foreign-invested enterprises is 25% with certain exceptions. To clarify certain provisions in the EIT Law, the State Council promulgated the Implementation Rules of the EIT Law in December 2007, which became effective in January 2008 and as amended in April 2019. Under the EIT Law and the Implementation Rules of the EIT Law, enterprises are classified as either “resident enterprises” or “non-resident enterprises.” Besides enterprises established within the PRC, enterprises established outside of China whose “de facto management bodies” are located in China are considered “resident enterprises” and subject to the uniform 25% enterprise income tax rate for their global income. In addition, the EIT Law provides that a non-resident enterprise refers to an entity established under foreign law whose “de facto management bodies” are not within the PRC, but has an establishment or place of business in the PRC, or does not have an establishment or place of business in the PRC but has income sourced within the PRC.

The Implementation Rules of the EIT Law provide that since January 2008, an income tax rate of 10% shall normally be applicable to dividends declared to non-PRC resident enterprise investors that do not have an establishment or place of business in the PRC, or have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such dividends are derived from sources within the PRC. The income tax on the dividends may be reduced pursuant to a tax treaty between China and the jurisdictions in which the non-PRC shareholders reside.

Other PRC National- and Provincial-Level Laws and Regulations

We are subject to changing regulations under many other laws and regulations administered by governmental authorities at the national, provincial and municipal levels, some of which are or may become applicable to our business. For example, regulations control the confidentiality of patients' medical information and the circumstances under which patient medical information may be released for inclusion in our databases, or released by us to third parties. These laws and regulations governing both the disclosure and the use of confidential patient medical information may become more restrictive in the future.

We also comply with numerous additional national and provincial laws relating to matters such as safe working conditions, manufacturing practices, environmental protection and fire hazard control in all material aspects. We believe that we are currently in compliance with these laws and regulations; however, we may be required to incur significant costs to comply with these laws and regulations in the future. Unanticipated changes in existing regulatory requirements or adoption of new requirements could therefore have a material adverse effect on our business, results of operations and financial condition.

U.S. Regulations

Federal and State Laboratory Licensing Requirements

Pursuant to the CLIA, a laboratory that performs 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 must hold a certificate applicable to the complexity of the laboratory examinations it performs, and it must comply with, among other things, standards covering operations, personnel, facilities administration, quality, and proficiency testing, which are intended to ensure, among other things, that its clinical laboratory testing services are accurate, reliable and timely. The CLIA requirements do not apply to research laboratories that test human specimens but do not report patient specific results for the diagnosis, prevention or treatment of any disease or impairment of, or the assessment of, the health of individual patients. In order to offer our test in the United States, our laboratories must have the appropriate CLIA certification and the applicable state licenses. A laboratory that has submitted its application but has not yet received CLIA certification, may be issued a CLIA Certificate of Registration which allows the laboratory to perform testing while the laboratory's survey and inspection are pending. We obtained CAP accreditation and a CLIA Certificate of Accreditation for our San Jose laboratory in March 2020. We have obtained a CLIA Certificate of Registration for our new laboratory in Philadelphia, Pennsylvania. CMS, the agency that oversees CLIA, has deemed CAP standards to be equally or more stringent than CLIA regulations and has approved CAP as a recognized accrediting organization. Inspection by CAP is performed in lieu of CMS inspections for accredited laboratories. To maintain and renew our CAP accreditation and CLIA certification, we are subject to survey and inspection every two years to assess our laboratory's compliance with program standards. 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.

CLIA provides that a state may adopt laboratory regulations with more stringent requirements than those under U.S. federal law, and a number of states have implemented their own more stringent laboratory regulatory requirements. State laws may require that laboratory personnel meet certain qualifications, specify certain quality control procedures, facility requirements or prescribe record maintenance requirements.

We are required to maintain a California state laboratory license for our San Jose laboratory pursuant to the relevant state laws. We will be required to maintain a Pennsylvania state laboratory permit for our new Philadelphia laboratory. We may also need to maintain licenses in other states with such requirements for non-resident laboratories in order to perform tests on samples from patients who reside in those states. For example, in order to offer our test in New York, we must separately apply for a New York State clinical laboratory permit and approval of our test in New York, which will require submission of validation data as well as information regarding the test methods, among other things. Other states may currently have or adopt similar licensure requirements in the future. We will obtain any such necessary licenses before offering our cancer screening and detection test in a state requiring non-resident laboratory licensure.

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 corrective action, on-site monitoring, civil monetary penalties, criminal sanctions, and revocation of the relevant laboratory's approval to receive Medicare and Medicaid payment for its services, as well as significant adverse publicity.

Regulation of Laboratory Developed Tests

LDTs have generally been considered by the FDA to be tests that are designed, developed, validated and used within a single laboratory. The FDA has the authority to regulate such tests as medical devices under the FDCA. However, the FDA historically has exercised its enforcement discretion and not enforced applicable provisions of the FDCA and FDA regulations with respect to LDTs. However, in recent years, legislative and administrative proposals addressing oversight of LDTs were introduced. For example, in 2014 the FDA issued two draft guidance documents, or the Draft LDT Guidance, proposing a risk-based framework with respect to applying the FDA's oversight over LDTs. The Draft LDT 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, the FDA planned to begin to enforce its medical device requirements, including premarket submission requirements, on LDTs marketed without FDA premarket review and authorization. In November 2016, the FDA announced its intention not to finalize the 2014 Draft LDT 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 the regulation of LDTs.

We expect that new legislative and administrative proposals regarding the oversight of LDTs 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 offer our tests as LDTs or to develop and introduce new tests as LDTs in the foreseeable future.

Although we believe we are within the scope of the FDA's policy on enforcement discretion for LDTs, the initial commercialization and continued commercial availability of an LDT is subject to uncertainty given the FDA's latitude in interpreting and applying its laws and policies. For example, FDA does not consider tests to be subject to its LDT enforcement discretion if they are designed or manufactured completely, or partly, outside of the laboratory that offers and uses them, or if they are offered "direct-to-consumer," as opposed to being available to patients only when prescribed by a health care provider. Even for tests that appear to fall within FDA's previously stated enforcement discretion, the FDA may decide to take action against certain LDTs on a case-by-case basis at any time if FDA views them as presenting a risk to patients. The former FDA Commissioner and the Director of FDA's CDRH have expressed significant concerns regarding potential disparities in accuracy and quality between some LDTs and IVDs that have been reviewed and cleared, authorized or approved by FDA. In addition, the U.S. Congress has been considering various legislative proposals, such as the VALID Act, that would reform FDA's regulation of laboratory tests, and such legislation might lead to heightened FDA scrutiny of LDTs, particularly new LDTs. Whether such legislation will be enacted and, if so, what effect it may have on how FDA regulates laboratory tests, including LDTs, is unknown. If FDA disagrees with a laboratory test's LDT status, FDA may consider the test to be an unapproved medical device, may subject the company to FDA enforcement action, including, without limitation, requiring the company to seek clearance, authorization or approval for the laboratory test.

Regulation of Medical Devices

A medical device is an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including any component part, or accessory which is: (i) recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them; (ii) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or (iii) intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. IVDs, are a type of medical device and include reagents and instruments used in the diagnosis or detection of diseases, conditions or infections, including, without limitation, the presence of certain chemicals, genetic information or other biomarkers. Predictive, prognostic and screening tests can also be IVDs.

In the United States, medical devices, including IVDs, are subject to extensive regulation by the FDA under the FDCA and its implementing regulations, and certain other U.S. federal and state statutes and regulations. The laws and regulations govern, among other things, the design, manufacture, storage, recordkeeping, approval, labeling, promotion, post-approval monitoring and reporting, distribution and import and export of medical devices. Failure to comply with applicable requirements may subject a device and/or its manufacturer to a variety of administrative sanctions, such as FDA refusal to approve pending pre-market approval applications, or PMAs, issuance of warning letters, mandatory product recalls, import detentions, civil monetary penalties, and/or judicial sanctions, such as product seizures, injunctions, and criminal prosecution.

Device Classification

Under the FDCA, medical devices are classified into one of three classes based on the risk associated with the device and the level of control necessary to provide a reasonable assurance of safety and effectiveness. Class I devices are deemed to be low risk and are subject to the fewest regulatory controls. Class III devices are generally the highest risk devices and are subject to the highest level of regulatory control to provide reasonable assurance of the device's safety and effectiveness. Class III devices must typically be approved by FDA before they are marketed.

Most Class I devices and a minority of Class II devices are completely exempt from premarket review by FDA. Most Class II and a minority of Class I devices require 510(k) clearance. Devices that pose the highest risk, including life-sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a previously 510(k)-cleared device or a "pre-amendment" Class III device in commercial distribution before May 28, 1976 for which PMA applications have not been called, are placed in Class III requiring PMA approval. A novel device is placed in Class III by default, but it may be eligible to be placed in Class I or Class II via "de novo" classification if it can be shown to pose only low to moderate risk with appropriate regulatory controls.

The PMA approval pathway requires proof of the safety and effectiveness of the device to the FDA's satisfaction. The 510(k) clearance pathway is much less burdensome and time-consuming than the PMA approval pathway. The de novo pathway has an enhanced burden compared to the 510(k) clearance pathway but is much less burdensome than a PMA approval process.

The 510(k) Clearance Pathway

Under the 510(k) clearance pathway, a device 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 may be a previously 510(k) cleared device or a pre-amendment device (unless the FDA has issued a regulation calling for PMA applications for this device type). 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 be shown to be equally safe and effective and not raise different questions of safety or effectiveness than the predicate device.

After the FDA accepts the 510(k) premarket notification, it begins a substantive review. By statute, the FDA is required to complete its review within 90 days of receiving the 510(k) notification. As a practical matter, clearance often takes longer, typically ranging from three to nine months or longer, and clearance is never assured. The FDA's 510(k) review generally compares a proposed device to a predicate device with respect to intended use and technology (design, materials, software, energy source, etc.). The information necessary to show substantial equivalence will depend upon the differences between the proposed device and the predicate device, which may include bench, cadaver, animal and/or clinical studies.

If the FDA agrees that the proposed device is substantially equivalent to the predicate device, it will grant clearance to commercially market the device. Otherwise, the device manufacturer must fulfill the much more rigorous premarketing requirements of the PMA approval process, or seek reclassification of the device through the de novo process.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or could require reclassification through the de novo process or a PMA approval. The FDA requires each manufacturer to make this determination in the first instance, but the FDA can review any such decision. If the FDA disagrees with a manufacturer's decision not to seek a new 510(k) clearance, the agency may retroactively require the manufacturer to seek 510(k) clearance, de novo classification, or PMA approval. The FDA also can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance, de novo classification, or PMA approval is obtained.

The De Novo Pathway

Devices of a new type that the FDA has not previously classified based on risk are automatically classified into Class III, regardless of the level of risk they pose. To avoid requiring PMA review of low- to moderate-risk devices classified in Class III by operation of law, the U.S. Congress created the de novo pathway that allows the FDA to classify a low- to moderate-risk device not previously classified into Class I or II.

Generally, a de novo petition contains a device description, indications for use statement, proposed labeling, data/performance testing (such as bench testing and/or clinical study data), the proposed classification, and a risk/benefit analysis. The risk/benefit analysis is the key element of a de novo petition and typically includes a summary of the benefits of the device, a summary of the known and potential risks, any risk mitigations, and an explanation of whether the benefits outweigh the risks.

The timing for review of a de novo petition is less certain than a 510(k). FDA has agreed to review 60% of de novo submissions received in fiscal year 2020 in 150 calendar days during which a submission is under review at the Agency. As a practical matter, de novo marketing authorization often takes longer, ranging from a year or more, and marketing authorization is never assured due, in part, to stoppages of FDA's 150-day timeline while the applicant responds to deficiencies identified by FDA. If the FDA authorizes the de novo petition, the device may be legally marketed and used as a predicate device for future 510(k) submissions. If the de novo petition is denied, the device remains in Class III and a PMA approval may be required before the device may be legally marketed in the United States.

The PMA Approval Process

A device not eligible for 510(k) clearance or de novo classification must follow the PMA approval pathway, which requires proof of the safety and effectiveness of the device to the FDA's satisfaction. The cost of preparing and submitting a PMA is substantial. Under U.S. federal law, the submission of most PMAs is additionally subject to a substantial annually-adjusted application user fee. For example, for fiscal year 2020, the user fee for an original PMA is $340,995. Satisfaction of FDA pre-market approval requirements typically takes years and the actual time required may vary substantially based upon the type, complexity, and novelty of the device or disease.

A PMA application must provide extensive preclinical and clinical trial data and also detailed information about the device and its components regarding, among other things, device design, manufacturing and labeling. There is typically advisory panel review of the clinical data. The FDA typically conducts a preapproval inspection of the manufacturer's facilities and may also inspect the clinical trial documentation. FDA will not approve a device unless compliance is shown with Quality System Regulation, or QSR, requirements, which impose elaborate testing, control, documentation and other quality assurance procedures. During the review period, the FDA may also request additional information or clarification of information already provided, and the FDA may issue a major deficiency letter to the applicant, requesting the applicant's response to deficiencies communicated by the FDA.

By statute, the FDA has 180 days to review a filed PMA application, although the review more often occurs over a significantly longer period of time. If its evaluation of a PMA is favorable, the FDA will issue either an approval letter, or an approvable letter. An approvable letter usually contains a number of conditions that must be met in order to secure a final approval of the PMA application. When and if these conditions have been fulfilled to the satisfaction of the FDA, the FDA will issue a PMA approval letter authorizing commercial marketing of the device, subject to the conditions of approval and the limitations established in this approval letter, if any. If the FDA's evaluation of a PMA application or the relevant manufacturing facilities is not favorable, the FDA will deny approval of the PMA application or issue a not approvable letter. The FDA also may 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 application, or the PMA application 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 by the FDA for marketing.

In approving a PMA application, as a condition of approval, the FDA may also 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 these 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, among other things, restrictions on labeling, promotion, sale, distribution and use.

Even after approval of a PMA, new PMA applications or PMA supplements may also be required for modifications to any approved device, including modifications to the manufacturing processes, device labeling and device design, based on the findings of post-approval studies. Supplements to a PMA often require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA.

Post-market FDA Regulation

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

- the FDA's QSR, which require 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 devices 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 previously 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 their 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;

- 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 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 devices; operating restrictions, partial suspension or total shutdown of manufacturing; the FDA's refusal of our requests for 510(k) clearances, de novo classification, or premarket approvals of new devices, new intended uses or modifications to existing devices; the FDA's refusal to issue certificates to foreign governments needed to export devices for sale in other countries; and withdrawing 510(k) clearances, de novo marketing authorization, or premarket approvals that have already been granted; and criminal prosecution.

Federal and State Fraud and Abuse Laws

We are subject to U.S. federal fraud and abuse laws such as the AKS, the U.S. federal prohibition against physician self-referral, or Stark Law, and the FCA. We are also subject to similar state and foreign fraud and abuse laws.

The AKS prohibits knowingly and willfully offering, paying, soliciting, or receiving remuneration, directly or indirectly, overtly or covertly, in cash or in kind, in return for or to induce the referral of an individual, or to purchase, lease, order, arrange for, or recommend purchasing, leasing or ordering, any good, facility, item or service that is reimbursable, in whole or in part, under a U.S. federal healthcare program. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, the exceptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor.

The Stark Law and similar state laws prohibit physician referral of patients for designated health services payable by Medicare/Medicaid to entities with which the physician or an immediate family member has a financial relationship (ownership/investment interest or compensation arrangement), unless an exception applies.

Other U.S. federal fraud and abuse laws to which we are subject include but are not limited to the U.S. federal civil and criminal false claims laws, including the FCA, which imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the U.S. federal government, and the U.S. federal Civil Monetary Penalties Law, which prohibits, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know that remuneration is likely to influence the beneficiary's selection of a particular provider, practitioner, or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies. Under the FCA, private citizens can bring claims on behalf of the government through qui tam actions. We must also operate within the bounds of the fraud and abuse laws of the states in which we do business which may apply to items or services reimbursed by nongovernmental third-party payers, including private insurers.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government-funded healthcare programs, such as Medicare and Medicaid, disgorgement, 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 the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. If any of the physicians or other healthcare providers or entities with whom we do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government-funded healthcare programs.

HIPAA and HITECH

Under the administrative simplification provisions of the HIPAA, as amended by HITECH, HHS issued regulations that establish uniform standards governing the conduct of certain electronic healthcare transactions and requirements for protecting the privacy and security of protected health information, or PHI, used or disclosed by covered entities. Covered entities and business associates are subject to HIPAA and HITECH.

HIPAA and HITECH include the privacy and security rules, breach notification requirements and electronic transaction standards.

The privacy rule covers the use and disclosure of PHI by covered entities and business associates and generally prohibits the use or disclosure of PHI except as permitted under the rule. The privacy rule also sets forth individual patient rights, such as the right to access or amend certain records containing PHI, or to request restrictions on the use or disclosure of PHI.

The security rule requires covered entities and business associates to safeguard the confidentiality, integrity, and availability of electronically transmitted or stored PHI by implementing administrative, physical and technical safeguards. Under HITECH's breach notification rule, a covered entity must notify individuals, the Secretary of the HHS, and in some circumstances, the media of breaches of unsecured PHI.

In addition, we may be subject to state health information privacy and data breach notification laws, which may govern the collection, use, disclosure and protection of health-related and other personal information. California, for example, has enacted the Confidentiality of Medical Information Act, which sets forth standards in addition to HIPAA and HITECH with which all California health care providers must abide. State laws may be more stringent, broader in scope or offer greater individual rights with respect to PHI than HIPAA, and state laws may differ from each other, which may complicate compliance efforts.

Entities that are found to be in violation of HIPAA as the result of a breach of unsecured PHI, a complaint about privacy practices or an audit by HHS, may be subject to significant civil and criminal fines and penalties and/or additional reporting and oversight obligations if such entities are required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance.

U.S. Healthcare Reform

In the United States, there have been a number of legislative and regulatory changes at the U.S. federal and state levels which seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the ACA, became law. This law substantially changed the way health care is financed by both commercial payers and government payers, and significantly impacted our industry. Since 2016 there have been efforts to repeal all or part of the ACA, and the current presidential administration and U.S. Congress have taken action to roll back certain provisions of the ACA. For example, the Tax Cuts and Jobs Act, among other things, removes penalties for not complying with the ACA's individual mandate to carry health insurance. The current presidential administration and the U.S. Congress may take further action regarding the ACA, including, but not limited to, repeal or replacement. Additionally, all or a portion of the ACA and related subsequent legislation may be modified, repealed or otherwise invalidated through judicial challenge, which could result in lower numbers of insured individuals, reduced coverage for insured individuals and adversely affect our business.

The ACA contained a number of provisions expected to impact our business and operations, some of which in ways we cannot currently predict, including those governing enrollment in state and U.S. federal health care programs, reimbursement changes and fraud and abuse, which will impact existing state and U.S. federal health care programs and will result in the development of new programs.

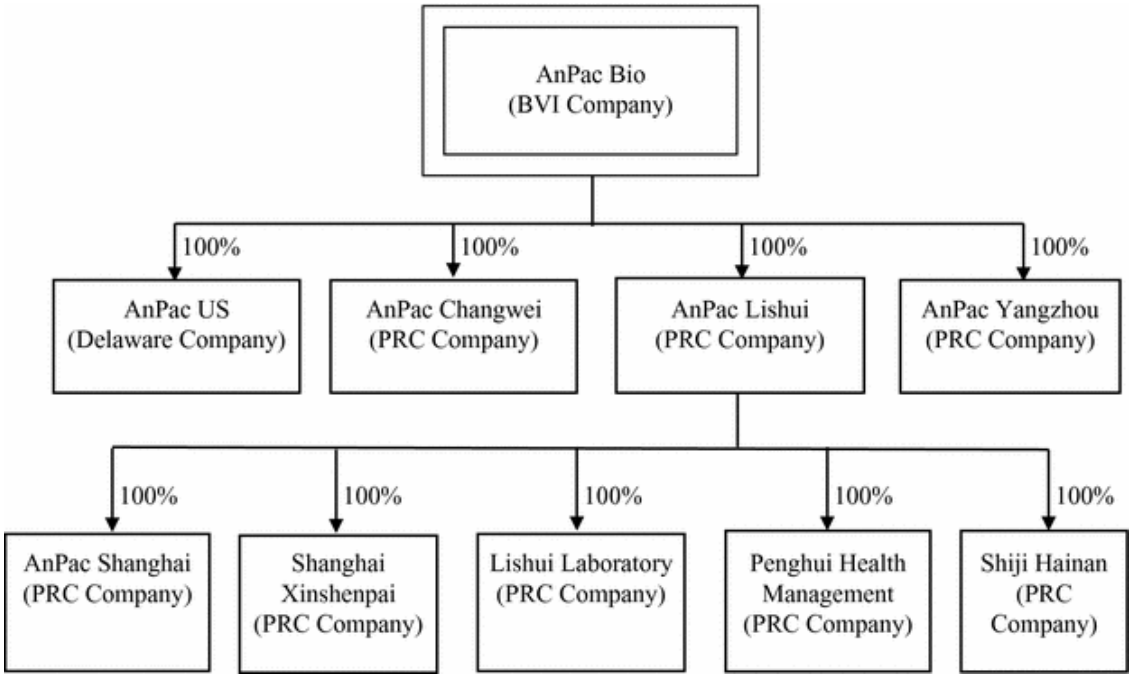
The expansion in the government's role in the U.S. healthcare industry may result in decreased profits to us and lower reimbursement by payers for our tests, any of which may have a material adverse impact on our business, financial condition, results of operations or cash flows.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, reduced Medicare payments to providers by 2% per fiscal year, effective on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2029 unless additional legislative action is taken.

We anticipate there will continue to be proposals by legislators at both the federal and state levels, and by regulators and commercial payers to reduce costs while expanding individual healthcare benefits. Certain of these changes could impose additional limitations on the prices we will be able to charge for our tests, and the coverage of or the amounts of reimbursement available for our tests from payers, including commercial payers and government payers.

C. Organizational Structure

The following diagram illustrates our corporate structure, including our principal subsidiaries, as of the date of this annual report.



D. Property, Plants and Equipment

Our China headquarters are located in the Bihu Industrial Park in Lishui, Zhejiang Province. Our facilities for manufacturing our CDA device for our performance of commercial CDA-based tests, our principle licensed clinical laboratory to conduct commercial CDA-based tests, as well as our warehouse are all in our headquarters in Lishui. We own the premises of our Lishui headquarters, which have an aggregate floor area of approximately 5,126 square meters. We also own an additional approximately 203 square meters in Lishui and 157 square meters of office space in Yangzhou, Jiangsu Province.

We currently lease several properties with an aggregate floor area of approximately 875 square meters in Shanghai, where we operate our primary research and development facilities. We also lease approximately 142 square meters of properties in Haikou, Hainan Province, primarily to operate our government-approved clinical laboratory. Furthermore, we lease approximately 517 square meters of properties in Yangzhou, where we operate a research and development facility. Our leases for these properties vary in duration from one to three years.

In the United States, we currently lease approximately 6,700 square feet of office space in Montgomery County, Pennsylvania as the premises for our new CLIA-registered laboratory and U.S. headquarters, which we plan to move in to around the second quarter of 2020. This lease has a term of approximately ten years and we are entitled to early terminate the lease in approximately five years subject to certain conditions. We also currently lease approximately 1,050 square feet of office space in San Jose as the premises for our CAP-accredited laboratory. This lease will expire on April 30, 2021.

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 the historical consolidated financial statements of our company for the years ended December 31, 2017, 2018 and 2019, and related notes included elsewhere in this annual report on Form 20-F. This discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and elsewhere in this annual report.

A. Operating Results

Key Factors Affecting Our Results of Operations

Our business and operating results are influenced by certain general factors that affect China's early cancer screening and detection market, including the increasing prevalence of cancer in China, growth of total healthcare expenditures, and technological trends in cancer diagnosis, treatment and management. Unfavorable changes in these general factors could adversely affect the results of our operations. In addition to these general trends, we believe that our results of operations are more directly affected by certain company-specific factors, including:

Market Adoption of Our CDA-Based Tests

We derive substantially all of our revenues from the sale of our CDA-based tests in China. We expect our business prospects to depend significantly on our ability to increase market adoption of our CDA-based tests in China, as well as our ability to commercialize our CDA-based tests in the U.S.

According to Frost & Sullivan, the market potential in China for early cancer screening and detection technologies increased at a CAGR of 20.7% from US$27.7 billion in 2014 to US$58.8 billion in 2018, and is expected to reach US$115.1 billion in 2023, representing a CAGR of 14.4% over this period. China's large, aging population, favorable government policies, and relatively low labor costs represent substantial commercial opportunities for our business and enable us to cost-effectively conduct our cancer screening and detection tests at a large scale. However, compared to conventional, more widely accepted cancer screening and detection technologies, we face additional challenges in raising recognition and adoption of our CDA technology by physicians, patients, hospitals, medical institutions, healthcare payers and others in China's medical community.

We believe that our CDA technology addresses many limitations of current early cancer screening and detection methods, such as its ability to detect the risk of multiple cancers early, cost-effectively and with high accuracy. We have conducted numerous research studies in cooperation with hospitals and medical institutions in China to validate our CDA technology, and we have published the results of 15 completed research studies at the American Society of Clinical Oncology, or ASCO, annual meetings and other medical conferences and medical journal supplements. To increase market adoption of our CDA-based tests, we intend to continue conducting research studies on our CDA technology on more cancer types and its applications in additional oncological areas, including assistance in diagnosis, prognosis and recurrence, and to present our study results at ASCO annual meetings and other medical conferences and publish them in important medical journals. We are also seeking to cooperate with universities and academic medical centers, hospitals and medical institutions, CROs, managed care companies and other health organizations in the U.S. to conduct research studies on our CDA technology, with a view to commercializing our CDA-based tests in the U.S. market. We plan to initially market our CDA test as an LDT in the U.S. We expect to invest significantly in research studies.

Regulatory Approvals for Our CDA Device by the NMPA

We are currently licensed to manufacture our CDA device and use it to perform our CDA-based tests at our own laboratories in China. To enlarge our total addressable market in China, in December 2018, we applied to the NMPA for a Class III medical device registration certificate for us to use our CDA device to assist in multi-cancer diagnosis. After we obtain this license, we will apply to update our medical device manufacture license to include the manufacture of Class III medical devices. With these licenses, we will be permitted to place our devices within Chinese hospitals' laboratories to conduct commercial tests there or sell our devices to the hospitals for the purposes of assisting in physicians' diagnosis of specified multiple cancers. We expect our revenues to grow substantially after our CDA devices are approved to access the Chinese hospital segment. However, it takes at least three years to obtain a Class III medical device registration certificate and the process is subject to regulatory and other uncertainties.

Our Customer Base and Customer Mix

Our business growth depends significantly on our ability to maintain relationships with our existing customers and attract new customers. Our existing customers in China consist primarily of life insurance companies and other corporations, which offer our CDA-based tests to their insured customers and/or employees. We also attract customers by offering our CDA-based tests as part of annual physical checkup packages and by engaging sales agents to market our tests. We plan to broaden our cancer screening and detection test offerings, including by expanding the range of genomics tests currently conducted at our Haikou laboratory, to attract more customers. If we are able to obtain the Class III medical device registration certificate and update our medical device manufacture license for our CDA device, we will seek to access the Chinese hospital market segment and provide our tests to more individual customers through Chinese hospitals. We expect our marketing expenses to continue to increase as we seek to increase market adoption of our technology and tests and build up our sales channels.

Since our business scale is currently relatively small and our customers are largely corporates, the availability and timing of large CDA-based test orders could cause our revenues to fluctuate significantly from period to period. This makes it difficult to compare our historical operating results or predict our future performance. For example, the year-on-year growth of our revenues for the year ended December 31, 2019 slowed down compared to that for the nine months ended September 30, 2019, primarily because certain of our customers placed their orders with us in the first three quarters rather than in the fourth quarter of 2019.

Cost Structure

Our results of operations are significantly affected by our cost structure. The largest component of our operating costs and expenses is staff costs, primarily related to our management as well as research and development, sales and marketing personnel. We have also incurred significant share-based compensation expenses to incentivize our directors, officers, employees and consultants, which were RMB10.8 million, RMB7.9 million and RMB32.9 million (US$4.7 million) in 2017, 2018 and 2019, respectively. In addition, we have made substantial investments in customer acquisition, research and development, and patent applications to support our future growth and expansion. As we begin to conduct research studies in the U.S., we expect our research and development expenses to significantly increase.

Funding for Our Operations

We have funded our operations primarily through capital contributions from our shareholders, short-term non-bank borrowings and loans from related parties. With the continuing expansion of our business, we will require further funding, possibly through public or private equity financings, debt financings, or other business arrangements. The availability and costs of funding could significantly impact our results of operations and financial position. Furthermore, debt financings could require us to agree to restrictive financial covenants, which could make it more difficult for us to achieve our goals.

Key Operating Data

We regularly review a number of operating metrics, including those set forth below, to evaluate our business, measure our performance and identify trends affecting our business.

The following table sets forth our key operating data for the periods indicated:

	For the year ended December 31,		
	2017	2018	2019
Number of commercial CDA-based tests[(1)] completed	19,336	41,607	52,428
Number of CDA-based tests[(1)] for research purposes completed	6,004	4,873	6,121

Note:

(1) Including our CDA tests and combination tests.

Key Components of Results of Operation

Revenues

We drive our revenues from two sources: (i) revenue from sales of cancer screening and detection tests (predominantly commercial CDA-based tests) and (ii) net revenue from sales of physical checkup packages.

The table below presents our revenues by type in absolute amount and as a percentage of our total revenues for the periods indicated.

	Year ended December 31,						
	2017		2018		2019		
	RMB	%	RMB	%	RMB	US$	%
	(in thousands, except %)						
Cancer screening and detection tests	5,203	91.5	9,557	93.2	10,381	1,491	95.7
Physical checkup packages	483	8.5	693	6.8	464	67	4.3
Total revenues	5,686	100.0	10,250	100.0	10,845	1,558	100.0

Cancer Screening and Detection Tests

Our revenue from sales of cancer screening and detection tests consists predominantly of revenue from the sales of our commercial CDA-based tests. Our commercial CDA-based tests comprise our CDA tests and our combination tests, which combine our CDA test and, on an auxiliary basis, biomarker-based cancer screening and detection tests performed either by us or by third-party clinical laboratories. We also recognize revenue from sales of commercial CDA-based tests that we provide as part of the physical checkup packages we sell. We expect that our revenue generated from our commercial CDA-based tests will increase as our business grows, including by providing additional tailored CDA-based tests to meet customer demand and exploring other sources of revenue related to our CDA test. We also expect to recognize additional revenue from commercial genomics tests as we devote more resources to marketing and sales of these tests.

Physical Checkup Packages

Our net revenue from physical checkup packages represents our gross billing amount from physical checkup packages that we sell to our customers and have performed during a specified period, less (i) the portion of fees for the commercial CDA-based tests contained in the packages (which are recognized as part of our revenue from sales of CDA-based tests) and (ii) our cost of physical checkup services (other than CDA-based tests) contained in the packages, which are payments we make to third-party physical checkup centers to which we outsource these services. We believe that selling annual physical checkup packages can expand our customer base for commercial CDA-based tests, and we intend to devote more resources to selling physical checkup packages and expect our net revenue from these packages to continue increasing.

Cost of Revenues

Our cost of revenues is related to our sales of cancer screening and detection tests, predominantly our commercial CDA-based tests and, to a lesser extent, our genomics tests. It mainly consists of staff costs, outsourced testing costs, blood sample taking costs, medical consumable costs, share-based compensation, and depreciation and amortization of our CDA devices. Staff costs mainly include salaries and employee benefit expenses of personnel engaged in laboratory testing functions. Outsourced testing cost represents our cost of engaging third-party clinical laboratories for their performance of auxiliary biomarker-based cancer screening and detection tests, which are included as part of our combination tests. Blood sample taking costs mainly include our cost of engaging third-party nursing service providers who collect blood samples on our behalf for our commercial CDA-based tests. We expect our cost of revenues to continue to grow as we increase the volume of our commercial CDA-based tests.

Gross Profit and Gross Margin

Our gross profit represents our revenue from sales of cancer screening and detection tests minus our cost of revenue, plus our net revenues from sales of physical checkup packages. Our gross profit margin is affected primarily by the mix and relative prices of the cancer screening and detection tests that we sell within a specified period, as well as changes in net revenues from sales of physical checkup packages as a percentage of our total revenues.

Operating expenses

Our operating expenses include selling and marketing expenses, research and development expenses, and general and administrative expenses. The following table sets forth a breakdown of these expenses for the periods indicated.

	Year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Operating expenses:				
Selling and marketing expenses	6,490	9,827	13,633	1,958
Research and development expenses	11,405	10,106	9,839	1,413
General and administrative expenses	24,938	28,847	70,781	10,167
Total	42,833	48,780	94,253	13,538

Selling and Marketing Expenses

Our selling and marketing expenses primarily consist of staff costs for personnel engaged in sales, marketing and customer support functions, share-based compensation, marketing expenses, travel expenses and office expenses. We expect that our selling and marketing expenses will increase as we continue to build out our sales and marketing teams and engage more sales agents and other channel partners to increase our market penetration.

Research and Development Expenses

Our research and development expenses primarily consist of staff costs for personnel engaged in research and development functions, share-based compensation, travel expenses, rental costs, costs of consumables and accessories, and depreciation and amortization (mainly related to our clinical laboratory facilities and CDA devices used for research and development purposes). We expect that our research and development expenses will increase significantly in the near future, because we not only have multiple on-going research studies in China, but have also entered into research agreements with U.S. universities and academic medical centers, and we are in discussions with other U.S. hospitals, medical institutions, CROs, managed care companies and other health organizations, to conduct research studies on our CDA technology at our CLIA-registered laboratory in San Jose, California.

General and Administrative Expenses

Our general and administrative expenses primarily include staff costs for personnel engaged in general and administrative functions, share-based compensation, patent service fees, professional service fees, depreciation and amortization (mainly related to our land use rights for the land we acquired in Lishui, Zhejiang Province and the office facilities on that land), rental and property management fees and office expenses. We expect our general and administrative expenses to continue increasing to support our business growth, but we expect that they will eventually decrease as a percentage of our revenues once our business scale increases.

Other income, net

Our net other income in 2017 and 2018 primarily included government grants we received, including for 2018 the price that the government in Lishui, Zhejiang Province of China paid us for repurchase of a portion of a parcel of land that we did not utilize. Our net other loss in 2019 was primarily related to fair value loss as a result of the increase in value of the convertible loans that we borrowed from Zhijun, offset in part by the government grants we received.

Taxation

BVI

Our Company is incorporated in the BVI, and we conduct our business operations primarily through our subsidiaries in China and the U.S.

All dividends, interest, rents, royalties, compensation and other amounts paid by our company to persons who are not resident in the BVI and any capital gains realized with respect to any shares, debt obligations, or other securities of our company by persons who are not resident in the BVI are exempt from all provisions of the Income Tax Ordinance in the BVI.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not resident in the BVI with respect to any shares, debt obligation or other securities of our company.

All instruments relating to transfers of property to or by our company and all instruments relating to transactions in respect of the shares, debt obligations or other securities of our company and all instruments relating to other transactions relating to the business of our company are exempt from payment of stamp duty in the BVI. This assumes that our company does not hold an interest in real estate in the BVI.

There are currently no withholding taxes or exchange control regulations in the BVI applicable to our company or its members.

China

Our subsidiaries in China are subject to the statutory enterprise income tax at a rate of 25%, in accordance with the EIT Law. Some of our PRC subsidiaries enjoy preferential enterprise income tax rates.

Dividends, interest, rent or royalties payable by our PRC subsidiaries to their non-PRC resident enterprise investors, and proceeds from any such non-resident enterprise investor's disposition of assets (after deducting the net value of such assets) will be subject to withholding tax at a rate of 10%, unless the jurisdiction of incorporation of the respective non-PRC resident enterprise investor has a tax treaty or arrangements with the PRC that provides for a reduced withholding tax rate or an exemption from withholding tax. If our BVI holding company were deemed to be a "resident enterprise" under the PRC Enterprise Income Tax Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See "Item 3. Key Information—Risk Factors—Risks Relating to Doing Business in China—Under the PRC Enterprise Income Tax Law, we may be classified as a PRC resident enterprise for PRC income tax purposes, which could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders, and have a material adverse effect on our results of operations and the value of your investment." For the foreseeable future, we intend to invest all the undistributed earnings of our subsidiaries incorporated in the PRC and do not plan to have our PRC subsidiaries distribute any dividend. Therefore, no withholding tax is expected to be incurred.

United States

Our U.S. subsidiary, AnPac US, is subject to U.S. federal corporate income tax at a rate of 21% for the year ended December 31, 2019, 21% for the year ended December 31, 2018 and 35% for the year ended December 31, 2017. AnPac US is also subject to state income tax in California for the years ended December 31, 2017, 2018 and 2019.

Critical Accounting Policies

An accounting policy is considered critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time such estimate is made, and if different accounting estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the consolidated financial statements.

We prepare our consolidated financial statements in conformity with U.S. GAAP. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses during the reporting period. Changes in facts and circumstances may result in revised estimates. Actual results could differ from those estimates, and as such, differences could be material to the consolidated financial statements.

The following descriptions of critical accounting policies, judgments and estimates should be read in conjunction with our consolidated financial statements and accompanying notes and other disclosures included in this annual report. When reviewing our financial statements, you should consider (i) our selection of critical accounting policies, (ii) the judgments and other uncertainties affecting the application of these policies and (iii) the sensitivity of reported results to changes in conditions and assumptions.

Revenue Recognition

Effective from January 1, 2017, we early adopted ASC 606, Revenue from Contracts with Customers and subsequent amendments to the initial guidance or implementation guidance issued between August 2015 and December 2016 within ASU 2015-14, ASU 2016-08, ASU 2016-10, ASU 2016-12 and ASU 2016-20 (collectively, "ASC 606"). The transaction adjustment using modified retrospective method recorded in 2017 beginning retained earnings was immaterial.

We derive our revenues principally from customers through our cancer screening and detection tests and physical checkup package services. Revenue is recognized when we satisfy the performance obligations in an amount of consideration to which we expect to be entitled to in exchange for those services. We evaluate the presentation of revenue on a gross or net basis based on whether we control the services provided to customers and are the principal (namely, on a gross basis), or we arrange for other parties to provide the service to the customers and are the agent (namely, on a net basis). We present value-added taxes as a reduction from revenues.

Revenue from Cancer Screening and Detection Tests

Our revenue from cancer screening and detection tests is primarily generated through the sales of the our proprietary CDA tests and our combination tests, which combines our CDA test and other cancer screening and detection technologies, such as biomarker-based tests, to our customers including corporations and life insurance companies. A contract exists when the master service agreement has been executed and the customer submits a service request, which is a placed order. Our contracts have a single performance obligation which is satisfied upon provision of the CDA-based test(s) and delivery of the CDA-based test result to the customer. We act as the principal as we control the CDA-based test(s) before it is transferred to the customer and record revenue on a gross basis at the point in time when the CDA-based test(s) result is delivered to the customer.

Revenue from Physical Checkup Packages

We facilitate corporations and life insurance companies to procure physical checkup services from third-party physical checkup service providers for their respective employees and policy holders. We enter into contracts with corporations and life insurance companies and physical checkup service providers. We consider both the corporations and life insurance companies and the third-party physical checkup service providers as our customers in this type of transaction. Our performance obligation is to facilitate the corporations and life insurance companies and the third-party physical checkup service providers to complete the purchase of physical checkup services, which is not controlled by us before the services are transferred to the corporations and life insurance companies. Therefore, we fulfill our performance obligation at the point in time when the employees of corporations and policy holders of life insurance companies complete the physical checkups and we record the net amount that we retain from these completed transactions as revenue.

We also enter into arrangements to deliver both CDA-based tests and physical checkup services. We are the principal for the CDA-based tests and the agent for the physical checkup services. Revenues for both services are recognized at the point in time when the performance obligation is satisfied upon delivery of the CDA-based test results to the end customers and completion of the physical checkup services, respectively. As we act as both the principal and agent in the arrangement, we allocate the transaction price to each performance obligation on a relative stand-alone selling price basis.

Research and Development Expenses

Research and development expenses primarily are comprised of costs incurred in performing research and development activities, including related personnel and consultant's salaries, benefits, share-based compensation and related costs, raw materials and supplies for internally-developed product candidates, and external costs of outside vendors engaged to conduct clinical development activities and trials. We expense our research and development expenses as they are incurred.

Share-Based Compensation

We account for share-based compensation in accordance with ASC 718, Compensation-Stock Compensation ("ASC 718"). In accordance with ASC 718, we determine whether an award should be classified and accounted for as a liability award or an equity award. All of our share-based awards were classified as equity awards and were recognized in the consolidated financial statements based on their grant date fair values.

In June 2018, the FASB issued ASU No. 2018-07, Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting to simplify the accounting for share-based payments to nonemployees ("ASU 2018-07") by aligning it with the accounting for share-based payments to employees, with certain exceptions. The measurement of equity-classified nonemployee awards will be fixed at the grant date. We elected to early adopt ASU 2018-07 on January 1, 2017 and the transition adjustment recorded in 2017 beginning retained earnings was immaterial.

In accordance with ASC 718, we recognize share-based compensation cost for equity awards to employees and non-employees with a performance condition based on the probable outcome of that performance condition—compensation cost is recognized if it is probable that the performance condition will be achieved and shall not be recognized if it is not probable that the performance condition will be achieved.

We have elected to recognize share-based compensation using the straight-line method for all share-based awards granted with graded vesting based on service conditions. We use the accelerated method for all awards granted with graded vesting based on performance conditions. We account for forfeitures as they occur in accordance with ASU No. 2016-09, Compensation-Stock Compensation (Topic 718): Improvement to Employee Share-based Payment Accounting. With the assistance of an independent third party valuation firm, we determined the fair value of the stock options granted to employees. The binominal option pricing model was applied in determining the estimated fair value of the options granted to employees and nonemployees.

Fair value of options

We use the binomial tree option pricing model to estimate the fair value of share options with the assistance of an independent third-party valuation firm. The assumptions used to value the share options granted to employees and nonemployee were as follows:

	2017	2018	2019
Risk-free interest rate	2.20%-2.46%	2.46%-3.11%	1.55%-2.50%
Expected volatility range	58.59%-65.18%	62.14%-63.61%	60.37%-64.48%
Exercise multiple	2.5	2.5	2.5
Fair market value per ordinary share as at grant dates (US$)	9.38-9.46	9.46-9.61	9.61-9.80

The estimated fair value of our ordinary shares at their respective grant dates was determined with the assistance of an independent third-party valuation firm. The risk-free interest rate for periods within the contractual life of the options is based on the U.S. Treasury yield curve in effect at the time of grant for a term consistent with the contractual term of the awards. Expected volatility is estimated based on the historical volatility of ordinary shares of several comparable companies in the same industry. The expected exercise multiple is based on management's estimation, which we believe is representative of the future.

We also entered into a share purchase agreement with CRS Holdings Inc., a company controlled by Dr. Chris Chang Yu, who has also served as the Chief Executive Officer since our inception. Pursuant to the share purchase agreement, CRS Holdings Inc. purchased 214,000 ordinary shares at a consideration of $3.27 per share. The offering price in the share purchase agreement with CRS Holdings Inc., which is below fair value, essentially represents compensation to Dr. Chris Chang Yu, for his past services to us.

The following table sets forth the amount of share-based compensation expense included in each of the relevant financial statement line items:

	For the year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Cost of revenues	—	317	327	47
Selling and marketing expenses	2,444	2,871	5,393	775
Research and development expenses	4,044	1,958	2,534	364
General and administrative expenses	4,270	2,790	24,601	3,533
Total share-based compensation expenses	10,758	7,936	32,855	4,719

Results of Operations

The following table summarizes our results of operations for the periods indicated. 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.

	Year ended December 31,						
	2017		2018		2019		
	RMB	% of Revenues	RMB	% of Revenues	RMB	US$	% of Revenues
	(in thousands, except %)						
Revenues:							
Cancer screening and detection tests	5,203	91.5	9,557	93.2	10,381	1,491	95.7
Physical checkup packages	483	8.5	693	6.8	464	67	4.3
Total revenues	5,686	100.0	10,250	100.0	10,845	1,558	100.0
Cost of revenues	(3,954)	(69.5)	(5,672)	(55.3)	(6,047)	(869)	(55.8)
Gross profit	1,732	30.5	4,578	44.7	4,798	689	44.2
Operating expenses:							
Selling and marketing expenses	(6,490)	(114.1)	(9,827)	(95.9)	(13,633)	(1,958)	(125.7)
Research and development expenses	(11,405)	(200.6)	(10,106)	(98.6)	(9,839)	(1,413)	(90.7)
General and administrative expenses	(24,938)	(438.6)	(28,847)	(281.4)	(70,781)	(10,167)	(652.7)
Other operating income	178	3.1	593	5.8	373	54	3.4
Loss from operations	(40,923)	(719.7)	(43,609)	(425.5)	(89,082)	(12,795)	(821.4)
Non-operating income and expenses							
Interest expense, net	(338)	(5.9)	(925)	(9.0)	(2,609)	(375)	(24.1)
Foreign exchange gain (loss), net	644	11.3	(2,776)	(27.1)	(3,219)	(461)	(29.7)
Share of net (loss) gain in equity method investments	(3)	(0.1)	(441)	(4.3)	190	27	1.7
Other income (expense), net	1,309	23.0	5,256	51.3	(7,119)	(1,023)	(65.6)
Net loss before income taxes	**(39,311)**	**(691.4)**	**(42,495)**	**(414.6)**	**(101,839)**	**(14,627)**	**(939.1)**
Income tax (expense) benefit	(9)	(0.2)	199	1.9	218	31	2.0
Net loss	**(39,320)**	**(691.5)**	**(42,296)**	**(412.6)**	**(101,621)**	**(14,596)**	**(937.0)**

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

Revenues

Our revenues increased by 5.8% to RMB10.8 million (US$1.6 million) for 2019 from RMB10.3 million for 2018, due to an increase in our revenue from sales of cancer screening and detection tests, partially offset by a decrease in our net revenue from sales of physical checkup packages.

Our revenue generated from sales of cancer screening and detection tests increased by 8.6% to RMB10.4 million (US$1.5 million) for 2019 from RMB9.6 million for 2018, due to an increase in the sales volume of our CDA-based tests, which was partially offset by a decrease in the average selling price of our CDA-based tests as we offered greater discounts to certain customers as a marketing strategy.

Our net revenue generated from sales of physical checkup packages decreased by 33.0% to RMB464,000 (US$67,000) for 2019 from RMB693,000 for 2018, primarily due to a substantial increase in the volume of physical checkup packages that we sold to a sales agent at prices lower than our costs as part of our customer acquisition strategy.

Cost of Revenues

Our cost of revenues increased by 6.6% to RMB6.0 million (US$869,000) for 2019 from RMB5.7 million for 2018. The increase was primarily attributable to our increased sales volume of CDA-based tests, which resulted in an increase in the testing cost for outsourced biomarker-based tests as well as increases in blood sample taking costs and medical consumables costs. The increase in our cost of revenues was also attributable to an increase in depreciation expense, as we put more CDA devices into use to meet the increased demand for our CDA-based tests.

Gross Profit

Our gross profit was RMB4.6 million and RMB4.8 million (US$689,000) for 2018 and 2019, respectively. Our gross margin decreased slightly to 44.2% for 2019 from 44.7% for 2018.

Operating Expenses

Selling and marketing expenses

Our selling and marketing expenses increased by 38.7% to RMB13.6 million (US$2.0 million) for 2019 from RMB9.8 million for 2018, primarily due to (i) higher share-based compensation as we granted more options to our marketing and sales personnel, and (ii) higher marketing expenses as we increased our marketing efforts.

Research and development expenses

Our research and development expenses decreased by 2.6% to RMB9.8 million (US$1.4 million) for 2019 from RMB10.1 million for 2018, primarily because we conducted less research and development activities under one of our research projects, as we came closer to the completion of the project, in 2019 compared to 2018. The decrease in our research and development expenses was also attributable to a decrease in our research and development related depreciation expenses. These factors were partially offset by higher staff costs and share-based compensation for our research and development personnel.

General and administrative expenses

Our general and administrative expenses increased significantly to RMB70.8 million (US$10.2 million) for 2019 from RMB28.8 million for 2018, primarily due to (i) higher share-based compensation to personnel engaged in general and administrative functions, and (ii) higher professional service fees, primarily related to our initial public offering.

Interest Expenses

Our interest expense increased significantly to RMB2.6 million (US$375,000) for 2019 from RMB925,000 for 2018, primarily due to an increase in average borrowings.

Other Income (Expense), Net

We recognized net other income of RMB5.3 million for 2018, which turned into net other expense of RMB7.1 million (US$1.0 million) for 2019, primarily due to an increase in fair value loss as a result of the increase in value of the convertible loans that we borrowed from Zhijun.

Net Loss

As a result of the foregoing, our loss for the year was RMB101.6 million (US$14.6 million) for 2019, compared to RMB42.3 million for 2018.

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Revenues

Our revenues increased by 80.3% to RMB10.3 million for 2018 from RMB5.7 million for 2017, primarily due to an increase in our revenue from sales of cancer screening and detection tests.

Our revenue generated from sales of cancer screening and detection tests increased by 83.7% to RMB9.6 million for 2018 from RMB5.2 million for 2017, primarily due to a substantial increase in the sales volume of our CDA-based tests, offset in part by more favorable prices at which we offered our CDA-based tests to certain large customers in 2018.

Our net revenue generated from sales of physical checkup packages increased significantly to RMB693,000 for 2018 from RMB483,000 for 2017, primarily due to a significant increase in the volume of our physical checkup packages sold.

Cost of Revenues

Our cost of revenues increased by 43.4% to RMB5.7 million for 2018 from RMB4.0 million for 2017. The increase was primarily attributable to our increased sales volume of CDA-based tests, which resulted in an increase in the testing cost for outsourced biomarker-based tests as well as increases in blood sample taking costs and medical consumables costs. The increase in our cost of revenues was also attributable to our share-based compensation of RMB317,000 in 2018, while we did not recognize any share-based compensation in 2017.

Gross Profit

Our gross profit increased significantly to RMB4.6 million for 2018 from RMB1.7 million for 2017. Our gross margin increased to 44.7% for 2018 from 30.5% for 2017, primarily because our revenue from sales of cancer screening and detection tests increased at a greater rate than our fixed costs, such as staff costs, as a result of economies of scale. This increase in gross margin is also because our net revenue from sales of physical checkup packages increased as a percentage of our total revenues.

Operating Expenses

Selling and marketing expenses

Our selling and marketing expenses increased by 51.4% to RMB9.8 million for 2018 from RMB6.5 million for 2017, primarily due to (i) higher marketing expenses as we increased our marketing efforts, (ii) higher staff costs as we increased our marketing and sales headcount, and (iii) higher share-based compensation as we granted more options to our marketing and sales personnel.

Research and development expenses

Our research and development expenses decreased by 11.4% to RMB10.1 million for 2018 from RMB11.4 million for 2017, primarily because we granted fewer options to our research and development personnel. These factors were partially offset by higher staff costs as we expanded our research and development team.

General and administrative expenses

Our general and administrative expenses increased by 15.7% to RMB28.8 million for 2018 from RMB24.9 million for 2017, primarily due to higher professional service fees, higher depreciation and amortization of property and equipment, higher staff costs (primarily due to an increase in headcount), higher patent service expenses, and higher rental costs. These factors were partially offset by a decrease in our share-based compensation, as we granted fewer options to personnel engaged in general and administrative functions.

Interest Expenses

Our interest expense increased to RMB925,000 for 2018 from RMB338,000 for 2017, primarily due to an increase in average borrowings.

Other Income, Net

Our net other income increased significantly to RMB5.3 million for 2018 from RMB1.3 million for 2017, primarily due to the price that the government in Lishui, Zhejiang Province of China paid us in 2018 for repurchase of a portion of a parcel of land that we did not utilize.

Net Loss

As a result of the foregoing, our loss for the year increased by 7.6% to RMB42.3 million for 2018 from RMB39.3 million for the prior year.

Non-GAAP Financial Measure

In evaluating our business, we consider and use adjusted net loss, a non-GAAP measure, as a supplemental measure to review and assess our operating performance. The presentation of this non-GAAP financial measure is not intended to be considered in isolation or as a substitute for financial information prepared and presented in accordance with U.S. GAAP. We define adjusted net loss as net loss adjusted to add back share-based compensation expenses.

We believe that adjusted net loss helps to identify underlying trends in our business that could otherwise be distorted by the effect of the expenses that we add back to net loss. We believe that adjusted net loss provides useful information about our operating results, enhances 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 its financial and operational decision-making.

The non-GAAP financial measure "adjusted net loss" is not defined under U.S. GAAP, is not presented in accordance with U.S. GAAP and has limitations as an analytical tool. One of the key limitations of using adjusted net loss is that it does not reflect all of the items of income and expense that affect our operations. Share-based compensation has been and may continue to be incurred in our business and is not reflected in the presentation of adjusted net loss. Further, the non-GAAP financial measure "adjusted net loss" may differ from the non-GAAP information used by other companies, including peer companies, and therefore their comparability may be limited.

We compensate for these limitations by reconciling the non-GAAP financial measure to the nearest U.S. GAAP performance measure, all of which should be considered when evaluating our performance. This non-GAAP financial measure should be viewed in addition to, and not as a substitute for, our reported results prepared in accordance with U.S. GAAP and should be read only in conjunction with our consolidated financial statements prepared in accordance with U.S. GAAP that are included elsewhere in this annual report.

	Year ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Net loss	(39,320)	(42,296)	(101,621)	(14,596)
Add:				
Share-based compensation expenses	10,758	7,936	32,855	4,719
Adjusted net loss	(28,562)	(34,360)	(68,766)	(9,877)

Recent Accounting Pronouncements

A list of recent relevant accounting pronouncements is included in Note 2 "Summary of Principal Accounting Policies" of our Consolidated Financial Statements.

Inflation

Since our inception, inflation has not materially affected our results of operations. According to the National Bureau of Statistics of China, the year-over-year percent change in the consumer price index was 1.8% for December 2017, 1.9% for December 2018 and 4.5% for December 2019. Although we have not been materially affected by inflation, we may be affected if China experiences higher rates of inflation in the future.

B. Liquidity and Capital Resources

Our principal sources of liquidity have been capital contributions from our shareholders, short-term non-bank borrowings and loans and advances from our related parties. As of December 31, 2019, we had cash and cash equivalents of RMB6.1 million (US$880,000), consisting of cash on hand and demand deposits placed with banks. As of December 31, 2019, our short-term debt included (i) convertible loans of RMB24.6 million (US$3.5 million) that we borrowed from Zhijun in 2018, the balance of which (US$750,000 as of the date of this annual report) has been extended to May 31, 2020, and (ii) short-term borrowings of RMB14.0 million (US$2.0 million).

We believe that our cash and cash equivalents on hand, borrowings, and our anticipated cash flows generated from our operating activities will be sufficient to meet our current and anticipated needs for general corporate purposes for the 12 months after the date of this annual report. We may decide to expand our business through additional equity and debt financing from time to time. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that would restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

In utilizing the proceeds we received from our initial public offering, we may make additional capital contributions or loans to our PRC subsidiaries. However, most of these uses are subject to PRC regulations.

Substantially all of our revenues in the foreseeable future are likely to continue to be in the form of Renminbi. 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 SAFE approval as long as certain routine procedural requirements are fulfilled. Therefore, our PRC subsidiaries are allowed to pay dividends in U.S. dollars to us without prior SAFE approval by following these routine procedural requirements. However, approval from or registration with competent government authorities is required where the 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. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future.

The following table sets forth selected cash flow statement information for the periods indicated:

	Year Ended December 31,			
	2017	2018	2019	
	RMB	RMB	RMB	US$
	(in thousands)			
Net cash used by operating activities	(21,641)	(31,147)	(48,600)	(6,980)
Net cash used in investing activities	(8,017)	(2,680)	(3,461)	(497)
Net cash generated from financing activities	39,807	36,271	46,108	6,622
Effect of exchange rate changes on cash and cash equivalents	(2,893)	(969)	(809)	(116)
Net increase (decrease) in cash, cash equivalents	7,256	1,475	(6,762)	(971)
Cash and cash equivalents at the beginning of the year	4,156	11,412	12,887	1,851
Cash and cash equivalents at the end of the year	11,412	12,887	6,125	880

Operating Activities

Net cash used in operating activities for 2019 was RMB48.6 million (US$7.0 million), which was primarily attributable to our net loss of RMB101.6 million (US$14.6 million) for the same period, as adjusted to add back share-based compensation of RMB32.9 million (US$4.7 million), fair value loss on convertible loans of RMB5.3 million (US$761,000), and foreign exchange loss of RMB4.1 million (US$594,000) before changes in operating assets and liabilities. Our increase in net operating liabilities of RMB6.4 million (US$910,000) was primarily due to an RMB8.2 million (US$1.2 million) increase in accrued expenses and other current liabilities, partially offset by an RMB2.9 million (US$413,000) increase in other current assets and an RMB1.9 million (US$269,000) decrease in advance from customers.

Net cash used in operating activities for 2018 was RMB31.1 million, which was primarily attributable to our net loss of RMB42.3 million for the same period, as adjusted to deduct gains on disposal of land use right of RMB5.0 million and a foreign exchange loss of RMB2.5 million and to add back share-based compensation of RMB7.9 million and depreciation and amortization of RMB3.1 million before changes in operating assets and liabilities. Our increase in net operating liabilities of RMB874,000 was primarily due to an RMB2.3 million increase in advances from customers, primarily related to our CDA-based tests, and an RMB1.4 million increase in accrued expenses and other current liabilities. These factors were partially offset by an RMB1.6 million increase in advances to suppliers, and an RMB1.1 million increase in accounts receivable.

Net cash used in operating activities for 2017 was RMB21.6 million, which was primarily attributable to our net loss of RMB39.3 million for the same period, as adjusted to add back share-based compensation of RMB10.8 million and depreciation and amortization of RMB2.3 million and to deduct a foreign exchange gain of RMB1.8 million before changes in operating assets and liabilities. Our increase in net operating liabilities of RMB6.2 million was primarily due to an RMB5.5 million increase in accrued expenses and other current liabilities, an RMB1.1 million increase in advance from customers. These factors were offset in part by an RMB1.3 million increase in accounts receivable and an RMB1.0 million decrease in amounts due to related parties.

Investing Activities

Net cash used in investing activities for 2019 was RMB3.5 million (US$497,000), which was primarily attributable to our purchase of property and equipment of RMB2.8 million (US$401,000).

Net cash used in investing activities for 2018 was RMB2.7 million, which was primarily attributable to payments (net of cash received) for our acquisition of our subsidiary, Shiji Hainan, of RMB3.5 million, purchases of property and equipment of RMB2.4 million, and purchases of long-term investments in certain investee companies of RMB1.6 million, partially offset by proceeds from disposal of land use rights of RMB5.3 million.

Net cash used in investing activities for 2017 was RMB8.0 million, which was primarily attributable to payments (net of cash received) for our acquisition of our subsidiary, Shiji Hainan, of RMB3.3 million, purchase payments for property and equipment of RMB2.6 million, and purchases of long-term investments in certain investee companies of RMB2.1 million.

Financing Activities

Net cash generated from financing activities for 2019 was RMB46.1 million (US$6.6 million), which was primarily attributable to (i) proceeds from issuance of ordinary shares of RMB47.6 million (US$6.8 million), and (ii) proceeds from short-term borrowings of RMB24.3 million (US$3.5 million), partially offset by our payment for short-term borrowings of RMB18.3 million (US$2.6 million).

Net cash generated from financing activities for 2018 was RMB36.3 million (US$5.1 million), which was primarily attributable to (i) advances from Jiaxing Zhijun Sihang Investment Partnership Enterprises (Limited Partnership), or Zhijun Sihang, of RMB25.0 million (US$3.5 million) to one of our PRC subsidiaries in 2018, which constituted a step in the process of Zhijun Sihang making equity contributions of these funds in our company, and (ii) proceeds from short-term borrowings from Zhijun and a non-bank institution of RMB26.6 million (US$3.7 million), partially offset by payment for short-term borrowings from a non-bank institution of RMB14.7 million (US$2.1 million).

Net cash generated from financing activities for 2017 was RMB39.8 million, which was primarily attributable to proceeds from equity contributions of investors of RMB40.2 million.

Capital Expenditures

Our capital expenditures were RMB2.6 million, RMB2.8 million and RMB3.2 million (US$454,000) for 2017, 2018 and 2019, respectively. In these periods, these capital expenditures included the purchases of property and equipment and intangible assets. We will continue to make capital expenditures to meet the needs of our business' expected growth.

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

See "Item 4. Information on the Company—B. Business Overview—Research and Development." See "Item 4. Information on the Company—B. Business Overview—Intellectual Property."

D. Trend Information

Market Trends

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the fiscal year ended December 31, 2019 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.

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. In addition, we have not entered into any derivative contracts that are indexed to our shares and classified as shareholders' 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.

F. Tabular Disclosure of Contractual Obligations

Our contractual obligations include our operating lease commitments related to our business premises. The table below sets forth our contractual obligations as of December 31, 2019:

		For the year ending December 31,			
	Total	2020	2021	2022	Thereafter
		(RMB in thousands)			
Operating lease obligations	17,215	3,215	2,492	2,019	9,489

G. Safe Harbor

See "Forward-Looking Statements" in this annual report.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Executive Officers

The following table sets forth information regarding our directors and executive as of the date of this annual report.

Name	Age	Position/Title
Chris Chang Yu	62	Founder, chairman of the board of directors and chief executive officer
Feng Guo	40	Director
Jiefeng Gu	37	Director
Lin Yu	60	Director
Pu Xing	52	Independent director
Ren Luo	62	Independent director
Sarah Yu	31	Director
Rain Yu Zhang	42	Chief financial officer
He Yu	63	Chief medical officer
Xuedong Du	40	Vice president in charge of R&D
Weidong Dai	59	China president

Dr. Chris Chang Yu is a co-founder of our company and has served as chairman of our board of directors and chief executive officer since our inception in January 2010. As the first or principal inventor of more than 300 patent applications spanning semiconductor, materials and life science, Dr. Yu has innovated leading technologies and products during his long and successful career since 1990s. Dr. Yu and our team have developed the CDA technology for cancer screening and detection. He is a member of the ASCO. Prior to founding our company, he co-founded Anji Microelectronics (Shanghai) Co., Ltd. (688019.SH) in 2004, and that company recently completed its IPO in China's science and technology innovation board market in July 2019. Dr. Yu served as a technical director at Semiconductor Manufacturing International Corporation (NYSE: SMI and SEHK: 981) from 2002 to 2004. Dr. Yu served as a vice president of the research and development team of Cabot Microelectronics Corporation, or Cabot, from 1996 to 2002. While working at Cabot, Dr. Yu took a multi-disciplinary approach to developing a new mechanism for a key integrated circuit material. Dr. Yu also worked at three U.S. Fortune 500 companies, including serving as a group leader in the research and development division at Rockwell Co., Ltd. from 1994 to 1995, engineer at Motorola Co., Ltd. from 1992 to 1994, and senior engineer at Micron Technology Co., Ltd. from 1989 to 1992. He has also authored more than 80 papers, some of which are relevant to cancer detection. Dr. Yu received his bachelor and master's degrees in physics from the University of Missouri Kansas-City Campus in 1983 and 1984, respectively. He received his doctoral degree in physics from the Pennsylvania State University in 1990. His master's and doctoral dissertations both addressed innovative detection techniques.

Mr. Feng Guo has served as our director since August 2018. He is a co-founder and the president of Jiaxing Zhijun Investment Management Co., Ltd. He is also a sponsor representative and a Chartered Financial Analyst. He has served as an executive director at the Investment Banking Division of Guo Xin Securities Co., Ltd. since 2004 and an executive director at the Investment Banking Division of Huajing Securities since 2017. He also served as a director at China Renaissance Capital from 2015 to 2017. Mr. Guo has approximately 16 years of experience in China's capital markets and many years of experience in the fields of high-end manufacturing, technology, media and telecom (TMT), medical consumption and energy transportation. He has experience in leading the financial consultation, stock reform, IPO, refinancing, acquisition and capital reduction transactions for many domestic and foreign companies. Mr. Guo received his bachelor's degree in economics from East China University of Political Science and Law in 2002 and his master's degree in finance from Shanghai University of Finance and Economics in 2004.

Mr. Jiefeng Gu has served as our director since April 2016. Since 2016 Mr. Gu has been an investment director at Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd , where his investment focus included the medical, medical equipment and diagnostic reagents sectors. Mr. Gu was a senior investment manager at Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. from 2014 to 2016. He also served as a vice president in Entrepreneurial Accelerator Co., Ltd. from 2013 to 2014, an investment manager at Shanghai Pudong Venture Capital Co., Ltd. from 2010 to 2013, and. Mr. Gu received his bachelor's degree in biological science from Fudan University in 2005 and master's degree in genetics from Fudan University in 2008.

Ms. Lin Yu has served as our director since our inception in January 2010. Ms. Lin Yu served as legal representative at Shanghai Yu Lin Information Science Co., Ltd. from April 2016 to October 2018, a consultant for Yi Mai Fiber Co., Ltd. from 2016 to 2017, a business manager and operation manager from 2000 to 2006 and a technology controller from 2007 to 2015 for Shanghai Fenner Conveyor Belt Co., Ltd., a sales engineer and an operation manager for Trelleborg Sealing Solutions (China) Co., Ltd. (formerly Busak+Shamban Eastern China) from 1994 to 1999, and a sales engineer for Sinopec Shanghai Petrochemical Co., Ltd. from 1986 to 1993. Ms. Lin Yu received her college degree in chemistry from Shanghai University of Science and Technology, Jin Shan Campus, in 1986.

Mr. Pu Xing has served as our independent director since September 2019. Mr. Pu Xing has also served as the head of the compliance and risk management department at Shenzhen Qianhai Kekong Lingdingyang Venture Capital Co., Ltd. since April 2019. Before that, he served as the managing partner at Shanghai Jiyun Investment Management Co., Ltd. from April 2017 to February 2019, a executive vice president and CFO at BesTv New Media Co., Ltd. (a subsidiary of a Shanghai Stock Exchange listed company) from January 2014 to March 2017 and deputy director of the State-owned Assets Supervision and Administration Commission of Shanghai Pudong New Area from March 2013 to February 2014. He also served as vice president and deputy director of the board's strategic decision-making and investment committee at Shanghai Shengrong Investment Co., Ltd. (now known as Shanghai Guosheng Group) from December 2008 to February 2013, vice general manager at Shanghai Guosheng Group Investment Co., Ltd. from December 2010 to January 2013, executive general manager and executive deputy director at Shanghai Corporate Pavilion from January 2008 to December 2010, special assistant to the president at Shanghai Shengrong Investment Co., Ltd. from July 2008 to November 2008, and vice chairman of SiTV from October 2005 to January 2008. In addition, he served as deputy chief economist from January 2002 to June 2008 and special assistant to the president from October 1999 to January 2002 at Shanghai Automotive Industry (Group) Corporation (a Shanghai Stock Exchange listed company). Previously, he served as an analyst at Lehman Brothers from January 1997 to September 1999 and financial manager at Northeimer Engineering from January 1994 to December 1996. He has been a Special Auditor of Shanghai Audit Bureau since January 2011. Mr. Xing received his bachelor's degree in economics from Fudan University in 1990, MBA degree in economics and finance from West Chester University in 1993 and master's degree in accounting from Widener University in 1996.

Mr. Ren Luo has served as our independent director since September 2019. Mr. Luo has served as a senior director and director in charge of industry and government relationships and business development at IQVIA Management Consulting (Shanghai) Co. Ltd. since 2018, and senior manager in charge of industry and government relationships at IMS Health Co. Ltd. since 2013. He also served as supplier services manager at IMS Health Co. Ltd. (a subsidiary of a U.S. listed company) from 2011 to 2013, senior manager and researcher at National Institute for Hospital Administration of the Ministry of Health from 2009 to 2011, senior manager for Greater China and a director at IMS Health Co. Ltd. from 2003 to 2008, general manager and a director of IMS Market Research Consulting (Shanghai) Co. Ltd. from 2002 to 2003, China chief representative of IMS ChinaMetrik Co., Ltd. and manager of China division of IMS Ltd. from 1998 to 2002, chief manager of Chinese projects of ChinaMetrik Ltd. from 1994 to 1998, and consultant of Chinese projects of ChinaMetrik Ltd. from 1991 to 1993. He was also a pharmaceutical chemist at George Washington University Medical Center from 1990 to 1993. He is a consultant to a number of Chinese social associations and a member of American Pharmaceutical Association, American Chemical Society, and Chinese American Pharmacists Association. He is currently a member of the editorial board of Chinese Annual Report of Cardiovascular Disease and was a vice editor-in-chief of China Pharmaceutical Practical Manual for the 2002 and 2003 Edition. Mr. Luo received his bachelor's degree in medical chemistry from Shanghai Pharmacy College in 1981, and master's degree in M.S. Medical Chemistry from University of Mary Hardin Baylor in 1990.

Ms. Sarah Yu has served as our director since August 2018. Ms. Sarah Yu has served as a senior software engineer at LinkedIn since September 2016. She also served as a software engineer at KQED (California Public Broadcasting) from 2015 to 2016 and a new media producer at KTOO (Alaska Public Broadcasting) from 2013 to 2015. Ms. Sarah Yu received her bachelor's degrees in biology and English from Dartmouth College in 2011 and her master's degree in science writing from Massachusetts Institute of Technology in 2012.

Ms. Rain Yu Zhang has served as our CFO since March 2019. Prior to joining us, Ms. Zhang served as a general manager-operation at Buckman Laboratories (Asia) Pte. Ltd. (Singapore) (a subsidiary of Bulab Holdings, Inc., a U.S. company) from 2017 to 2018 and a finance director at Buckman Laboratories Shanghai Chemicals Co., Ltd. from 2005 to 2016. She became a Chartered Global Management Accountant (CGMA) in 2016 and a Certified Public Accountant in 2002. Ms. Zhang received her bachelor's degree in accounting from Shanghai University of Finance and Economics in 1999 and master's degree in business administration from AnTai College of Economics & Management, Shanghai Jiao Tong University in 2015.

Dr. He Yu is a co-founder of our company and has served as our chief medical officer since our inception in 2010. Dr. Yu has served as a professor and program director of cancer epidemiology at the University of Hawaii Cancer Center and an adjunct professor at Yale School of Public Health since 2012. He was a faculty member, from assistant professor to professor, at Yale University, School of Medicine from 2001 to 2011. Being trained in medicine, epidemiology and clinical biochemistry, Dr. Yu conducts various laboratory-based clinical and epidemiologic investigations and has extensive experience in cancer research. He has designed and been involved in many clinical research projects that assess the molecular and genetic features of tumor specimens in relation to cancer characteristics and survival outcomes of patients with various kinds of cancers. As a principal investigator and co-investigator, Dr. Yu has developed and participated in several large population-based epidemiologic studies that investigate gene-environment interactions in breast, endometrial, liver and pancreatic cancers. Biomarkers under his investigation include genetic polymorphisms in DNA repair genes, DNA methylation and methylator phenotype in tumor suppressor genes and detoxification genes, protein markers, peptide growth factors and various non-coding transcripts. Dr. Yu received his bachelor's degree in medicine from Shanghai First Medical College in 1983. He also received a master of science degree in epidemiology and a PhD in clinical biochemistry from University of Toronto in 1990 and 1996, respectively.

Mr. Xuedong Du has served as our vice president in charge of research and development since April 2011. Prior to joining us, Mr. Du successively served as an engineer, senior engineer, chief engineer and manager at SMIC International IC Manufacturing (Shanghai) Co., Ltd. (a subsidiary of a U.S. listed company) from 2001 to 2010. He has extensive experience in product innovation and research and development. He has participated in more than ten provincial talent projects in relation to municipal science and technology. He is the first or principal inventor of more than 100 Chinese and international patent applications (primarily on medical devices), among which over 30 patents have been granted. He has published approximately 20 papers in professional journals and academic conferences. Mr. Du received his bachelor's degree in physical electronics technology from Fudan University in 2001 and his master's degree in electronics and communications engineering from Fudan University in 2009.

Mr. Weidong Dai has served as our China president since April 2015. Prior to joining us, Mr. Dai served as a general partner at Stirrfir Investment Management Co. Ltd. from 2008 to 2015, chairman of RTS Management (Shanghai) Co., Ltd. from 2004 to 2013, a managing director of Hong Kong Pro-Health Technology Co., Ltd. and Shanghai Pro-Health Medical Devices Co., Ltd. from 1998 to 2004, and the chief scientific officer at Wex International Inc. (a subsidiary of a U.S. listed company) from 1994 to 1998. He has served as an adjunct professor at Anhui College of Traditional Chinese Medicine since 2004 and an executive director at the Hainan Branch of China Science Tsing Research Institute of Science and Technology since 2018. He has published a number of medical research papers and scientific articles in professional journals. A medical device that he led in research and development was awarded the Hong Kong Industrial Award in 1999. Mr. Dai received his bachelor's degree in medicine from Anhui Medical University in 1982, master's degree in medicine from Sun Yat-San University of Medicine in 1985, and an Advanced Certificate of the EMBA CEO Program from Fudan University, School of Economics in 2002.

None of our directors and executive officers have any family relationships up to the fourth civil degree either by consanguinity or affinity, except that Dr. Chris Chang Yu is Ms. Sarah Yu's father and Ms. Lin Yu and Dr. He Yu's first cousin; and Dr. He Yu and Ms. Lin Yu are siblings.

B. Compensation

For the year ended December 31, 2019, we paid an aggregate of approximately RMB2.1 million (US$0.3 million) in cash to our executive officers and 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 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.

Employment Agreements and Indemnification Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our executive officers is employed for a specified time period. We may terminate employment for cause, at any time, without advance notice, for certain acts of the executive officer, such as being investigated for criminal liability, committing serious dereliction of duty, jobbery or malpractice to our detriment, or seriously violating our work discipline, rules and regulations. The executive officer may resign at any time for cause with a one-month advance written notice.

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence and not to disclose, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our or our affiliates' confidential information or trade secrets. The executive officers have also agreed that during the term of employment, all patents, copyrights and other intellectual property rights arising from our work achievement belong to us, and the executive officers have no right to use them for commercial purpose.

In addition, each executive officer has agreed to be bound by non-competition and non-solicitation restrictions during the term of his or her employment and typically for two years following the last date of employment. Specifically, each executive officer has agreed not to (i) approach directly or indirectly our suppliers, clients, customers or contacts or other persons or entities introduced to the executive officer in his or her capacity as a representative of us for the purpose of doing business with such persons or entities that will harm our business relationships with these persons or entities; (ii) assume employment with or provide services directly or indirectly to any of our competitors; (iii) seek directly or indirectly, to solicit the services of any of our employees who is employed by us on or after the date of the executive officer's termination; or (iv) engage in any business activity, technology development, or sales and marketing related to bio-medical detection devices, targeted therapies or other specified technologies.

We have entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we may 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.

2019 Share Incentive Plan

On October 31, 2019, our board of directors and shareholders approved our 2019 Plan, to encourage our employees, officers, directors and consultants to continue contributing to our success. The maximum number of ordinary shares that may be issued under the 2019 Plan is 1,105,300 ordinary shares. The following paragraphs describe the principal terms of the 2019 Plan:

Type of Awards. The 2019 Plan permits the awards of options that the plan administrator decides.

Plan Administration. Our compensation committee or such other committee as appointed by our Board from time to time will administer the 2019 Plan. The committee, as applicable, will determine the participants to receive awards, the time, type and number of awards to be granted to each participant, and the terms and conditions of each award grant.

Award Agreement. Awards granted under the 2019 Plan are evidenced by an award agreement that sets forth terms, conditions and limitations for each award, which may include the term of the award, the provisions applicable in the event of the grantee's employment or service terminates, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind the award.

Eligibility. We may grant awards to directors, service provider, advisor, employees and consultants of our company or any of our subsidiaries.

Vesting Conditions. In general, the plan administrator determines the vesting conditions, which is specified in the relevant award agreement.

Exercise of Options. The plan administrator determines the exercise price for each award, which is stated in the award agreement and shall be no less than the fair market value of a share on the date of an award grant. The vested portion of option will expire if not exercised prior to the time as the plan administrator determines at the time of its grant. However, the maximum exercisable term is ten years from the date of a grant.

Transfer Restrictions. Awards may not be transferred in any manner by the recipient other than (i) by trust that was established solely for tax planning purpose; (ii) by gift or pursuant to a qualified domestic relations order to one or more family member; or (iii) by will or the laws of descent and distribution, except as otherwise provided by the plan administrator.

Termination and Amendment. Unless terminated earlier, the 2019 Plan has a term of ten years. The plan administrator has the authority to amend or terminate the 2019 Plan. However, no such action may adversely affect in any material way any awards previously granted without written consent of the recipient, unless the plan administrator expressly reserved the right to make such amendment at the time the relevant awards were granted.

Other Options

The following table summarizes, as of March 31, 2020, the awards granted to our directors and executive officers and other individuals as authorized by our board of directors, other than under our 2019 Plan, excluding awards that were forfeited or canceled after the relevant grant dates and retrospectively reflecting the effectiveness of a share subdivision of each ordinary share of par value of US$1.00 into 100 ordinary shares of par value of US$0.01 each, which became effective on November 12, 2019.

Name	Number of Shares*	Exercise Price ($/Share)	Date of Grant	Date of Expiration
Ren Luo	*	US$0.05	October 28, 2010	October 28, 2020
Weidong Dai	330,000	Zero to US$0.01	August 1, 2014 and April 1, 2015	August 1, 2024 and April 1, 2025
Xuedong Du	488,600	Zero to US$0.05	September 6, 2010 - January 1, 2018	September 6, 2020 - January 1, 2028
Rain Yu Zhang	*	US$0.05	July 15, 2019	July 5, 2029
Other individuals as a group	1,172,300	Zero to US$0.1	August 1, 2010- September 1, 2019	August 1, 2020 - September 1, 2029

* Less than 1% of our total outstanding ordinary shares.

C. Board Practices

Composition of Board of Directors

Our board of directors consists of seven directors. Unless so fixed by our company in a general meeting, a director is not required to hold any shares in our company to qualify to serve as a director. A director may vote with respect to any contract, proposed contract or transaction in which he is interested, and if he does so, his vote shall be counted and he may be counted in the quorum at any meeting of our directors at which any such contract or proposed contract or arrangement is considered, provided that the nature of the interest of such director shall be disclosed by such director at or prior to its consideration and any vote thereon. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

Committees of the Board of Directors

We have established three committees under the board of directors: an audit committee, a compensation committee and a nominating and corporate governance committee. We have 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 Mr. Pu Xing, Mr. Ren Luo and Mr. Feng Guo. Mr. Pu Xing is the chairman of our audit committee. We have determined that Mr. Pu Xing and Mr. Ren Luo satisfy the "independence" requirements of Rule 5605(c)(2) of the Listing Rules of The NASDAQ Stock Market and Rule 10A-3 under the Exchange Act, as amended. We have determined that Mr. Pu Xing 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:

- appointing the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;

- reviewing with the independent auditors any audit problems or difficulties and management's response;
- discussing the annual audited financial statements with management and the independent auditors;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any steps taken to monitor and control major financial risk exposures;
- reviewing and approving all proposed related party transactions;
- meeting separately and periodically with management and the independent auditors; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

Compensation Committee. Our compensation committee consists of Mr. Ren Luo, Mr. Jiefeng Gu and Dr. Chris Chang Yu. Mr. Ren Luo is the chairman of our compensation committee. We have determined that Mr. Ren Luo satisfies the "independence" requirements of Rule 5605(a)(2) of the Listing Rules of The NASDAQ Stock Market. 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 his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors;
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements; and
- selecting compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person's independence from management.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Dr. Chris Chang Yu, Mr. Feng Guo and Mr. Pu Xing. Dr. Chris Chang Yu is the chairman of our nominating and corporate governance committee. We have determined that Mr. Pu Xing satisfies the "independence" requirements of Rule 5605(a)(2) of the Listing Rules of The NASDAQ Stock Market. The nominating and corporate governance committee assists the board of directors 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:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience and diversity;
- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board; and
- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken.

Duties of Directors

Under BVI 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 also have a duty to exercise the skill they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our M&A, as amended and restated from time to time, the BVI Act and the class rights vested thereunder in the holders of the shares. Our company has the right to seek damages if a duty owed by our directors is breached. A shareholder may in certain limited exceptional circumstances have the right to seek damages in our name if a duty owed by the directors is breached.

Our Board of Directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our Board include, among others:

- convening shareholders' general meetings;
- declaring dividends and distributions;
- appointing officers and determining the term of office of the officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and
- approving the transfer of shares in our company, including the registration of such shares in our share register.

Terms of Directors and Officers

Our directors may be elected by a resolution of our board of directors, or by a resolution of our shareholders either to appoint any person as a director to fill a casual vacancy on our board or as an addition to the existing board. Our company may by resolution of our shareholders remove any director, notwithstanding any provision in our memorandum and articles of association or in any agreement between such director and us.

D. Employees

As of December 31, 2019, we had 111 full-time employees, including seven in the United States and the remainder in China. The following table sets forth the numbers of our employees categorized by function as of December 31, 2019.

Function	Number of Employees
Research and development	24
Laboratory technicians and manufacturing personnel	19
Sales and marketing	19
Logistics and customer support and service	9
General and administration	40
Total	111

We plan to hire additional employees for sales and marketing, customer support and service and manufacturing functions as we grow our business. None of our employees are represented by a labor union with respect to his or her employment with us. We believe that we maintain a good working relationship with our employees, and we have not experienced any material labor disputes.

In accordance with applicable regulations in the PRC, we participate in various employee social security plans that are organized by municipal and provincial governments, including housing, pension, medical insurance, work-related injury insurance, employment injury insurance, maternity insurance and unemployment insurance. 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.

E. Share Ownership

Except as specifically noted, the following table sets forth information with respect to the beneficial ownership of our ordinary shares as of the date of March 31, 2020 by:

- each of our directors and executive officers; and
- each person known to us to own beneficially more than 5% of our total outstanding ordinary shares.

The calculations in the table below are based on 11,201,360 ordinary shares (including 8,338,260 Class A ordinary shares and 2,863,100 Class B ordinary shares) outstanding as of March 31, 2020.

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.

	Class A Ordinary Shares	Class B Ordinary Shares	% of total ordinary shares on an as-converted basis***	% of aggregate voting power†
Directors and Executive Officers:**				
Chris Chang Yu(1)	*	2,263,900	20.3%	61.2%
Feng Guo(2)	606,700	247,900	7.6%	8.3%
Jiefeng Gu	—	—	—	—
Lin Yu	—	—	—	—
Pu Xing	*	—	*	*
Ren Luo	*	—	*	*
Sarah Yu	—	—	—	—
Rain Yu Zhang	*	—	*	—
He Yu(3)	1,212,700	—	10.8%	3.3%
Xuedong Du(4)	438,400	—	3.8%	0.5%
Weidong Dai(5)	430,100	—	3.8%	1.1%
All Directors and Executive Officers as a Group	2,770,600	2,511,800	45.9%	74.6%
Principal Shareholders:				
CRS Holdings Inc.(6)	—	2,263,900	20.2%	61.2%
He Yu(3)	1,212,700	—	10.8%	3.3%
Zhangjiang GU KE Company Limited(7)	859,200	351,300	10.8%	11.8%
Zhijun Sihang Holdings Limited(2)	606,700	247,900	7.6%	8.3%

Notes:

* Less than 1% of our total outstanding ordinary shares.

** Except as indicated otherwise below, the business address of our directors and executive officers is 801 Bixing Street, Bihu County, Lishui, Zhejiang Province 323006, People's Republic of China.

*** For each person or group included in this column, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group by the sum of the total number of shares outstanding and the number of shares such person or group has the right to acquire upon exercise of an option, warrant or other right within 60 days after March 31, 2020.

† For each person or group included in this column, percentage of total voting power represents voting power based on both Class A and Class B ordinary shares held by such person or group with respect to all outstanding shares of our Class A and Class B ordinary shares as a single class. Each holder of Class A ordinary shares is entitled to one (1) vote per share. Each holder of our Class B ordinary shares is entitled to ten (10) votes per share. Our Class B ordinary shares are convertible at any time by the holder into Class A ordinary shares on a one-for-one basis.

(1) Represents (i) 2,263,900 Class B ordinary shares held by CRS Holdings Inc., a British Virgin Islands company, which is wholly owned by Dr. Chris Chang Yu and (ii) 9,800 Class A ordinary shares issuable upon exercise of options held by the spouse of Dr. Chris Chang Yu. The registered address of CRS Holdings Inc. is Trinity Chambers, P. O. Box 4301, Road Town, Tortola, British Virgin Islands.

(2) Represents (i) 536,000 Class A ordinary shares and 247,900 Class B ordinary shares held by Zhijun Sihang Holding Limited, a British Virgin Islands company, which is wholly owned by Jiaxing Zhijun Sihang Investment Partnership Enterprises (Limited Partnership), and (ii) 70,700 Class A ordinary shares held by Mr. Lei Luo for the benefit of Zhijun Sihang Holdings Limited. The general partner of Jiaxing Zhijun Sihang Investment Partnership Enterprises (Limited Partnership) is Jiaxing Zhijun Investment Management Co., Ltd. Mr. Feng Guo is the controlling shareholder and a member of the three-person investment committee of Jiaxing Zhijun Investment Management Co., Ltd. Mr. Guo disclaims any beneficial ownership with respect to these shares. The registered address of Zhijun Sihang Holding Limited is 113-7, No.100, Zhuyuan Road, Nanhu District, Jiaxing, Zhejiang Province, P.R. China.

(3) Represents 1,212,700 Class A ordinary shares held by Dr. He Yu.

(4) Represents (i) 176,400 Class A ordinary shares held by YuLin Bio-medical Science Co., Ltd., and (ii) 262,000 Class A ordinary shares issuable upon exercise of options held by Mr. Xuedong Du. YuLin Bio-medical Science Co., Ltd. is owned by certain individuals, with none of them holding a controlling interest in YuLin Bio-medical Science Co., Ltd. The registered address of YuLin Bio-medical Science Co., Ltd. is Aequitas International Management Ltd., Grand Pavilion Commercial Centre, Suite 24, 802 West Bay Road, P.O. Box 10281, Grand Cayman KY1-1003, Cayman Islands.

(5) Represents (i) 300,000 Class A ordinary shares held by Mr. Weidong Dai, (ii) 30,000 Class A ordinary shares issuable upon exercise of options held by Mr. Weidong Dai, and (iii) 100,100 Class A ordinary shares held by YuLin Bio-medical Science Co., Ltd. for the benefit of Mr. Weidong Dai's spouse. YuLin Bio-medical Science Co., Ltd. is owned by certain individuals, with none of them holding a controlling interest in YuLin Bio-medical Science Co., Ltd. The registered address of YuLin Bio-medical Science Co., Ltd. is Aequitas International Management Ltd., Grand Pavilion Commercial Centre, Suite 24, 802 West Bay Road, P.O. Box 10281, Grand Cayman KY1-1003, Cayman Islands.

(6) Represents 2,263,900 Class B ordinary shares. CRS Holdings Inc. is wholly owned by Dr. Chris Chang Yu, and its registered address is Trinity Chambers, P. O. Box 4301, Road Town, Tortola, British Virgin Islands.

(7) Represents 859,200 Class A ordinary shares and 351,300 Class B ordinary shares held by Zhangjiang GU KE Company Limited, a British Virgin Islands company, which is 100% beneficially owned by Shanghai Pudong State-owned Assets Supervision and Administration Commission. The registered address of Zhangjiang GU KE Company Limited is Commence Chambers, P.O. Box 2208, Road Town, Tortola, British Virgin Islands.

As of March 31, 2020, to our knowledge, 1,333,360 Class A ordinary shares were held by one record holder, which is the depositary of our ADS program. In addition, we have 14 record holders in the United States of Class A our ordinary shares, who hold approximately 17.6% of our total outstanding ordinary shares. As of March 31, 2020, none of our Class B ordinary shares were held by U.S. record holders. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holders of our ordinary shares 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

A. Major Shareholders

Please refer to "Item 6. Directors, Senior Management and Employees—E. Share Ownership."

B. Related Party Transactions

Shareholders Agreements

According to shareholders agreements dated June 30, 2017 and August 17, 2017, respectively, that we entered into with certain of our shareholders (the "Investors"), which provide for certain rights, including the right in respect of board composition, right of information and inspection, right of first refusal, co-sale right, anti-dilution protection and registration rights. These rights, except the registration rights, have automatically terminated upon the completion of our initial public offering.

Registration Rights

Upon the demand of any of the Investors, we and certain of our principal shareholders shall procure a company within our group that is conducting a public offering to grant (to the Investors' satisfaction) the Investors: (i) rights to register their respective shares in the company with the United States Securities and Exchanges Commission, including, but not limited to, three times of demand registration, unlimited times of piggyback registration, and unlimited times of registration under Form F-3/S-3 (or any subsequent registration statements under the U.S. Securities Act of 1933, as amended), or (ii) equivalent or similar registration rights in respect of any issuances of the company's shares in any other jurisdiction where it commits to a public offering or listing of its shares in a recognized stock exchange.

Employment Agreements and Indemnification Agreements

See "Item 6. Directors, Senior Management and Employees—B. Compensation—Employment Agreements and Indemnification Agreements."

Share Incentive Plan and Other Options

See "Item 6. Directors, Senior Management and Employees—B. Compensation—2019 Share Incentive Plan" and "Item 6. Directors, Senior Management and Employees—B. Compensation—Other Options."

Private Placements

On September 17, 2019, we issued 214,000 ordinary shares to CRS Holdings Inc., which is wholly owned by our founder and chairman, Dr. Chris Chang Yu, for consideration of US$0.7 million. CRS Holdings Inc. made this investment primarily to enhance our liquidity. Given that the purchase price of US$3.27 per share was below fair value of our ordinary shares, such discount represented share-based compensation to Dr. Chris Chang Yu for his past services to us.

Zhijun Sihang provided an advance of RMB25.0 million (US$3.5 million) to one of our PRC subsidiaries in 2018. Zhijun Sihang is in the process of making equity contribution of these funds in our company.

Convertible Loan Agreements

In 2018, we borrowed from Zhijun a total of US$2.5 million in one-year term loans convertible into our ordinary shares. These loans and the accrued interest expenses amounted to RMB18.0 million and RMB824,000, respectively, as of December 31, 2018. These loans and the accrued interest expenses amounted to RMB24.6 million (US$3.5 million) and RMB2.4 million (US$345,000), respectively, as of December 31, 2019. The parties subsequently agreed to extend the term of the balance of these convertible loans (US$750,000 as of the date of this annual report) to May 31, 2020. These loans bear interest at 9% per annum. The conversion price will be determined based on the then outstanding principal amount of the loans and an RMB488 million assumed equity value of the Company before granting of the loans in 2018. The convertible loans are convertible into our Class A ordinary shares at the election of Zhijun in whole or in part prior to maturity subject to certain conditions. If by May 31, 2020 Zhijun does not convert the loans into our Class A ordinary shares, we will be required to repay the loans within six months or renegotiate an extension of the loans.

Loans From CRS Holdings Inc.

CRS Holdings Inc., wholly owned by our founder and chairman, Dr. Chris Chang Yu, provided loans of RMB1.2 million (US$173,000) to us in 2019. We repaid to CRS Holdings Inc. RMB1.3 million (US$181,000) in 2019. These loans were interest-free, unsecured and repayable on demand.

Loan to an Investee Company

We provided a loan of RMB2.9 million (US$414,000) to Shanghai Yulin Information Technology Co., Ltd., a company controlled by Ms. Lin Yu, in 2019. Shanghai Yulin Information Technology Co., Ltd. repaid RMB2.9 million (US$413,000) to us in 2019.

Sales Agreements and Consultancy Agreement with Investee Companies

We have in the ordinary course of our business engaged certain of our investee companies, including AnPac Beijing Health Management Co., Ltd., Jiangsu AnPac and Anpai (Shanghai) Health Management Consulting Co., Ltd., as sales agents for our CDA-based tests. In 2019, we recognized an aggregate revenue of RMB683,000 (US$98,100) from sales to AnPac Beijing Health Management Co., Ltd., Jiangsu AnPac and Anpai (Shanghai) Health Management Consulting Co., Ltd.

In 2019, we incurred a consultancy fee of RMB2.2 million (US$316,000) to AnPac Beijing Health Management Co., Ltd. for their marketing services to us.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

We may be subject to legal proceedings and claims in the ordinary course of business. We cannot predict the results of any such disputes, and despite the potential outcomes, their existence alone may have an adverse material impact on us because of diversion of management time and attention as well as the financial costs related to resolving such disputes. Neither we nor any of our directors or executive officers are currently a party to, nor is any of our properties the subject of, any material legal or arbitration proceedings.

Dividend Policy

Our board of directors has discretion on whether to distribute dividends, subject to certain restrictions under British Virgin Islands law, namely that our company may only pay dividends if our directors are satisfied on reasonable grounds that we are solvent immediately after the dividend payment in the sense that we will be able to pay our debts as they become due in the ordinary course of business, and the value of assets of our company will exceed our total liabilities. 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.

We have never declared or paid dividends and do not have any plan to pay any cash dividends on our ordinary shares in the foreseeable future. We 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 British Virgin Islands. We may rely on dividends from our subsidiaries in China 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 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—We rely on dividends paid by our subsidiaries for our cash needs, and any limitation on the ability of our subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business."

If we pay any dividends on our Class A ordinary shares, we will pay those dividends which are payable in respect of the Class A ordinary shares underlying our ADSs to the depositary, as the registered holder of such Class A ordinary shares, and the depositary then will pay such amounts to our ADS holders in proportion to the Class A 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. Cash dividends on our Class A ordinary shares, if any, will be paid in U.S. dollars.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offering and Listing Details

Our ADSs, each representing one Class A ordinary share, have been listed on the NADAQ Global Market since January 30, 2020 and trade under the symbol "ANPC." No significant trading suspensions have occurred since listing.

B. Plan of Distribution

Not applicable.

C. Markets

See "—A. Offering and Listing Details."

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

We are a BVI business company limited by shares and our affairs are governed by our memorandum and articles of association, as amended and restated from time to time, and the BVI Business Companies Act (the "BVI Act"). The following are summaries of material provisions of our Third Amended and Restated Memorandum and Articles of Association in effect as of the date of this annual report insofar as they relate to the material terms of our ordinary shares.

M&A

The following discussion describes our M&A:

Objects and Purposes, Register, and Shareholders. Subject to the BVI Act, our objects and purposes are unlimited. Our register of members will be maintained by our share registrar, Maples Fund Services (Cayman) Limited. Under the BVI Act, a BVI company may treat the registered holder of a share as the only person entitled to (a) exercise any voting rights attaching to the share, (b) receive notices, (c) receive a distribution in respect of the share and (d) exercise other rights and powers attaching to the share. Consequently, as a matter of BVI law, where a shareholder's shares are registered in the name of a nominee, the nominee is entitled to receive notices, receive distributions and exercise rights in respect of any such shares registered in its name. The beneficial owners of the shares registered in a nominee's name will therefore be reliant on their contractual arrangements with the nominee in order to receive notices and dividends and ensure the nominee exercises voting and other rights in respect of the shares in accordance with their directions.

Directors' Powers. Under the BVI Act, subject to any modifications or limitations in a company's M&A, a company's business and affairs are managed by, or under the direction or supervision of, its directors; and directors generally have all powers necessary to manage a company. A director must disclose any interest he has on any proposal, arrangement or contract not entered into in the ordinary course of business and on usual terms and conditions. An interested director may (subject to the M&A) vote on a transaction in which he has an interest. In accordance with, and subject to, our M&A, the directors may by resolution of directors exercise all the powers of the company to incur indebtedness, liabilities or obligations and to secure indebtedness, liabilities or obligations whether of the company or of any third party.

Rights, Preferences and Restrictions of Ordinary Shares. Subject to the restrictions described under the section titled "Dividend Policy" above, our directors may (subject to the M&A) authorize dividends at such time and in such amount as they determine. In the event of a liquidation or dissolution of the company, the holders of ordinary shares are (subject to the M&A) entitled to share ratably in all surplus assets remaining available for distribution to them after payment and discharge of all claims, debts, liabilities and obligations of the company and after provision is made for each class of shares (if any) having preference over the ordinary shares if any at that time. There are no sinking fund provisions applicable to our ordinary shares. Holders of our ordinary shares have no pre-emptive rights. Subject to the provisions of the BVI Act, we may, (subject to the M&A) with board or shareholders' consent, repurchase our ordinary shares provided always that the company will, immediately after the repurchase, satisfy the solvency test. The company will satisfy the solvency test, if (i) the value of the company's assets exceeds its liabilities; and (ii) the company is able to pay its debts as they fall due.

In accordance with the BVI Act:

(i) the company may purchase, redeem or otherwise acquire its own shares in accordance with either (a) Sections 60, 61 and 62 of the BVI Act (save to the extent that those Sections are negated, modified or inconsistent with provisions for the purchase, redemption or acquisition of its own shares specified in the company's M&A); or (b) such other provisions for the purchase, redemption or acquisition of its own shares as may be specified in the company's M&A. The company's M&A provide that such Sections 60, 61 and 62 of the BVI Act do not apply to the company; and

(ii) where a company may purchase, redeem or otherwise acquire its own shares otherwise than in accordance with Sections 60, 61 and 62 of the BVI Act, it may not purchase, redeem or otherwise acquire the shares without the consent of the member whose shares are to be purchased, redeemed or otherwise acquired, unless the company is permitted by the M&A to purchase, redeem or otherwise acquire the shares without that consent; and

(iii) unless the shares are held as treasury shares in accordance with Section 64 of the BVI Act, any shares acquired by the company are deemed to be canceled immediately on purchase, redemption or other acquisition.

Variation of the Rights of Shareholders. As permitted by the BVI Act and our M&A, whenever the capital of our company is divided into different classes, the rights attached to any such class may only be materially adversely varied with the consent in writing of the holders of not less than two-thirds (2/3rds) of the issued shares of that class or with the sanction of a resolution of our shareholders passed at a separate meeting of the holders of the shares of that class by the holders of not less than two-thirds (2/3rds) of the issued shares of that class.

Ordinary Shares. Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Our ordinary shares are issued in registered form and are issued when registered in our register of members. Our shareholders who are non-residents of the BVI may freely hold and vote their shares.

Conversion. Each Class B ordinary share is convertible into one (1) Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment or disposition of Class B ordinary shares by a holder thereof to any person other than holders of Class B ordinary shares or their affiliates, or upon a change of ultimate beneficial ownership of the holder of any Class B ordinary share to any person or entity who is not an affiliate of the holder, such Class B ordinary shares shall be automatically and immediately converted into the same number of Class A ordinary shares.

Voting Rights. In respect of all matters subject to a shareholders' vote, each Class A ordinary share shall entitle the holder thereof to one (1) vote per share and each Class B ordinary share shall entitle the holder to ten (10) votes per share on all matters subject to vote at our general meetings. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Voting at any shareholders' meeting is by show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. A poll may be demanded by the chairman of such meeting or any shareholder present in person or by proxy.

Shareholder Meetings. In accordance with, and subject to, our M&A, (a) the chairman of our board of directors, or a majority of our directors (acting by a resolution of the board), may call general meetings of our shareholders; and (b) upon the written request of shareholders entitled to exercise thirty per cent (30%) or more of the voting rights in respect of the matter for which the meeting is requested, the directors shall convene a meeting of shareholders. Under BVI law, the M&A may be amended to decrease but not increase the required percentage to call a meeting above thirty per cent (30%). In accordance with, and subject to, our M&A, (a) the director convening a meeting shall give not less than ten (10) days' notice of a meeting of shareholders to those shareholders entitled to vote at the meeting; (b) an annual general meeting of shareholders held in contravention of the requirement to give notice is valid if shareholders holding at least ninety-five per cent (95%) of the total votes attaching to all shares in issue and entitled to attend and vote at such annual general meeting have agreed to waive notice of the meeting; and an extraordinary general meeting of shareholders held in contravention of the requirement to give notice is valid if shareholders holding no less than two-thirds of total votes attaching to all shares in issue and entitled to attend and vote at such extraordinary general meeting have agreed to waive notice of the meeting; (c) a meeting of shareholders is duly constituted if, at the commencement of the meeting, there are present in person or by proxy one or more shareholders holding shares which carry in aggregate not less than a majority of all votes attaching to all shares in issue and entitled to vote at such meeting, and (d) if within half an hour from the time appointed for the meeting a quorum is not present, the meeting shall be dissolved.

Dividends. Subject to the BVI Act and our M&A, our directors may, by resolution, declare dividends at a time and amount as they think fit if they are satisfied, based on reasonable grounds, that, immediately after distribution of the dividend, the value of our assets will exceed our liabilities and we will be able to pay our debts as they fall due. There is no further BVI law restriction on the amount of funds which may be distributed by us by dividend, including all amounts paid by way of the subscription price for ordinary shares regardless of whether such amounts may be wholly or partially treated as share capital or share premium under certain accounting principles. Shareholder approval is not (except as otherwise provided in our M&A) required to pay dividends under BVI law. In accordance with, and subject to, our M&A, no dividend shall bear interest as against the company (except as otherwise provided in our M&A).

Disclosure of the SEC's Position on Indemnification for Securities Act Liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has 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.

Transfer of Shares. Subject to any applicable restrictions or limitations arising pursuant to (i) our M&A; or (ii) the BVI Act, any of our shareholders may transfer all or any of his or her shares by an instrument of transfer in the usual or common form or in any other form which our directors may approve (such instrument of transfer being signed by the transferor and containing the name and address of the transferee). Our directors may decline to register any transfer of shares which is not fully paid up or on which our company has a lien. In addition, our directors may also decline to register any transfer of any shares unless (i) the instrument of transfer is lodged with our company, accompanied by the relevant share certificate, (ii) the instrument of transfer is in respect of only one class of shares, (iii) the instrument of transfer is properly stamped, if required, (iv) in the case of a transfer to joint holders, the number of joint holders to whom the share is to be transferred does not exceed four, and (v) a fee of such maximum sum as The NASDAQ Global Market may determine to be payable, or such lesser sum as our board of directors may require, is paid to our company in respect thereof.

Differences in Corporate Law

The BVI Act 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 BVI Act applicable to us and the laws applicable to companies incorporated in the State of Delaware.

Mergers, Consolidations and Similar Arrangements

The BVI Act provides for mergers as that expression is understood under US corporate law. Common law mergers are also permitted outside of the scope of the BVI Act. Under the BVI Act, two or more companies may either merge into one of such existing companies, or the surviving company, or consolidate with both existing companies ceasing to exist and forming a new company, or the consolidated company. The procedure for a merger or consolidation between our company and another company (which need not be a BVI company) is set out in the BVI Act. The directors of the BVI company or BVI companies which are to merge or consolidate must approve a written plan of merger or consolidation which must also be authorized by a resolution of members (and the outstanding shares of every class of shares that are entitled to vote on the merger or consolidation as a class if the memorandum or articles of association so provide or if the plan of merger or consolidation contains any provisions that, if contained in a proposed amendment to the memorandum or articles, would entitle the class to vote on the proposed amendment as a class) of the shareholders of the BVI company or BVI companies which are to merge. A foreign company which is able under the laws of its foreign jurisdiction to participate in the merger or consolidation is required by the BVI Act to comply with the laws of that foreign jurisdiction in relation to the merger or consolidation. The BVI company must then execute articles of merger or consolidation, containing certain prescribed details. The plan and articles of merger or consolidation are then filed with the Registrar of Corporate Affairs in the BVI, or the Registrar. If the surviving company or the consolidated company is to be incorporated under the laws of a jurisdiction outside BVI, it shall file the additional instruments required under Section 174(2)(b) of the BVI Act. The Registrar then (if he or she is satisfied that the requirements of the BVI Act have been complied with) registers, in the case of a merger, the articles of merger or consolidation and any amendment to the M&A of the surviving company and, in the case of a consolidation, the M&A of the new consolidated company and issues a certificate of merger or consolidation (which is conclusive evidence of compliance with all requirements of the BVI Act in respect of the merger or consolidation). The merger or consolidation is effective on the date that the articles of merger or consolidation are registered by the Registrar or on such subsequent date, not exceeding thirty days, as is stated in the articles of merger or consolidation but if the surviving company or the consolidated company is a company incorporated under the laws of a jurisdiction outside the BVI, the merger or consolidation is effective as provided by the laws of that other jurisdiction.

As soon as a merger or consolidation becomes effective (among other things), (a) the surviving company or consolidated company (so far as is consistent with its amended memorandum and articles of association, as amended or established by the articles of merger or consolidation) has all rights, privileges, immunities, powers, objects and purposes of each of the constituent companies; (b) the memorandum and articles of association of any surviving company are automatically amended to the extent, if any, that changes to its amended memorandum and articles of association are contained in the articles of merger; (c) assets of every description, including choses-in-action and the business of each of the constituent companies, immediately vest in the surviving company or consolidated company; (d) the surviving company or consolidated company is liable for all claims, debts, liabilities and obligations of each of the constituent companies; (e) no conviction, judgment, ruling, order, claim, debt, liability or obligation due or to become due, and no cause existing, against a constituent company or against any shareholder, director, officer or agent thereof, is released or impaired by the merger or consolidation; and (f) no proceedings, whether civil or criminal, pending at the time of a merger or consolidation by or against a constituent company, or against any shareholder, director, officer or agent thereof, are abated or discontinued by the merger or consolidation, but: (i) the proceedings may be enforced, prosecuted, settled or compromised by or against the surviving company or consolidated company or against the shareholder, director, officer or agent thereof, as the case may be or (ii) the surviving company or consolidated company may be substituted in the proceedings for a constituent company but if the surviving company or the consolidated company is incorporated under the laws of a jurisdiction outside the BVI, the effect of the merger or consolidation is the same as noted foregoing except in so far as the laws of the other jurisdiction otherwise provide.

The Registrar shall strike off the register of companies each constituent company that is not the surviving company in the case of a merger and all constituent companies in the case of a consolidation (save that this shall not apply to a foreign company).

If the directors determine it to be in the best interests of us, it is also possible for a merger to be approved as a court approved plan of arrangement or as a scheme of arrangement in accordance with (in each such case) the BVI Act. The convening of any necessary shareholders meetings and subsequently the arrangement must be authorized by the BVI court. A scheme of arrangement requires the approval of 75% of the votes of the shareholders or class of shareholders, as the case may be. If the effect of the scheme is different in relation to different shareholders, it may be necessary for them to vote separately in relation to the scheme, with it being required to secure the requisite approval level of each separate voting group. Under a plan of arrangement, a BVI court may determine what shareholder approvals are required and the manner of obtaining the approval.

Shareholders' Suits

Under the provisions of the BVI Act, the memorandum and articles of association of a company are binding as between the company and its members and between the members. In general, members are bound by the decision of the majority or special majorities as set out in the articles of association or in the BVI Act. As for voting, the usual rule is that with respect to normal commercial matters members may act from self-interest when exercising the right to vote attached to their shares.

If the majority members have infringed a minority member's rights, the minority may seek to enforce its rights either by derivative action or by personal action. A derivative action concerns the infringement of the company's rights where the wrongdoers are in control of the company and are preventing it from taking action, whereas a personal action concerns the infringement of a right that is personal to the particular member concerned.

The BVI Act provides for a series of remedies available to members. Where a company incorporated under the BVI Act conducts some activity which breaches the BVI Act or the company's memorandum and articles of association, the BVI High Court can issue a restraining or compliance order. Members can now also bring derivative, personal and Representative Actions under certain circumstances.

The traditional English basis for members' remedies have also been incorporated into the BVI Act: where a member of a company considers that the affairs of the company have been, are being or are likely to be conducted in a manner likely to be oppressive, unfairly discriminating or unfairly prejudicial to him, he may apply to the BVI High Court for an order on such conduct.

Any member of a company may apply to the BVI High Court for the appointment of a liquidator for the company and the Court may appoint a liquidator for the company if it is of the opinion that it is just and equitable to do so.

The BVI Act provides that any member of a company is entitled to payment of the fair value of his shares upon dissenting from any of the following:

(a) a merger;

(b) a consolidation;

(c) any sale, transfer, lease, exchange or other disposition of more than 50 per cent in value of the assets or business of the company if not made in the usual or regular course of the business carried on by the company but not including (i) a disposition pursuant to an order of the court having jurisdiction in the matter; (ii) a disposition for money on terms requiring all or substantially all net proceeds to be distributed to the members in accordance with their respective interest within one year after the date of disposition; or (iii) a transfer pursuant to the power of the directors to transfer assets for the protection thereof;

(d) a redemption of 10 per cent, or fewer, of the issued shares of the company required by the holders of 90 percent, or more, of the shares of the company pursuant to the terms of the BVI Act; and

(e) an arrangement, if permitted by the BVI High Court.

Generally any other claims against a company by its members must be based on the general laws of contract or tort applicable in the BVI or their individual rights as members as established by the company's memorandum and articles of association.

The BVI Act provides that if a company or a director of a company engages in, proposes to engage in or has engaged in, conduct that contravenes the BVI Act or the memorandum or articles of association of the company, the BVI High Court may, on the application of a member or a director of the company, make an order directing the company or director to comply with, or restraining the company or director from engaging in conduct that contravenes the BVI Act or the memorandum or articles of association.

Indemnification of Directors and Executive Officers and Limitation of Liability

BVI law does not limit the extent to which a company's articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the BVI High Court to be contrary to public policy (e.g. for purporting to provide indemnification against the consequences of committing a crime). An indemnity will be void and of no effect and will not apply to a person unless the person acted honestly and in good faith and in what he believed to be in the best interests of the company and, in the case of criminal proceedings, the person had no reasonable cause to believe that his conduct was unlawful. Our memorandum and articles of association provide that every director and officer of our company shall be indemnified against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such indemnified person, other than by reason of such indemnified person's own dishonesty, willful default or fraud, in or about the conduct of our company's business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such indemnified person in defending (whether successfully or otherwise) any civil proceedings concerning our company or its affairs in any court whether in the British Virgin Islands or elsewhere. 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 or she reasonably believes to be in the best interests of the corporation. He or she must not use his or her 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 BVI law, directors must not place themselves in a position in which there is a conflict between their duty to the company and their personal interests. This means that, strictly speaking, a director should not participate in a decision in circumstances where he has a potential conflict. That is, he should declare his interest and abstain. The BVI Act provides that a director "shall, forthwith after becoming aware of the fact that he is interested in a transaction entered into or to be entered into by the company, disclose the interest to the board of the company". The failure of a director to so disclose an interest does not affect the validity of a transaction entered into by the director or the company, provided that the director's interest was disclosed to the board prior to the company's entry into the transaction or was not required to be disclosed (for example where the transaction is between the company and the director himself or is otherwise in the ordinary course of business and on usual terms and conditions). Typically a company's memorandum and articles of association will allow a director interested in a particular transaction to vote on it, attend meetings at which it is considered, and sign documents on behalf of the company which relate to the transaction.

Under the laws of the BVI, a transaction entered into by the company in respect of which a director is interested will not be voidable by the company where the members have approved or ratified the transaction in knowledge of the material facts of the interest of the director in the transaction, or if the company received fair value for the transaction.

Broadly speaking, the duties that a director owes to a company may be divided into two categories. The first category encompasses fiduciary duties, that is, the duties of loyalty, honesty and good faith. The second category encompasses duties of skill and care. Each is considered in turn below.

A director's fiduciary duties can be summarized as follows:

(a) Bona Fides: The directors must act bona fide in what they consider is in the best interests of the company (or, if permitted as above, that company's parent company).

(b) Proper Purpose: The directors must exercise the powers that are vested in them for the purpose for which they were conferred and not for a collateral purpose.

(c) Unfettered Discretion: Since the powers of the directors are to be exercised by them in trust for the company, they should not improperly fetter the exercise of future discretion.

(d) Conflict of Duty and Interest: as per the above.

In addition to their fiduciary duties a director has the duties of care, diligence and skill which are owed to the company itself and not, for example, to individual members (subject to the limited exceptions as to enforcement on behalf of the company).

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. As permitted by BVI law, our articles of association provide that 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.

BVI law and our M&A provide that upon the written request of shareholders entitled to exercise thirty per cent (30%) or more of the voting rights in respect of the matter for which the meeting is requested, the directors shall convene a meeting of shareholders. As a BVI 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 investors on a board of directors since it permits the investor 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 British Virgin Islands but our 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 articles of association, a director may be removed from office, by a resolution of shareholders passed at a meeting of shareholders or by a written resolution passed by a least fifty per cent (50%) of the votes of all shareholders of the company entitled to vote, notwithstanding any provision in the memorandum and articles of association or in any agreement between such director and us.

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.

British Virgin Islands law has no comparable statute. As a result, we are not afforded the same statutory protections in the British Virgin Islands as we would be offered by the Delaware business combination statute. However, although British Virgin Islands law does not regulate transactions between a company and its significant shareholders, it does provide that such transactions must be entered into bona fide in the best interests of the company and not with the effect of constituting a fraud on the investors. See also "Shareholders' Suits" above. We have adopted a code of business conduct and ethics which requires employees to fully disclose any situations that could reasonably be expected to give rise to a conflict of interest, and sets forth relevant restrictions and procedures when a conflict of interest arises to ensure the best interest of the company.

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.

The liquidation of a company may be a voluntary solvent liquidation or a liquidation under the Insolvency Act. Where a company has been struck off the Register of Companies under the BVI Act continuously for a period of seven years it is dissolved with effect from the last day of that period.

Voluntary Liquidation

If the liquidation is a solvent liquidation, the provisions of the BVI Act governs the liquidation. A company may only be liquidated under the BVI Act as a solvent liquidation if it has no liabilities or it is able to pay its debts as they fall due and the value of its assets exceeds its liabilities. Subject to the memorandum and articles of association of a company, a liquidator may be appointed by a resolution of directors or resolution of members but if the directors have commenced liquidation by a resolution of directors the members must approve the liquidation plan by a resolution of members save in limited circumstances.

A liquidator is appointed for the purpose of collecting in and realizing the assets of a company and distributing proceeds to creditors.

Liquidation under the Insolvency Act

The Insolvency Act governs an insolvent liquidation. Pursuant to the Insolvency Act, a company is insolvent if it fails to comply with the requirements of a statutory demand that has not be set aside pursuant to the Insolvency Act, execution or other process issued on a judgment, decree or order of court in favor of a creditor of the company is returned wholly or partly unsatisfied or either the value of the company's liabilities exceeds its assets or the company is unable to pay its debts as they fall due. The liquidator must be either the Official Receiver in BVI or a BVI licensed insolvency practitioner. An individual resident outside the BVI may be appointed to act as liquidator jointly with a BVI licensed insolvency practitioner or the Official Receiver. The members of the company may appoint an insolvency practitioner as liquidator of the company or the court may appoint an Official Receiver or an eligible insolvency practitioner. The application to the court can be made by one or more of the following: (i) the company, (ii) a creditor, (iii) a member, or (iv) the supervisor of a creditors' arrangement in respect of the company, the Financial Services Commission and the Attorney General in the BVI.

The court may appoint a liquidator if:

(a) the company is insolvent;

(b) the court is of the opinion that it is just and equitable that a liquidator should be appointed; or

(c) the court is of the opinion that it is in the public interest for a liquidator to be appointed.

An application under (a) above by a member may only be made with leave of the court, which shall not be granted unless the court is satisfied that there is prima facie case that the company is insolvent. An application under (c) above may only be made by the Financial Services Commission or the Attorney General and they may only make an application under (c) above if the company concerned is, or at any time has been, a regulated person (i.e. a person that holds a prescribed financial services license) or the company is carrying on, or at any time has carried on, unlicensed financial services business.

Order of Preferential Payments upon Liquidation

Upon the insolvent liquidation of a company, the assets of a company shall be applied in accordance with the following priorities: (a) in paying, in priority to all other claims, the costs and expenses properly incurred in the liquidation in accordance with the prescribed priority; (b) after payment of the costs and expenses of the liquidation, in paying the preferential claims admitted by the liquidator (wages and salary, amounts to the BVI Social Security Board, pension contributions, government taxes) — preferential claims rank equally between themselves and, if the assets of the company are insufficient to meet the claims in full, they shall be paid ratably; (c) after the payment of preferential claims, in paying all other claims admitted by the liquidator, including those of non-secured creditors — the claims of non-secured creditors of the company shall rank equally among themselves and if the assets of the company are insufficient to meet the claims in full, such non-secured creditors shall be paid ratably; (d) after paying all admitted claims, paying any interest payable under the BVI Insolvency Act; and finally (e) any surplus assets remaining after payment of the costs, expenses and claims above shall be distributed to the members in accordance with their rights and interests in the company. Part VIII of the Insolvency Act provides for various applications which may be made by a liquidator to set aside transactions which have unfairly diminished the assets which are available to creditors.

The appointment of a liquidator over the assets of a company does not affect the right of a secured creditor to take possession of and realize or otherwise deal with assets of the company over which that creditor has a security interest. Accordingly, a secured creditor may enforce its security directly without recourse to the liquidator, in priority to the order of payments described in the preceding paragraph. However, so far as the assets of a company in liquidation available for payment of the claims of unsecured creditors are insufficient to pay the costs and expenses of the liquidation and the preferential creditors, those costs, expenses and claims have priority over the claims of charges in respect of assets that are subject to a floating charge created by a company and shall be paid accordingly out of those assets.

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. Under the BVI Act and our articles of association, our company may be dissolved, liquidated or wound up by a resolution of our shareholders.

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 British Virgin Islands law and our articles of association, if our share capital is divided into more than one class of shares, the rights attached to any class may only be materially adversely varied with the consent in writing of the holders of not less than two-thirds (2/3rds) of the issued shares of that class or with the sanction of a resolution of our shareholders passed at a separate meeting of the holders of the shares of that class by the holders of not less than two-thirds (2/3rds) of the issued shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by, inter alia, the creation, allotment or issue of further shares ranking *pari passu* with or subsequent to them or the redemption or purchase of any shares of any class by the company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

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. As permitted by British Virgin Islands law, our memorandum and articles of association may be amended by a resolution of shareholders or by a resolution of directors, save that no amendment may be made by a resolution of directors: (i) to restrict the rights or powers of the shareholders to amend the memorandum or articles; (ii) to change the percentage of shareholders required to pass a resolution of shareholders to amend the memorandum or articles; (iii) in circumstances where the memorandum or articles cannot be amended by the shareholders; or (iv) to certain specified clauses of the articles of association.

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 governing the ownership threshold above which shareholder ownership must be disclosed.

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—B. Business Overview", "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions," or elsewhere in this annual report.

D. Exchange Controls

See "Item 4. Information on the Company—B. Business Overview—PRC Regulations—Other Significant PRC Regulations Affecting Our Business Activities in China—Regulations Relating to Foreign Exchange."

E. Taxation

The following summary of the material BVI, PRC and United States federal income tax consequences of an investment in our Class A ordinary shares or ADSs is based upon laws and relevant interpretations thereof in effect as of the date of this registration statement, all of which are subject to change. This summary does not deal with all possible tax consequences relating to an investment in our Class A ordinary shares or ADSs, such as the tax consequences under U.S. state and local tax laws or under the tax laws of jurisdictions other than the BVI, the People's Republic of China and the United States.

BVI Taxation

Our company and all dividends, interest, rents, royalties, compensation and other amounts paid by our company to persons who are not resident in the BVI and any capital gains realized with respect to any shares, debt obligations, or other securities of our company by persons who are not resident in the BVI are exempt from all provisions of the Income Tax Ordinance in the BVI.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not resident in the BVI with respect to any shares, debt obligation or other securities of our company.

All instruments relating to transfers of property to or by our company and all instruments relating to transactions in respect of the shares, debt obligations or other securities of our company and all instruments relating to other transactions relating to the business of our company are exempt from payment of stamp duty in the BVI. This assumes that our company does not hold an interest in real estate in the BVI.

There are currently no withholding taxes or exchange control regulations in the BVI applicable to our company or its members.

People's Republic of China Taxation

Under the PRC EIT Law and its implementation rules, an enterprise established outside 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 at the rate of 25% on its global income. 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, production, personnel, accounts and properties of an enterprise. In April 2009, the SAT issued the Circular of the SAT on Issues Relating to Identification of PRC-Controlled Overseas Registered Enterprises as Resident Enterprises in Accordance With the De Facto Standards of Organizational Management, or 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 the PRC only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is 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 do not believe that AnPac Bio meets all of the conditions above. AnPac Bio 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. For the same reasons, we believe our other entities outside of the PRC 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 ours.

If the PRC tax authorities determine that AnPac Bio is a PRC resident enterprise for enterprise income tax purposes, 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 our ADSs. In addition, non-resident enterprise shareholders (including our ADS holders) may be subject to a 10% PRC tax on gains realized on the sale or other disposition of ADSs or Class A ordinary shares, if such income is treated as sourced from within the PRC. It is unclear whether our non-PRC individual shareholders (including our ADS holders) would be subject to any PRC tax on dividends or gains obtained by such non-PRC individual shareholders in the event we are determined to be a PRC resident enterprise. If any PRC tax were to apply to such dividends or gains, it would generally apply at a rate of 20% unless a reduced rate is available under an applicable tax treaty. However, it is also unclear whether non-PRC shareholders of AnPac Bio would be able to claim the benefits of any tax treaties between their country of tax residence and the PRC in the event that AnPac Bio is treated as a PRC resident enterprise.

Provided that our BVI holding company, AnPac Bio, is not deemed to be a PRC resident enterprise, holders of our ADSs and Class A ordinary shares who are not PRC residents will not be subject to PRC income tax on dividends distributed by us or gains realized from the sale or other disposition of our shares or ADSs. However, under SAT Public Notice 7 and SAT Public Notice 37, where a non-resident enterprise conducts an "indirect transfer" by transferring taxable assets, including, in particular, equity interests in a PRC resident enterprise, indirectly by disposing of the equity interests of an overseas holding company, the non-resident enterprise, being the transferor, or the transferee or the PRC entity which directly owned such taxable assets may report to the relevant tax authority such indirect transfer. 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 other 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. We and our non-PRC resident investors may be at risk of being required to file a return and being taxed under SAT Public Notice 7 and SAT Public Notice 37, and we may be required to expend valuable resources to comply with SAT Public Notice 7 and SAT Public Notice 37, or to establish that we should not be taxed under these circulars. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—We face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies."

United States Federal Income Tax Considerations

The following is a summary of material U.S. federal income tax considerations that are likely to be relevant to the purchase, ownership and disposition of our Class A ordinary shares or ADSs by a U.S. Holder (as defined below).

This summary is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial interpretations thereof, in force as of the date hereof. Those authorities may be changed at any time, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those summarized below.

This summary is not a comprehensive discussion of all of the tax considerations that may be relevant to a particular investor's decision to purchase, hold, or dispose of Class A ordinary shares or ADSs. In particular, this summary is directed only to U.S. Holders that hold Class A ordinary shares or ADSs as capital assets, and does not address particular tax consequences that may be applicable to U.S. Holders who may be subject to special tax rules, such as banks, brokers or dealers in securities or currencies, traders in securities electing to mark to market, financial institutions, life insurance companies, tax exempt entities, regulated investment companies, entities or arrangements that are treated as partnerships for U.S. federal income tax purposes (or partners therein), holders that own or are treated as owning 10% or more of our stock by vote or value, persons holding Class A ordinary shares or ADSs as part of a hedging or conversion transaction or a straddle, or persons whose functional currency is not the U.S. dollar. Moreover, this summary does not address state, local or non-U.S. taxes, the U.S. federal estate and gift taxes, the Medicare contribution tax applicable to net investment income of certain non-corporate U.S. Holders, or alternative minimum tax consequences of acquiring, holding or disposing of Class A ordinary shares or ADSs.

For purposes of this summary, a "U.S. Holder" is a beneficial owner of Class A ordinary shares or ADSs that is a citizen or resident of the United States or a U.S. domestic corporation or that otherwise is subject to U.S. federal income taxation on a net income basis in respect of such Class A ordinary shares or ADSs.

You should consult your own tax advisors about the consequences of the acquisition, ownership and disposition of the Class A ordinary shares or ADSs, including the relevance to your particular situation of the considerations discussed below and any consequences arising under non-U.S., state, local or other tax laws.

ADSs

In general, if you are a U.S. Holder of ADSs, you will be treated, for U.S. federal income tax purposes, as the beneficial owner of the underlying Class A ordinary shares that are represented by those ADSs. References to "shares" below apply to both Class A ordinary shares and ADSs, unless the context indicates otherwise.

Taxation of Dividends

Subject to the discussion below under "Passive Foreign Investment Company Status," the gross amount of any distribution of cash or property with respect to our shares (including amounts, if any, withheld in respect of PRC taxes) that is paid out of our current or accumulated earnings and profits (as determined for U.S. federal income tax purposes) will generally be includible in your taxable income as ordinary dividend income on the day on which you receive the dividend, in the case of Class A ordinary shares, or the date the depositary receives the dividends, in the case of ADSs, and will not be eligible for the dividends-received deduction allowed to U.S. corporations under the Code.

We do not expect to maintain calculations of our earnings and profits in accordance with U.S. federal income tax principles. U.S. Holders therefore should expect that distributions generally will be treated as dividends for U.S. federal income tax purposes.

Subject to certain exceptions for short-term and hedged positions, the dividends received by a non-corporate U.S. Holder with respect to the shares will be subject to taxation at a preferential rate if the dividends are "qualified dividends." Dividends paid on the shares will be treated as qualified dividends if:

- the shares are readily tradable on an established securities market in the United States or we are eligible for the benefits of a comprehensive tax treaty with the United States that the U.S. Treasury determines is satisfactory for purposes of this provision and that includes an exchange of information program; and

- we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a PFIC.

The ADSs are listed on the NASDAQ Global Market, and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on our audited financial statements, the manner in which we conduct our business, and relevant market and shareholder data, we do not believe we were a PFIC for U.S. federal income tax purposes with respect to our prior taxable year. In addition, based on our audited financial statements, the manner in which we conduct our business, relevant market and shareholder data and our current expectations regarding the value and nature of our assets, and the sources and nature of our income, we do not anticipate becoming a PFIC for our current taxable year or in the foreseeable future. U.S. Holders should consult their own tax advisors regarding the availability of the reduced dividend tax rate in light of their own particular circumstances.

Because the Class A ordinary shares are not themselves listed on a U.S. exchange, dividends received with respect to Class A ordinary shares that are not represented by ADSs may not be treated as qualified dividends. U.S. Holders should consult their own tax advisors regarding the potential availability of the reduced dividend tax rate in respect of the Class A ordinary shares.

In the event that we are deemed to be a PRC resident enterprise under the PRC EIT Law (see "Taxation—People's Republic of China Taxation"), a U.S. Holder may be subject to PRC withholding taxes on dividends paid on our shares. In that case, we may, however, be eligible for the benefits of the Agreement Between the Government of the United States of America and the Government of the People's Republic of China for the Avoidance of Double Taxation and the Prevention of Tax Evasion with Respect to Taxes on Income (the "Treaty"). If we are eligible for such benefits, dividends we pay on our shares would be eligible for the reduced rates of taxation described above (assuming we are not a PFIC in the year the dividend is paid or the prior year). Dividend distributions with respect to our shares generally will be treated as "passive category" income from sources outside the United States for purposes of determining a U.S. Holder's U.S. foreign tax credit limitation. Subject to the limitations and conditions provided in the Code and the applicable U.S. Treasury Regulations, a U.S. Holder may be able to claim a foreign tax credit against its U.S. federal income tax liability in respect of any PRC income taxes withheld at the appropriate rate applicable to the U.S. Holder from a dividend paid to such U.S. Holder. Alternatively, the U.S. Holder may deduct such PRC income taxes from its U.S. federal taxable income, provided that the U.S. Holder elects to deduct rather than credit all foreign income taxes for the relevant taxable year. The rules with respect to foreign tax credits are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit or the deductibility of foreign taxes under their particular circumstances.

U.S. Holders that receive distributions of additional shares or rights to subscribe for shares as part of a pro rata distribution to all our shareholders generally will not be subject to U.S. federal income tax in respect of the distributions, unless the U.S. Holder has the right to receive cash or property, in which case the U.S. Holder will be treated as if it received cash equal to the fair market value of the distribution.

Taxation of Dispositions of Shares

Subject to the discussion below under "Passive Foreign Investment Company Status," upon a sale, exchange or other taxable disposition of the shares, U.S. Holders will realize gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the amount realized on the disposition and the U.S. Holder's adjusted tax basis in the shares. Such gain or loss will be capital gain or loss, and will generally be long-term capital gain or loss if the shares have been held for more than one year. Long-term capital gain realized by a U.S. Holder that is an individual generally is subject to taxation at a preferential rate. The deductibility of capital losses is subject to limitations.

Gain, if any, realized by a U.S. Holder on the sale or other disposition of the shares generally will be treated as U.S. source income for U.S. foreign tax credit purposes. Consequently, if a PRC tax is imposed on the sale or other disposition of the shares, a U.S. Holder who does not receive significant foreign source income from other sources may not be able to derive effective U.S. foreign tax credit benefits in respect of such PRC tax. However, in the event that gain from the disposition of the shares is subject to tax in the PRC, and a U.S. Holder is eligible for the benefits of the Treaty, such U.S. Holder may elect to treat such gain as PRC source gain under the Treaty. U.S. Holders should consult their own tax advisors regarding the application of the foreign tax credit rules to their investment in, and disposition of, the shares.

Deposits and withdrawals of Class A ordinary shares by U.S. Holders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

Passive Foreign Investment Company Status

Special U.S. tax rules apply to companies that are considered to be PFICs. We will be classified as a PFIC in a particular taxable year if, taking into account our proportionate share of the income and assets of our subsidiaries under applicable "look-through" rules, either

- 75 percent or more of our gross income for the taxable year is passive income; or
- the average percentage of the value of our assets that produce or are held for the production of passive income is, based on the average of four quarterly testing dates, at least 50 percent (the "asset test").

For this purpose, passive income generally includes dividends, interest, royalties and rents (other than royalties and rents derived in the active conduct of a trade or business and not derived from a related person). If we own at least 25% (by value) of the stock of another corporation, for purposes of determining whether we are a PFIC, we will be treated as owning our proportionate share of the other corporation's assets and receiving our proportionate share of the other corporation's income. The asset test is generally applied using the fair market values of a non-U.S. corporation's assets but is applied using adjusted tax bases of the assets if the non-U.S. corporation is a CFC and is not publicly traded for the year. We have been publicly traded since our initial public offering completed on February 3, 2020 and expect that we will be treated as publicly traded for 2020 and subsequent years. Accordingly, we believe that the PFIC asset test should be applied using the fair market values of our assets. U.S. Holders should consult their own tax advisors regarding the application of these rules and the appropriate valuation of our assets for purposes of the PFIC asset test, as well as the desirability of making a mark-to-market election (discussed below).

Based on our audited financial statements, the manner in which we conduct our business, relevant market and shareholder data and our current expectations regarding the value and nature of our assets and the sources and nature of our income, we do not believe that we were a PFIC in our taxable year ending December 31, 2019, and we do not anticipate becoming a PFIC for our current taxable year or in the foreseeable future. However, because the PFIC tests must be applied each year, and the composition of our income and assets and the value of our assets may change, it is possible that we may become a PFIC in the current or a future year. In particular, because the value of our assets for purposes of the asset test may be determined by reference to the market price of our ADSs, fluctuations in the market price of our ADSs may cause us to become a PFIC for the current or subsequent taxable years. The determination of whether we are a PFIC also may be affected by the cash raised in our initial public offering and how, and how quickly, we use that cash and our other liquid assets. If we do not deploy significant amounts of cash for active purposes, our risk of being a PFIC may increase.

In the event that we are classified as a PFIC in any year during which a U.S. Holder holds our shares and such U.S. Holder does not make a mark-to-market election, as described in the following paragraph, the U.S. Holder will be subject to a special tax at ordinary income tax rates on "excess distributions," including certain distributions by us (generally, distributions that are greater than 125% of the average annual distributions received during the shorter of the three preceding taxable years or the U.S. Holder's holding period for the shares) and gain that the U.S. Holder recognizes on the sale or other disposition of our shares. The amount of income tax on any excess distributions will be increased by an interest charge to compensate for tax deferral, calculated as if the excess distributions were earned ratably over the period that the U.S. Holder holds its shares. Further, if we are a PFIC for any year during which a U.S. Holder holds our shares, we generally will continue to be treated as a PFIC for all subsequent years during which such U.S. Holder holds our shares unless we cease to be a PFIC and the U.S. Holder makes a special "purging" election on IRS Form 8621. Classification as a PFIC may also have other adverse tax consequences, including, in the case of individuals, the denial of a step-up in the basis of his or her shares at death.

A U.S. Holder may be able to avoid the unfavorable rules described in the preceding paragraph by electing to mark its ADSs to market, provided the ADSs are treated as "marketable stock." The ADSs generally will be treated as marketable stock if the ADSs are "regularly traded" on a "qualified exchange or other market" (which includes the NASDAQ Global Market). It should also be noted that it is not currently intended that the Class A ordinary shares will be listed on any stock exchange. Consequently, a U.S. Holder that holds Class A ordinary shares that are not represented by ADSs may not be eligible to make a mark-to-market election. If the U.S. Holder makes a mark-to-market election, (i) the U.S. Holder will be required in any year in which we are a PFIC to include as ordinary income the excess of the fair market value of its ADSs at year-end over the U.S. Holder's basis in those ADSs and (ii) the U.S. Holder will be entitled to deduct as an ordinary loss in each such year the excess of the U.S. Holder's basis in its ADSs over their fair market value at year-end, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's adjusted tax basis in its ADSs will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. In addition, any gain the U.S. Holder recognizes upon the sale of the U.S. Holder's ADSs in a year in which we are PFIC will be taxed as ordinary income in the year of sale, and any loss the U.S. Holder recognizes upon the sale will be treated as ordinary loss, but only to the extent of the net amount of previously included income as a result of the mark-to-mark election.

A U.S. Holder that owns an equity interest in a PFIC must annually file IRS Form 8621. A failure to file one or more of these forms as required may toll the running of the statute of limitations in respect of each of the U.S. Holder's taxable years for which such form is required to be filed. As a result, the taxable years with respect to which the U.S. Holder fails to file the form may remain open to assessment by the IRS indefinitely, until the form is filed.

If we are a PFIC for any taxable year during which a U.S. Holder holds our shares and any of our non-U.S. subsidiaries is also a PFIC, such U.S. Holder will be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of the PFIC rules. U.S. Holders should consult their own tax advisors about the possible application of the PFIC rules to any of our subsidiaries.

U.S. Holders should consult their own tax advisors regarding the U.S. federal income tax considerations discussed above and the desirability of making a mark-to-market election.

Foreign Financial Asset Reporting

Certain U.S. Holders that own "specified foreign financial assets" with an aggregate value in excess of U.S.$50,000 on the last day of the taxable year or $75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on IRS Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer that are not held in accounts maintained by financial institutions. The understatement of income attributable to "specified foreign financial assets" in excess of U.S.$5,000 extends the statute of limitations with respect to the tax return to six years after the return was filed. U.S. Holders who fail to report the required information could be subject to substantial penalties. Prospective investors are encouraged to consult their own tax advisors regarding the possible application of these rules to their investment, including the application of the rules to their particular circumstances.

Backup Withholding and Information Reporting

Dividends paid on, and proceeds from the sale or other disposition of, the shares that are paid to a U.S. Holder generally may be subject to the information reporting requirements of the Code and may be subject to backup withholding unless the U.S. Holder provides an accurate taxpayer identification number and makes any other required certification or otherwise establishes an exemption. 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 refund or credit against the U.S. Holder's U.S. federal income tax liability, provided the required information is furnished to the IRS in a timely manner.

A holder that is not a U.S. Holder may be required to comply with certification and identification procedures in order to establish its exemption from information reporting and backup withholding.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We have filed a registration statement, including relevant exhibits, with the SEC on Form F-1 (Registration No. 333-234408) under the Securities Act to register the issuance and sale of our Class A ordinary shares represented by ADSs in relation to our initial public offering. We have also filed a related registration statement on Form F-6 (Registration No. 333-234548) with the SEC to register the ADSs.

We are subject to periodic reporting and other informational requirements of the Exchange Act as applicable to foreign private issuers. Accordingly, we are required to file reports, including annual reports on Form 20-F, and other information with the SEC. All information filed with the SEC can be obtained over the internet at the SEC's website at *www.sec.gov* or inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You can request copies of documents, upon payment of a duplicating fee, by writing to the SEC.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, the rules prescribing the furnishing and content of 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. However, we intend to furnish the depositary with our annual reports, which will include a review of operations and annual audited consolidated combined financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, if we so request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

I. Subsidiary Information

For a listing of our subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Concentration of credit risk

Financial instruments may subject us to significant concentration of credit risk. These financial instruments consist primarily of cash and cash equivalents and accounts receivables. As of December 31, 2017, 2018 and 2019, the aggregate amount of cash and cash equivalents of RMB8.9 million, RMB7.0 million and RMB5.0 million (US$725,000), respectively, was held at major financial institutions located in the PRC, and RMB2.5 million, RMB5.9 million and RMB1.1 million (US$155,000), respectively, was deposited with major financial institutions located outside the PRC. Our management believes that these financial institutions are of high credit quality and continually monitors the credit worthiness of these financial institutions. Historically, deposits in Chinese banks are secure due to the state policy on protecting depositors' interests. However, China promulgated a new Bankruptcy Law in August 2006 that came into effect on June 1, 2007, which contains a separate article expressly stating that the State Council may promulgate implementation measures for the bankruptcy of Chinese banks based on the Bankruptcy Law. Under the new Bankruptcy Law, a Chinese bank may go into bankruptcy. In addition, since China's concession to the World Trade Organization, foreign banks have been gradually permitted to operate in China and have been significant competitors against Chinese banks in many aspects, especially since the opening of the Renminbi business to foreign banks in late 2006. Therefore, the risk of bankruptcy of those Chinese banks in which we have deposits has increased. In the event of bankruptcy of one of the banks which holds our deposits, we are unlikely to claim our deposits back in full since the bank is unlikely to be classified as a secured creditor based on PRC laws.

Accounts receivables, unsecured and denominated in Renminbi, derived from sales on our cancer screening and detection tests and physical checkup packages, are exposed to credit risk. As of December 31, 2017, 2018 and 2019, we had three customers, one customer and four customers, respectively, each with a receivable balance exceeding 10% of the total accounts receivable balance. The risk is mitigated by credit evaluations that we perform on our corporate customers.

Equity price risk

We are exposed to equity price risk primarily with respect to convertible loans issued by us accounted for under fair value option. Our investment in Jiangsu Anpac, which is equity securities without readily determinable fair values, is held for strategic purposes. It is accounted for under measurement alternative and not subject to equity price risk.

Currency convertibility risk

A significant portion of our expenses, assets and liabilities are denominated in Renminbi. On January 1, 1994, the PRC government abolished the dual rate system and introduced a single rate of exchange as quoted daily by the People's Bank of China (the "PBOC"). However, the unification of the exchange rates does not imply that the Renminbi may be readily convertible into U.S. dollar or other foreign currencies. All foreign exchange transactions continue to take place either through the PBOC or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the PBOC. Approvals of foreign currency payments by the PBOC or other institutions require submitting a payment application form together with relevant documents.

Additionally, the value of the Renminbi is subject to changes in central government policies and international economic and political developments affecting supply and demand in the PRC foreign exchange trading system market.

Foreign currency exchange rate risk

Since July 21, 2005, Renminbi has been permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. The U.S. dollar depreciated against Renminbi by approximately 6.3% in 2017, appreciated against Renminbi by approximately 5.7% in 2018 and appreciated against Renminbi by approximately 1.3% in 2019. As the trade war between the U.S. and China escalated, the U.S. dollar has appreciated against Renminbi to be 1:7.0732 as of May 8, 2020. 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.

The functional currency of our company and AnPac US is the U.S. dollar and the functional currency of our PRC subsidiaries and our reporting currency is Renminbi. Most of our revenues and costs are denominated in RMB, while a portion of cash and cash equivalents and convertible loans are denominated in U.S. dollars. It is difficult to predict how market forces or the PRC or U.S. government policy may impact the exchange rate between the Renminbi and the US$ in the future. Any significant fluctuation of the valuation of RMB may materially affect our cash flows, revenues, earnings and financial position, and the value of any dividends payable on the ADS in US$.

Liquidity risks

As of December 31, 2019, we had RMB6.1 million (US$880,000) of cash and cash equivalents and RMB43.9 million (US$6.3 million) of working capital deficit. For the year ended December 31, 2019, we incurred RMB50.3 million (US$7.2 million) of negative cash flows from operations and RMB3.2 million (US$454,000) of capital expenditures. We believe that our cash and cash equivalents on hand, borrowings and future operating cash flows will be adequate to meet our obligations as they come due for the 12 months after the date of this annual report.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Fees and Charges

As an ADS holder, you will be required to pay the following fees under the terms of the deposit agreement:

Services:	Fees:
Issuance of ADSs (e.g., an issuance of ADS upon a deposit of Class A ordinary shares, upon a change in the ADS(s)-to Class A ordinary shares ratio, or for any other reason), excluding ADS issuances as a result of distributions of Class A ordinary shares)	Up to U.S. 5¢ per ADS issued
Cancellation of ADSs (e.g., a cancellation of ADSs for delivery of deposited property, upon a change in the ADS(s)-to-Class A ordinary shares ratio, or for any other reason)	Up to U.S. 5¢ per ADS cancelled
Distribution of cash dividends or other cash distributions (e.g., upon a sale of rights and other entitlements)	Up to U.S. 5¢ per ADS held
Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercise of rights to purchase additional ADSs	Up to U.S. 5¢ per ADS held
Distribution of securities other than ADSs or rights to purchase additional ADSs (e.g., upon a spin-off)	Up to U.S. 5¢ per ADS held
ADS Services	Up to U.S. 5¢ per ADS held on the applicable record date(s) established by the depositary
Registration of ADS transfers (e.g., upon a registration of the transfer of registered ownership of ADSs, upon a transfer of ADSs into DTC and vice versa, or for any other reason)	Up to U.S. 5¢ per ADS (or fraction thereof) transferred
Conversion of ADSs of one series for ADSs of another series (e.g., upon conversion of Partial Entitlement ADSs for Full Entitlement ADSs, or upon conversion of Restricted ADSs (each as defined in the Deposit Agreement) into freely transferable ADSs, and vice versa)	Up to U.S. 5¢ per ADS (or fraction thereof) converted

As an ADS holder you will also be responsible to pay certain charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- the registration fees as may from time to time be in effect for the registration of Class A ordinary shares on the share register and applicable to transfers of Class A ordinary shares to or from the name of the custodian, the depositary or any nominees upon the making of deposits and withdrawals, respectively;
- certain cable, telex and facsimile transmission and delivery expenses;
- the fees, expenses, spreads, taxes and other charges of the depositary and/or service providers (which may be a division, branch or affiliate of the depositary) in the conversion of foreign currency;
- the reasonable and customary out-of-pocket expenses incurred by the depositary in connection with compliance with exchange control regulations and other regulatory requirements applicable to Class A ordinary shares, ADSs and ADRs; and
- the fees, charges, costs and expenses incurred by the depositary, the custodian, or any nominee in connection with the ADR program.

ADS fees and charges for (i) the issuance of ADSs, and (ii) the cancellation of ADSs are charged to the person for whom the ADSs are issued (in the case of ADS issuances) and to the person for whom ADSs are cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depositary into DTC, the ADS issuance and cancellation fees and charges may be deducted from distributions made through DTC, and may be charged to the DTC participant(s) receiving the ADSs being issued or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participants as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are charged to the holders as of the applicable ADS record date. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, holders as of the ADS record date will be invoiced for the amount of the ADS fees and charges and such ADS fees and charges may be deducted from distributions made to holders of ADSs. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC, and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs. In the case of (i) registration of ADS transfers, the ADS transfer fee will be payable by the ADS Holder whose ADSs are being transferred or by the person to whom the ADSs are transferred, and (ii) conversion of ADSs of one series for ADSs of another series, the ADS conversion fee will be payable by the Holder whose ADSs are converted or by the person to whom the converted ADSs are delivered.

In the event of refusal to pay the depositary fees, the depositary may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary fees from any distribution to be made to the ADS holder. Certain depositary fees and charges (such as the ADS services fee) may become payable shortly after the closing of the ADS offering. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary. You will receive prior notice of such changes. The depositary may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary agree from time to time.

Fees and Other Payments Made by the Depositary to Us

The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time. For the year ended December 31, 2019, the reimbursement we received from the depositary was nil.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

See “Item 10. Additional Information—B. Memorandum and Articles of Association” for a description of the rights of securities holders, which remain unchanged.

Use of Proceeds

The following “Use of Proceeds” information relates to the registration statement on Form F-1, as amended (File No. 333-234408) in relation to our initial public offering, which was declared effective by the SEC on January 28, 2020. We made our initial public offering on January 29, 2020 and completed the offering on February 3, 2020. In this offering, we issued and sold an aggregate of 1,333,360 ADSs, representing 1,333,360 Class A ordinary shares, at an initial offering price of US$12.00 per ADS.

The total expenses incurred for our company’s account in connection with our initial public offering were approximately US$5.0 million, which included US$1.4 million in underwriting discounts and commissions for the initial public offering and approximately US$3.6 million in other costs and expenses for our initial public offering. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities or our affiliates.

For the period from February 3, 2020, the date that we completed our initial public offering, to the date of this annual report, we have used (i) RMB5.0 million (US$0.7 million) of the net proceeds from our initial public offering to research studies in China and the U.S. and the development of new cancer screening and detection tests and technologies, (ii) RMB7.3 million (US$1.0 million) of the net proceeds from our initial public offering for the expansion of marketing and sales channels in China and our clinical laboratory expansion in the U.S., and (iii) RMB68.5 million (US$9.8 million) of the net proceeds from our initial public offering for general corporate purposes. None of the net proceeds from the initial public offering were paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities or our affiliates, except that we used approximately US$1,994,000 of the net proceeds to repay part of the principal and interest of the convertible loans we borrowed from Zhijun. The significant increase in the amount of net proceeds applied under item (iii) above compared to the disclosure in our registration statement on Form F-1, as amended, was primarily because we used RMB34.0 million (US$4.9 million) to repay part of the principal and interest of our outstanding loans (including the convertible loans we borrowed from Zhijun) and we used a portion of the net proceeds for our general corporate purposes to mitigate the negative impact of COVID-19 on our business.

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, as of December 31, 2019, our management has concluded that our disclosure controls and procedures were not effective as of December 31, 2019 because of the material weaknesses described below under “Management’s Annual Report on Internal Control over Financial Reporting.”

Management's Annual Report On Internal Control Over Financial Reporting

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report by our independent registered public accounting firm due to a transition period established by rules of the SEC for newly listed public companies.

Attestation report of the registered public accounting firm

Since we are an "emerging growth company" as defined under the JOBS Act, we are exempt from the requirement to comply with the auditor attestation requirements that our independent registered public accounting firm attest to and report on the effectiveness of our internal control structure and procedures for financial reporting.

Internal Control Over Financial Reporting

In connection with the preparation and external audit of our consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019, our auditors, an independent registered public accounting firm, noted two material weaknesses in our internal control over financial reporting.

The material weaknesses related to lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience in application of U.S. GAAP and SEC rules, and lack of financial reporting policies and procedures that are commensurate with U.S. GAAP and SEC reporting requirements. Neither we nor our independent registered public accounting firm undertook a comprehensive assessment of our internal control for purposes of identifying and reporting material weaknesses and other control deficiencies in our internal control over financial reporting. In light of the material weaknesses that were identified as a result of the limited procedures performed, we believe it is possible that, had we performed a formal assessment of our internal control over financial reporting or had our independent registered public accounting firm performed an audit of our internal control over financial reporting, additional control deficiencies would have been identified.

After identifying the material weaknesses, we implemented measures designed to improve our financial control over financial reporting through: (i) hiring additional qualified accounting and financial reporting personnel with U.S. GAAP and SEC reporting experience, (ii) obtaining advisory services from professional consultants with experience in the requirements of the Sarbanes Oxley Act of 2002 and internal audit guidance on SEC reporting, (iii) expanding the capabilities of our existing accounting and financial reporting personnel through continuous training and education in the accounting and reporting requirements under U.S. GAAP, and SEC rules and regulations, (iv) developing, communicating and implementing an accounting policy manual for our accounting and financial reporting personnel for our recurring transactions and period-end closing processes, and (v) establishing effective monitoring and oversight controls for non-recurring and complex transactions to ensure the accuracy and completeness of our company's consolidated financial statements and related disclosures.

Because such remediation measures were not fully implemented, our management has concluded that the material weaknesses still existed as of December 31, 2019. We expect to complete the measures discussed above and also to take actions to (i) continue to recruit experienced personnel with relevant past experience working on U.S. GAAP and SEC reporting, (ii) improve monitoring and oversight controls for non-recurring and complex transactions to ensure the accuracy and completeness of financial reporting and (iii) engage external experts to assist in non-recurring and complex transactions by the end of 2020 and will continue to implement measures to remediate our internal control deficiencies.

However, the implementation of these measures may not fully address the material weaknesses in our internal control over financial reporting. We are not able to estimate with reasonable certainty the costs that we will need to incur to implement these and other measures designed to improve our internal control over financial reporting.

The process of designing and implementing an effective financial reporting system is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a financial reporting system that is adequate to satisfy our reporting obligations. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—Two material weaknesses in our internal control over financial reporting have been identified, and if we fail to implement and maintain an effective system of internal controls over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud."

As a company with less than US$1.07 billion in revenue 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, in the assessment of the emerging growth company's ICFR. The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. We intend to choose to take advantage of the extended transition period. As a result of this election, our financial statements may not be comparable to other public companies that comply with the public company effective dates for these new or revised accounting standards.

Changes in Internal Control over Financial Reporting

Other than as described above, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F, which have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our Board of Directors has determined that Mr. Pu Xing, an independent director (under the standards set forth in Rule 5605(c)(2) of the NASDAQ and Rule 10A-3 under the Exchange Act), and the chairman of our Audit Committee, is our Audit Committee financial expert.

ITEM 16B. CODE OF ETHICS

Our Board of Directors has adopted a code of business conduct and ethics that applies to our all directors, officers and employees in October 2019. We have posted a copy of our code of business conduct and ethics on our website at https://investors.anpacbio.com/static-files/21d2b39d-29e7-4a19-878d-846206d70089, where you can obtain a copy without charge.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Ernst & Young Hua Ming LLP, our principal external auditors, for the periods indicated.

	Years Ended December 31,			
	2018		2019	
	RMB	US$	RMB	US$
	(in thousands)			
Audit fees[(1)]	604	85	4,438	637

(1) Audit fees include the aggregate fees billed in each of the fiscal period listed for professional services rendered by our independent public accountant in relation to the audit of our annual financial statements and services related to our initial public offering.

The policy of our audit committee is to pre-approve all audit services provided by Ernst & Young Hua Ming LLP as described above, other than those for *de minimis* services which are approved by the audit committee prior to the completion of the audit.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

We are a "foreign private issuer" (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs are listed on the NASDAQ Global Market. The NASDAQ rules provide that foreign private issuers may follow home country practice in lieu of the corporate governance requirements of the NASDAQ Stock Market LLC, subject to certain exceptions and requirements and except to the extent that such exemptions would be contrary to U.S. federal securities laws and regulations. The significant differences between our corporate governance practices and those followed by domestic companies under the NASDAQ rules are summarized as follows:

- shareholder approval for certain events, including the establishment or amendment of equity based compensation plans and arrangements and transactions involving issuances of 20% or more interest in our company;
- a majority of independent directors on our board of directors;
- a compensation committee and a nominating/corporate governance committee composed entirely of independent directors;
- an audit committee with a minimum of three members; and
- regularly scheduled executive sessions of independent directors.

Other than the above, we have followed and intend to continue to follow the applicable corporate governance standards under the NASDAQ rules.

As a result of our reliance on the corporate governance exemptions available to foreign private issuers, holders of our ADSs will not have the same protection afforded to shareholders of companies that are subject to all of NASDAQ Global Market corporate governance requirements.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to "Item 18. Financial Statements."

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	Third Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated herein by reference to Exhibit 3.2 to the registration statement on Form F-1 (File No. 333-234408) filed with the Securities and Exchange Commission on October 31, 2019)
2.1	Registrant's Specimen American Depositary Receipt (included in Exhibit 2.3)
2.2	Registrant's Specimen Certificate for Class A Ordinary Shares (incorporated herein by reference to Exhibit 4.2 to the registration statement on Form F-1 (File No. 333-234408), as amended, initially filed with the Securities and Exchange Commission on November 15, 2019)
2.3	Form of Deposit Agreement, among the Registrant, the depositary and owners and holders of American Depositary Receipts (incorporated herein by reference to Exhibit (a) to the registration statement on Form F-6 (File No. 333-234548), as amended, initially filed with the Securities and Exchange Commission on November 7, 2019).
2.4	English Translation of Shareholders Agreement between the Registrant and other parties thereto dated June 30, 2017 (incorporated herein by reference to Exhibit 4.4 to the registration statement on Form F-1 (File No. 333-234408), as amended, initially filed with the Securities and Exchange Commission on October 31, 2019)
2.5	English Translation of Shareholders Agreement between the Registrant and other parties thereto dated August 17, 2017 (incorporated herein by reference to Exhibit 4.5 to the registration statement on Form F-1 (File No. 333-234408), as amended, initially filed with the Securities and Exchange Commission on October 31, 2019)
2.6	Form of Underwriters' Warrants (incorporated herein by reference to Exhibit 4.6 to the registration statement on Form F-1 (File No. 333-234408), as amended, initially filed with the Securities and Exchange Commission on December 5, 2019)
2.7*	Description of Securities
4.1	Form of Indemnification Agreement between the Registrant and its directors and executive officers (incorporated herein by reference to Exhibit 10.1 to the registration statement on Form F-1, as amended (File No. 333-234408), initially filed with the Securities and Exchange Commission on October 31, 2019)
4.2	English translation of the Form of Employment Agreement between the Registrant and its executive officerss (incorporated herein by reference to Exhibit 10.2 to the registration statement on Form F-1, as amended (File No. 333-234408), initially filed with the Securities and Exchange Commission on October 31, 2019)
4.3	2019 Share Incentive Plan of the Registrant (incorporated herein by reference to Exhibit 10.3 to the registration statement on Form F-1, as amended (File No. 333-234408), initially filed with the Securities and Exchange Commission on October 31, 2019)
4.4*	English translation of the Supplemental Convertible Loan Agreement entered into by and among Jiaxing Zhijun Investment Management Co., Ltd., Dr. Chris Chang Yu and the Registrant dated April 29, 2019
4.5	Master Services Agreement and Service Order between the Registrant and NASDAQ Capital Markets Advisory LLC dated February 28, 2019 (incorporated herein by reference to Exhibit 10.5 to the registration statement on Form F-1, as amended, (File No. 333-234408), initially filed with the Securities and Exchange Commission on October 31, 2019)

8.1*	List of Principal Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 99.1 to the registration statement on Form F-1, as amended, (File No. 333-234408), initially filed with the Securities and Exchange Commission on October 31, 2019)
12.1*	Certification by Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	Certification by Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	Certification by Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**	Certification by Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
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 with this annual report on Form 20-F

** Furnished with this annual report on Form 20-F

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.

By:	/s/ Chris Chang Yu
Name:	Dr. Chris Chang Yu
Title:	Chairman of the Board of Directors and Chief Executive Officer

Date: May 15, 2020

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED FINANCIAL STATEMENTS
For the years ended December 31, 2018 and 2019

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of AnPac Bio-Medical Science Co., Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of AnPac Bio-Medical Science Co., Ltd. (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of comprehensive loss, shareholders' deficit and cash flows for each of the two years in the period ended December 31, 2019, and 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 at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with the U.S. generally accepted accounting principles.

Adoption of New Accounting Standards

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for investments in certain equity securities in the year ended December 31, 2019.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 in accordance with the standards of PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young Hua Ming LLP

We have served as the Company's auditor since 2018.

Shanghai, the People's Republic of China

May 15, 2020

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands of Renminbi ("RMB") and U.S. dollars ("US$"), except for number of shares and per share data)

	Notes	As of December 31,		
		2018	2019	2019
		RMB	RMB	US$
ASSETS				
Current assets:				
Cash and cash equivalents		12,887	6,125	880
Advances to suppliers		2,807	1,093	157
Accounts receivable, net of allowance for doubtful accounts of RMB198 and RMB177 (US$25) as of December 31, 2018 and 2019 respectively		2,749	1,295	186
Amounts due from related parties	14	269	555	80
Inventories		62	313	45
Other current assets	3	2,078	12,790	1,837
Total current assets		20,852	22,171	3,185
Property and equipment, net	4	18,141	18,868	2,710
Land use rights, net	5	1,222	1,194	172
Intangible assets, net	6	5,406	5,200	747
Goodwill		2,223	2,223	319
Long-term investments	7	3,456	2,326	334
Other assets		1,462	1,000	144
TOTAL ASSETS		52,762	52,982	7,611
LIABILITIES AND SHAREHOLDERS' DEFICIT				
Current liabilities:				
Short-term debt	8	25,961	38,568	5,540
Accounts payable		1,618	1,800	259
Advance from customers		4,313	2,450	352
Amounts due to related parties	14	28,687	4,597	660
Accrued expenses and other current liabilities	9	10,859	18,782	2,698
Total current liabilities		71,438	66,197	9,509
Deferred tax liabilities	12	1,222	1,134	163
Other long-term liabilities		2,495	1,575	226
TOTAL LIABILITIES		75,155	68,906	9,898
Commitments and contingencies	16			

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED BALANCE SHEETS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

	Notes	As of December 31, 2018 RMB	As of December 31, 2019 RMB	As of December 31, 2019 US$
Shareholders' deficit:				
Ordinary shares (US$0.01 par value per share; 100,000,000 and Nil shares authorized as of December 31, 2018 and 2019; 8,596,900 and Nil shares issued and outstanding as of December 31, 2018 and 2019, respectively)	1	569	—	—
Class A Ordinary shares (US$0.01 par value per share; Nil and 70,000,000 shares authorized as of December 31, 2018 and 2019; Nil and 7,004,900 shares issued and outstanding as of December 31, 2018 and 2019, respectively)	1	—	466	67
Class B Ordinary shares (US$0.01 par value per share; Nil and 30,000,000 shares authorized as of December 31, 2018 and 2019; Nil and 2,863,100 shares issued and outstanding as of December 31, 2018 and 2019, respectively)	1	—	191	27
Additional paid-in capital		152,367	257,736	37,021
Accumulated deficits		(174,353)	(276,476)	(39,712)
Accumulated other comprehensive (loss) income	10	(976)	2,110	303
Total AnPac Bio-Medical Science Co., Ltd. shareholders' deficit		(22,393)	(15,973)	(2,294)
Noncontrolling interests		—	49	7
Total shareholders' deficit		(22,393)	(15,924)	(2,287)
TOTAL LIABILITIES AND SHAREHOLDERS' DEFICIT		52,762	52,982	7,611

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

	Notes	Year Ended December 31, 2018 RMB	Year Ended December 31, 2019 RMB	Year Ended December 31, 2019 US$
Revenues:				
Cancer screening and detection tests (including RMB639 and RMB683 (US$97) from related parties for years ended December 31, 2018 and 2019, respectively)		9,557	10,381	1,491
Physical checkup packages		693	464	67
Total revenues		10,250	10,845	1,558
Cost of revenues		(5,672)	(6,047)	(869)
Gross Profit		4,578	4,798	689
Operating expenses:				
Selling and marketing expenses (including RMB700 and RMB2,199 (US$316) from related parties for years ended December 31, 2018 and 2019, respectively)		(9,827)	(13,633)	(1,958)
Research and development expenses		(10,106)	(9,839)	(1,413)
General and administrative expenses		(28,847)	(70,781)	(10,167)
Other operating income		593	373	54
Loss from operations		(43,609)	(89,082)	(12,795)
Non-operating income and expenses:				
Interest expense, net (including RMB824 and RMB 1,579 (US$227) from related parties for years ended December 31, 2018 and 2019, respectively)		(925)	(2,609)	(375)
Foreign exchange loss, net		(2,776)	(3,219)	(461)
Share of net (loss) gain in equity method investments		(441)	190	27
Other income (expense), net		5,256	(7,119)	(1,023)
Loss before income taxes		(42,495)	(101,839)	(14,627)
Income tax benefit	12	199	218	31
Net loss		(42,296)	(101,621)	(14,596)
Net loss attributable to noncontrolling interests		(233)	(561)	(81)
Net loss attributable to ordinary shareholders		(42,063)	(101,060)	(14,515)
Loss per share:				
Ordinary shares - basic and diluted	17	(4.93)	(11.31)	(1.62)
Weighted average shares outstanding used in calculating basic and diluted loss per share				
Ordinary shares - basic and diluted	17	8,524,100	8,937,600	8,937,600
Other comprehensive income, net of tax:				
Fair value change relating to Company's own credit risk on convertible loan		—	(955)	(137)
Foreign currency translation differences		797	2,978	428
Total comprehensive loss		(41,499)	(99,598)	(14,305)
Total comprehensive loss attributable to noncontrolling interests		(233)	(561)	(81)
Total comprehensive loss attributable to ordinary shareholders		(41,266)	(99,037)	(14,224)

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' DEFICIT
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

	Attributable to AnPac Bio- Medical Science Co., Ltd. Shareholders											
	Ordinary Shares		Class A Ordinary Shares		Class B Ordinary Shares		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income (Note 10)	Total AnPacBio-Medical Science Co., Ltd. Shareholders' Equity (Deficit)	Noncontrolling interest	Total Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount						
Balance at January 1, 2018	8,524,000	564	—	—	—	—	143,057	(132,290)	(1,773)	9,558	(61)	9,497
Net loss	—	—	—	—	—	—	—	(42,063)	—	(42,063)	(233)	(42,296)
Issuance of ordinary shares	93,700	6	—	—	—	—	2,555	—	—	2,561	—	2,561
Foreign currency translation differences	—	—	—	—	—	—	—	—	797	797	—	797
Acquisition of noncontrolling interests	—	—	—	—	—	—	(454)	—	—	(454)	294	(160)
Repurchase and cancellation of shares	(20,800)	(1)	—	—	—	—	(727)	—	—	(728)	—	(728)
Share-based compensation (Note 11)	—	—	—	—	—	—	7,936	—	—	7,936	—	7,936
Balance at December 31, 2018	8,596,900	569	—	—	—	—	152,367	(174,353)	(976)	(22,393)	—	(22,393)
Cumulative effect of the adoption of ASU 2016-01 (Note 10)	—	—	—	—	—	—	—	(1,063)	1,063	—	—	—
Balance at January 1, 2019	8,596,900	569	—	—	—	—	152,367	(175,416)	87	(22,393)	—	(22,393)
Re-designation of authorized ordinary shares (Note 1)	(8,596,900)	(569)	5,733,800	378	2,863,100	191	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	—	(101,060)	—	(101,060)	(561)	(101,621)
Issuance of ordinary shares	—	—	1,347,200	93	—	—	72,509	—	—	72,602	—	72,602
Fair value change relating to Company's own credit risk on convertible loan	—	—	—	—	—	—	—	—	(955)	(955)	—	(955)
Foreign currency translation differences	—	—	—	—	—	—	—	—	2,978	2,978	—	2,978
Capital contribution from noncontrolling interest holders	—	—	—	—	—	—	—	—	—	—	610	610
Repurchase and cancellation of shares	—	—	(76,100)	(5)	—	—	5	—	—	—	—	—
Share-based compensation (Note 11)	—	—	—	—	—	—	32,855	—	—	32,855	—	32,855
Balance at December 31, 2019	—	—	7,004,900	466	2,863,100	191	257,736	(276,476)	2,110	(15,973)	49	(15,924)
Balance at December 31, 2019 (US$)		—		67		27	37,021	(39,712)	303	(2,294)	7	(2,287)

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

	Year Ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Operating activities:			
Net loss	(42,296)	(101,621)	(14,596)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	3,144	2,664	383
Share of net loss (gain) in equity method investments	441	(190)	(27)
Bad debt expense	452	285	41
(Gains) losses on disposal of land use rights and property and equipment	(4,955)	4	1
Foreign exchange loss, net	2,473	4,133	594
Share-based compensation	7,936	32,855	4,719
Fair value loss on convertible loans	784	5,296	761
Inventory provision	—	304	44
Impairment of long-term investment	—	1,320	190
Changes in operating assets and liabilities:			
Advances to suppliers	(1,646)	1,714	246
Accounts receivable	(1,095)	1,286	185
Inventories	178	(555)	(80)
Amounts due from related parties	13	(286)	(41)
Other current assets	670	(2,875)	(413)
Other assets	(231)	462	66
Accounts payable	(843)	182	26
Amounts due to related parties	960	1,060	152
Advance from customers	2,328	(1,863)	(269)
Accrued expenses and other current liabilities	1,412	8,233	1,183
Other long-term liabilities	(784)	(920)	(132)
Deferred tax liabilities	(88)	(88)	(13)
Net cash used in operating activities	(31,147)	(48,600)	(6,980)
Investing activities:			
Purchases of property and equipment	(2,417)	(2,790)	(401)
Purchases of intangible assets	(430)	(371)	(53)
Proceeds from disposal of land use rights	5,257	—	—
Cash paid for business combination, net of cash acquired	(3,540)	—	—
Proceeds from short-term investments	12,000	20,929	3,006
Purchase of short-term investments	(12,000)	(20,929)	(3,006)
Purchase of long-term investments	(1,550)	(300)	(43)
Net cash used in investing activities	(2,680)	(3,461)	(497)

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

	Year Ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Financing activities:			
Proceeds from short-term borrowings	26,645	24,300	3,490
Payment for short-term borrowings	(14,700)	(18,300)	(2,629)
Repayment of related party loan	(350)	(150)	(22)
Capital contribution from noncontrolling interest holders	—	610	88
Advance from investors	25,000	—	—
Repurchase of shares	(728)	—	—
Proceeds from issuance of ordinary shares	404	47,602	6,838
Payment for initial public offering costs	—	(7,954)	(1,143)
Net cash generated from financing activities	36,271	46,108	6,622
Effect of exchange rate changes on cash and cash equivalents	(969)	(809)	(116)
Net increase (decrease) in cash and cash equivalents	1,475	(6,762)	(971)
Cash and cash equivalents at beginning of year	11,412	12,887	1,851
Cash and cash equivalents at end of year	12,887	6,125	880
Supplemental disclosure of cash flow information:			
Interest paid	891	1,028	148
Supplemental disclosure of non-cash investing and financing activities:			
Purchase of ordinary shares when registered included in advance from investors	2,157	25,000	3,591
Purchase of property and equipment included in accrued expenses and other current liabilities	28	15	2

The accompanying notes are an integral part of these consolidated financial statements.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

1. ORGANIZATION AND PRINCIPAL ACTIVITIES

AnPac Bio-Medical Science Co., Ltd. (the "Company") was incorporated in the British Virgin Islands (the "BVI") in January 2010. The Company and its subsidiaries (collectively, the "Group") are engaged in marketing and selling a multi-cancer screening and detection test that uses innovative, patented cancer differentiation analysis (the "CDA") technology and proprietary cancer-detection devices in the People's Republic of China (the "PRC" or "China"). Dr. Chris Chang Yu is the Founder of the Group (the "Founder").

In preparation of its initial public offering in the United States, the Company had undergone a reorganization in 2019. On October 29, 2019, the board of directors approved the re-designation of the authorized share capital of 100,000 ordinary shares to 71,369 Class A ordinary shares and 28,631 Class B ordinary shares. On October 31, 2019, the board of directors approved the increase of authorized share capital of the Class A and Class B ordinary shares to 700,000 and 300,000, respectively. Holders of Class A ordinary shares and Class B ordinary shares have the same rights, except for voting and conversion rights. Each Class A ordinary share is entitled to one vote; and each Class B ordinary share is entitled to ten votes and is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances.

On October 31, 2019, the board of directors approved a share split of 1-for-100, pursuant to which the authorized share capital of the Class A and Class B ordinary shares would increase to 70,000,000 and 30,000,000, respectively, with a par value of US$0.01.

The registration of the above changes was completed on November 12, 2019 and the ordinary shares have been retrospectively adjusted accordingly.

On January 30, 2020, the Company completed an initial public offering ("IPO") on the Nasdaq Stock Exchange. The Company offered 1,333,360 ADSs representing 1,333,360 Class A ordinary shares at USD12.00 per ADS.

As of the date of this report, the details of the Company's principal subsidiaries are as follows:

Major subsidiaries	Percentage of Ownership	Date of Incorporation	Place of Incorporation	Major Operation
Changhe Bio-Medical Technology (Yangzhou) Co., Ltd.	100%	March 2010	the PRC	Cancer screening and detection tests
Changwei System Technology (Shanghai) Co., Ltd.	100%	March 2011	the PRC	Research and development
AnPac Bio-Medical Technology (Lishui) Co., Ltd.	100%	October 2012	the PRC	Cancer screening detection tests and device manufacturing
Shanghai Xinshenpai Technology Co., Ltd.	100%	October 2013	the PRC	Cancer screening and detection tests
AnPac Bio-Medical Technology (Shanghai) Co., Ltd.	100%	April 2014	the PRC	Cancer screening and detection tests
AnPac Technology USA Co., Ltd. ("AnPac US")	100%	September 2015	the U.S.	Clinical trials for research on cancer screening and detection tests
Lishui AnPac Medical Laboratory Co., Ltd.	100%	August 2016	the PRC	Cancer screening and detection tests
Shiji (Hainan) Medical Technology Ltd.	100%	November 2017	the PRC	Cancer screening and detection tests
Penghui Health Management Co., Ltd.	100%	May 2018	the PRC	Cancer screening and detection tests

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES

(a) Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America ("U.S. GAAP").

(b) Principles of consolidation

The accompanying consolidated financial statements include the financial statements of the Company and its subsidiaries. All intercompany transactions and balances are eliminated upon consolidation.

(c) Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Areas where management uses subjective judgement include, but are not limited to allowance for doubtful accounts, share-based compensation, deferred tax and uncertain tax position, purchase price allocation, valuation of convertible loans, useful lives of intangible assets and property and equipment, and impairment of long-lived assets, goodwill and long-term investments. Changes in facts and circumstances may result in revised estimates. Actual results could differ from those estimates, and as such, differences could be material to the consolidated financial statements.

(d) Foreign currency

The functional currency of the Company and AnPac US is the United States dollar and its reporting currency is Renminbi. The functional currency of the Company's PRC subsidiaries is the RMB as determined based on the criteria of Accounting Standards Codification ("ASC") 830, *Foreign Currency Matters.*

The financial statements of the Company and AnPac US are translated from the functional currency to the reporting currency, RMB. Transactions denominated in foreign currencies are re-measured into the functional currency at the exchange rates prevailing on the transaction dates. Monetary assets and liabilities denominated in foreign currencies are re-measured at the exchange rates prevailing at the balance sheet date. Non-monetary items that are measured in terms of historical costs in foreign currency are re-measured using the exchange rates at the dates of the initial transactions. Exchange gains and losses are included in the consolidated statements of comprehensive loss.

The Group uses the average exchange rate for the year and the exchange rate at the balance sheet date to translate the operating results and financial position, respectively. Translation differences are recorded in accumulated other comprehensive loss, a component of shareholders' deficit.

(e) Convenience translation

Amounts in US$ are presented for the convenience of the reader and are translated at the noon buying rate of US$1.00 to RMB6.9618 on December 31, 2019, representing the noon buying rate set forth in the H.10 statistical release of the U.S. Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be converted, realized or settled into US$ at such rate or at any other rate.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(f) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and demand deposits placed with banks which are unrestricted as to withdrawal or use and have original maturities less than three months. All highly liquid investments with a stated maturity of 90 days or less from the date of purchase are classified as cash equivalents.

(g) Short-term investments

All highly liquid investments with original maturities of greater than three months, but less than 12 months, are classified as short-term investments. Investments that are expected to be realized in cash during the next 12 months are also included in short-term investments.

The Group accounts for short-term debt instruments in accordance with ASC 320, *Investments—Debt Securities* ("ASC 320"). The Group classifies the short-term investments in debt as "held-to-maturity", "trading" or "available-for-sale", whose classification determines the respective accounting methods stipulated by ASC 320. Dividend and interest income, including amortization of the premium and discount arising at acquisition, for all categories of investments in securities are included in earnings. Any realized gains or losses on the sale of the short-term investments are determined on a specific identification method, and such gains and losses are reflected in earnings during the period in which gains or losses are realized.

The securities that the Group has positive intent and ability to hold to maturity are classified as held-to-maturity securities and stated at amortized cost. For individual securities classified as held-to-maturity securities, the Group evaluates whether a decline in fair value below the amortized cost basis is other-than-temporary in accordance with ASC 320. Other-than-temporary impairment loss is recognized in the consolidated statements of comprehensive loss equal to the entire excess of the debt security's amortized cost basis over its fair value at the balance sheet date of the reporting period for which the assessment is made.

The Group's short-term held-to-maturity investments consisted of wealth management products as the Group has the positive intent and ability to hold those securities to maturity. For the years ended December 31,2018 and 2019, the Group recorded interest income from its short-term investments of RMB158 and RMB39 (US$6) in the consolidated statements of comprehensive loss, respectively.

(h) Accounts receivable, net of allowance for doubtful accounts

Accounts receivable are recorded at their invoiced amounts, net of allowances for doubtful accounts. An allowance for doubtful accounts is recorded when the collection of the full amount is no longer probable. In evaluating the collectability of receivable balances, the Group considers specific evidence, including aging of the receivable, the customer's payment history, its current creditworthiness and current economic trends. Accounts receivable are written off after all collection efforts have ceased. The Group regularly reviews the adequacy and appropriateness of the allowance for doubtful accounts.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(h) Accounts receivable, net of allowance for doubtful accounts (continued)

Movement in the allowances for doubtful debts were as follows:

	Year Ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Balance at beginning of year	18	198	28
Additional provision	334	168	24
Write-offs	(154)	(189)	(27)
Balance at end of year	198	177	25

(i) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost of inventories are determined using the first in first out method. The Group records inventory reserves for obsolete and slow-moving inventory.

(j) Property and equipment

Property and equipment are stated at cost less accumulated depreciation and any recorded impairment. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, as follows:

Category	Estimated useful life
Leasehold improvements	Over the shorter of the lease term or estimated useful lives
Buildings	20 years
Furniture, fixtures and equipment	3-5 years
Motor vehicles	5 years

Repair and maintenance costs are charged to expense as incurred, whereas the costs of betterments that extend the useful life of property and equipment are capitalized as additions to the related assets. Retirements, sale and disposals of assets are recorded by removing the cost and accumulated depreciation with any resulting gain or loss reflected in the consolidated statements of comprehensive loss.

Direct costs that are related to the construction of property and equipment and incurred in connection with bringing the assets to their intended use are capitalized as construction in progress. Construction in progress is transferred to specific property and equipment, and the depreciation of these assets commences when the assets are ready for their intended use.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(k) Long-term investments

The Group's long-term investments include equity method investments and equity investments without readily determinable fair values.

Investments in entities in which the Group can exercise significant influence but does not own a majority equity interest or control are accounted for using the equity method of accounting in accordance with ASC 323, *Investments-Equity Method and Joint Ventures* ("ASC 323"). Under the equity method, the Group initially records its investment at cost and the difference between the cost of the equity investee and the amount of the underlying equity in the net assets of the equity investee is accounted for as if the investee were a consolidated subsidiary. The equity method goodwill is not subsequently amortized and is not tested for impairment under ASC 350. The share of earnings or losses of the investee are recognized in the consolidated statements of comprehensive loss. Equity method adjustments include the Group's proportionate share of investee income or loss, adjustments to recognize certain differences between the Group's carrying value and its equity in net assets of the investee at the date of investment, impairments, and other adjustments required by the equity method. The Group assesses its equity investment for other-than-temporary impairment by considering factors as well as all relevant and available information including, but not limited to, current economic and market conditions, the operating performance of the investees including current earnings trends, the general market conditions in the investee's industry or geographic area, factors related to the investee's ability to remain in business, such as the investee's liquidity, debt ratios, and cash burn rate and other company-specific information.

Investments in equity securities without readily determinable fair values are measured at cost minus impairment adjusted by observable price changes in orderly transactions for the identical or a similar investment of the same issuer. These investments are measured at fair value on a nonrecurring basis when there are events or changes in circumstances that may have a significant adverse effect. An impairment loss is recognized in the consolidated statements of comprehensive loss equal to the amount by which the carrying value exceeds the fair value of the investment. Prior to the adoption of ASU 2016-01 on January 1, 2019, these investments were accounted for using the cost method of accounting, measured at cost less other-than-temporary impairment.

In the years ended December 31, 2018 and 2019, the Group has recognized an impairment on its equity investment in Jiangsu Anpac Health Management Co., Ltd. of Nil and RMB1,320 (US$190).

(l) Land use right, net

All land in the PRC is owned by the PRC government. The PRC government may sell land use rights for a specified period of time. Land use rights represent lease prepayments to the PRC government and are carried at cost less accumulated amortization. Land use rights are amortized on a straight-line basis over the terms of the land use right of 50 years.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(m) Business combinations

The Group accounts for all business combinations under the purchase method in accordance with ASC 805, *Business Combinations*. The cost of an acquisition is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued. The costs directly attributable to the acquisition are expensed as incurred. Identifiable assets, liabilities and contingent liabilities acquired or assumed are measured separately at their fair value as of the acquisition date, irrespective of the extent of any noncontrolling interests. The excess of (i) the total of the cost of the acquisition, fair value of the noncontrolling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree is recorded as goodwill. If the cost of acquisition is less than the fair value of the identifiable net assets of the acquiree, the difference is recognized directly in earnings.

The determination and allocation of fair values to the identifiable net assets acquired, liabilities assumed and noncontrolling interest is based on various assumptions and valuation methodologies requiring considerable judgment. The most significant variables in these valuations are discount rates, terminal values, the number of years on which to base the cash flow projections, as well as the assumptions and estimates used to determine the cash inflows and outflows. The Group determines discount rates to be used based on the risk inherent in the acquiree's current business model and industry comparisons. Although the Group believes that the assumptions applied in the determination are reasonable based on information available at the date of acquisition, actual results may differ from forecasted amounts and the differences could be material.

(n) Intangible assets

Intangible assets with finite lives are carried at cost less accumulated amortization. All intangible assets with finite lives are amortized using the straight-line method over the estimated useful lives.

Intangible assets have estimated useful lives from the date of purchase as follows:

Category	Estimated useful life
Software	3 years
Medical license	15 years

(o) Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the identifiable assets acquired less liabilities assumed of an acquired business. The Group's goodwill at December 31, 2018 and 2019 was related to its business acquisition in November 2017. Goodwill acquired in a business combination are not amortized, but instead tested for impairment at least annually, or more frequently if certain circumstances indicate a possible impairment may exist.

In accordance with ASC 350-20, *Intangibles-Goodwill and Other, Goodwill*, ("ASC 350-20") the Group has assigned and assessed goodwill for impairment at the reporting unit level. A reporting unit is an operating segment or one level below the operating segment. The Group has determined that it has one reporting unit, which is also its only reportable segment.

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(o) Goodwill (continued)

The Group has the option to first assess qualitative factors to determine whether it is necessary to perform the two-step test in accordance with ASC 350-20. If the Group believes, as a result of the qualitative assessment, that it is more-likely-than-not that the fair value of the reporting unit is less than its carrying amount, the two-step quantitative impairment test described above is required. Otherwise, no further testing is required. In the qualitative assessment, the Group considers primary factors such as industry and market considerations, overall financial performance of the reporting unit, and other specific information related to the operations. In performing the two-step quantitative impairment test, the first step compares the carrying amount of the reporting unit to the fair value of the reporting unit based on either quoted market prices of the ordinary shares or estimated fair value using a combination of the income approach and the market approach. If the fair value of the reporting unit exceeds the carrying value of the reporting unit, goodwill is not impaired, and the Group is not required to perform further testing. If the carrying value of the reporting unit exceeds the fair value of the reporting unit, then the Group must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. The fair value of the reporting unit is allocated to its assets and liabilities in a manner similar to a purchase price allocation in order to determine the implied fair value of the reporting unit goodwill. If the carrying amount of the goodwill is greater than its implied fair value, the excess is recognized as an impairment loss.

In the years ended December 31, 2018 and 2019, the Group performed a qualitative assessment for the reporting unit. Based on the requirements of ASC 350-20, the Group evaluated all relevant qualitative and quantitative factors, weighed all factors in their entirety and concluded that it was not more-likely-than-not that the fair value of the reporting unit was less than its carrying amount. Therefore, no goodwill impairment was recognized as of December 31, 2018 and 2019.

(p) Impairment of long-lived assets other than goodwill

The Group evaluates its long-lived assets, including property and equipment and intangibles with finite lives, for impairment whenever events or changes in circumstances, such as a significant adverse change to market conditions that will impact the future use of the assets, indicate that the carrying amount of an asset may not be fully recoverable. When these events occur, the Group evaluates the recoverability of long-lived assets by comparing the carrying amount of the assets to the future undiscounted cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flows is less than the carrying amount of the assets, the Group recognizes an impairment loss based on the excess of the carrying amount of the assets over their fair value. Fair value is generally determined by discounting the cash flows expected to be generated by the assets, when the market prices are not readily available. The adjusted carrying amount of the assets become new cost basis and are depreciated over the assets' remaining useful lives. Long-lived assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(q) Fair value of financial instruments

The Group applies ASC 820, *Fair Value Measurements and Disclosures*, ("ASC 820"). ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements.

ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Other inputs that are directly or indirectly observable in the marketplace.

Level 3—Unobservable inputs which are supported by little or no market activity.

ASC 820 describes three main approaches to measuring the fair value of assets and liabilities: (1) market approach; (2) income approach; and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

The Group's financial instruments include cash and cash equivalents, accounts receivables, accounts payable, other receivables, other payables and short-term debt. The carrying values of these financial instruments approximate their fair values due to their short-term maturities.

The Company elected the fair value option to account for its convertible loans. The fair value of the convertible loans as of December 31, 2018 and 2019 was RMB17,961 and RMB24,568 (US$3,529), calculated using the binomial tree model based on probability of remaining as straight debt using discounted cash flow and equity based on the premium conversion ratio of 25%, respectively. The convertible loans are classified as level 3 instruments as the valuation was determined based on unobservable inputs which are supported by little or no market activity and reflect the Group's own assumptions in measuring fair value. Significant inputs used in developing the fair value of the convertible loans include time to maturity, risk-free interest rate, straight debt discount rate, probability to convert and expected timing of conversion. Refer to Note 8 for additional information. Prior to the adoption of ASU 2016-01 on January 1, 2019, fair value changes relating to the Company's own credit risks of the convertible bonds accounted for under fair value option were recognized together with the total changes in fair value in the consolidated statement of comprehensive loss. After the adoption of ASU 2016-01, such fair value changes related to the Company's own credit risks are recognized separately in accumulated other comprehensive loss. There was decrease to beginning retained deficits of RMB1,063 and increase to accumulated other comprehensive income of RMB1,063 in consolidated statements of shareholders' deficits as a result of applying the new accounting standard.

As the inputs used in developing the fair value for level 3 instruments are unobservable, and require significant management estimate, a change in these inputs could result in a significant change in the fair value measurement.

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(r) Revenue recognition

Effective January 1, 2017, the Group early adopted ASC 606, *Revenue from Contracts with Customers* and subsequent amendments to the initial guidance or implementation guidance issued between August 2015 and December 2016 within ASU 2015-14, ASU 2016-08, ASU 2016-10, ASU 2016-12 and ASU 2016-20 (collectively, "ASC 606"). The transition adjustment using modified retrospective method recorded in 2017 beginning retained earnings was immaterial.

The Group derives its revenues principally from customers through the Group's cancer screening and detection test and physical checkup package services. Revenue is recognized when the Group satisfies the performance obligations in an amount of consideration to which the Group expects to be entitled to in exchange for those services. The Group evaluates the presentation of revenue on a gross or net basis based on whether it controls the services provided to customers and is the principal (i.e. "gross"), or the Group arranges for other parties to provide the service to the customers and is an agent (i.e. "net"). The Group presents value-added taxes as a reduction from revenues.

Revenue from cancer screening and detection tests

Revenue from cancer screening and detection test are primarily generated through the sales of the Group's cancer screening and detection tests based on CDA technology and other cancer screening and detection technologies, such as biomarker-based tests, to its customers i.e. corporations and life insurance companies. A contract exists when the master service agreement has been executed and the customer submitting a service request, which is a placed order. The Group's contracts have a single performance obligation which is satisfied upon rendering of the cancer screening and detection tests and delivery of the cancer screening and detection test results to the customer. The Group acts as the principal as it controls the cancer screening and detection tests before it is transferred to the customer and records revenue on a gross basis at a point in time, when the cancer screening and detection test results are delivered to the customer.

Revenue from physical checkup packages

The Group facilitates corporations and life insurance companies to procure physical checkup package services for their employees and policy holders, respectively, from third-party physical checkup package service providers. The Group enters into contracts with corporations and life insurance companies and physical checkup service providers. The Group considers both the corporations and life insurance companies and the third-party physical checkup package service providers as its customers in this type of transaction. The Group's performance obligation is to facilitate the corporations and life insurance companies and the third-party physical checkup package service providers to complete the purchase of physical checkup package services, which is not controlled by the Group prior to being transferred to the corporations and life insurance companies. Therefore, the Group fulfills its performance obligation at a point in time when the employees and policy holders of corporations and life insurance companies, respectively, complete the physical checkups and the Group records the net amount that it retains from such completed transaction as revenue.

The Group also enters into arrangements to deliver both cancer screening and detection tests and physical checkup package services. The Group is the principal for the cancer screening and detection tests and the agent for physical checkup package services. Revenues for cancer screening and detection tests and physical checkup are both recognized at a point in time when the performance obligation is satisfied upon delivery of the cancer screening and detection test results to the end customers and completion of physical checkup respectively. As the Group acts as both the principal and agent in the arrangement, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

All revenues are generated in the PRC.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(r) Revenue recognition (continued)

Contract balances

The payment terms and conditions within the Group's contracts vary by the type of services and the customers.

Contract assets relate to the Group's conditional right to consideration for completed performance obligations under the contract. Accounts receivable are recorded when the right to consideration becomes unconditional. The Group does not have contract assets for the years presented.

In instances where the timing of revenue recognition differs from the timing of invoicing, the Group has determined that its contracts generally do not include a significant financing component.

Contract liabilities represent considerations received from corporations and life insurance companies in advance of satisfying the Group's performance obligations under the contract, which are presented in "advance from customers" in the consolidated balance sheets. Revenue recognized that was included in contract liabilities at the beginning of the period was RMB503 and RMB2,700 (US$388) for the years ended December 31, 2018 and 2019, respectively.

The following table reflects the changes in contract liabilities as of December 31, 2018 and 2019:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Contract liabilities	4,313	2,450	352

Contract liabilities decreased by RMB1,863 (US$269), due to the decrease in consideration received by corporations and life insurance companies in the normal course of business.

PRC Value-Added Taxes and surcharges

Starting from May 2016, the services of the Group are subject to 6% of Value-Added Taxes. The Group is subject to education surtax and urban maintenance and construction tax, on the services provided in the PRC.

Practical expedients

The Group has applied the following practical expedients:

(i) The transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied has not been disclosed, as substantially all of the Group's contracts have a duration of one year or less.

(ii) The Group recognizes incremental costs to obtain a contract as expenses when incurred because the amortization period would be one year or less. These costs are recorded within sales and marketing expenses.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(s) Costs of revenues

Costs of revenues consists of staff costs, outsourced testing costs, blood sample taking costs, medical consumable costs, share-based compensation and depreciation of CDA equipment.

(t) Research and development expenses

Research and development expenses primarily are comprised of costs incurred in performing research and development activities, including related personnel and consultant's salaries, benefits, share-based compensation and related costs, raw materials and supplies for internally-developed product candidates and external costs of outside vendors engaged to conduct clinical development activities and trials. The Group expenses research and development expenses as they are incurred.

(u) Government grants

Government grants include financial incentives in the form of cash subsidies that involve no conditions or continuing performance obligations of the Group. Government grants are recognized as other non-operating income upon receipt. For government grants related to assets in the form of land use rights, the government grants are recorded as deferred income when received. The deferred income is then recognized in other income, net in the consolidated statement of comprehensive loss on a systematic basis over the useful life of the related asset.

(v) Leases

Leases are classified at the inception date as either a capital lease or an operating lease. The Group assesses a lease to be a capital lease if any of the following conditions exist: (a) ownership is transferred to the lessee by the end of the lease term, (b) there is a bargain purchase option, (c) the lease term is at least 75% of the property's estimated remaining economic life, or (d) the present value of the minimum lease payments at the beginning of the lease term is 90% or more of the fair value of the leased property to the lessor at the inception date. A capital lease is accounted for as if there was an acquisition of an asset and an occurrence of an obligation at the inception of the lease. The Group has no capital leases for the years presented.

All other leases are accounted for as operating leases wherein rental payments are expensed on a straight-line basis over the periods of their respective lease terms. The Group leases office space, storage unit, research laboratory, employee accommodation and manufacturing space under operating lease agreements. Certain of the lease agreements contain rent holidays. Rent holidays are considered in determining the straight-line rent expense to be recorded over the lease term. The lease term begins on the date of initial possession of the lease property for purposes of recognizing lease expense on straight-line basis over the term of the lease.

(w) Employee benefit expenses

As stipulated by the regulations of the PRC, full-time employees of the Group are entitled to various government statutory employee benefit plans, including medical insurance, maternity insurance, workplace injury insurance, unemployment insurance and pension benefits through a PRC government-mandated multi-employer defined contribution plan. The Group is required to make contributions to the plan and accrues for these benefits based on certain percentages of the qualified employees' salaries. The total expenses the Group incurred for the plan were RMB3,250 and RMB3,249 (US$467) for the year ended December 31, 2018 and 2019, respectively.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(x) Share-based compensation

The Group accounts for share-based compensation in accordance with ASC 718, *Compensation — Stock Compensation* ("ASC 718"). In accordance with ASC 718, the Group determines whether an award should be classified and accounted for as a liability award or an equity award. All the Company's share-based awards were classified as equity awards and are recognized in the consolidated financial statements based on their grant date fair values.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* to simplify the accounting for share-based payments to nonemployees ("ASU 2018-07") by aligning it with the accounting for share-based payments to employees, with certain exceptions. The measurement of equity-classified nonemployee awards will be fixed at the grant date. The Group elected to early adopt ASU 2018-07 on January 1, 2017 and the transition adjustment recorded in 2017 beginning retained earnings was immaterial.

In accordance with ASC 718, the Group recognizes share-based compensation cost for equity awards to employees and non-employees with a performance condition based on the probable outcome of that performance condition. Compensation cost is recognized if it is probable that the performance condition will be achieved and shall not be recognized if it is not probable that the performance condition will be achieved.

The Group has elected to recognize share-based compensation using the straight-line method for all share-based awards granted with graded vesting based on service conditions. The Group uses the accelerated method for all awards granted with graded vesting based on performance conditions. The Group accounts for forfeitures as they occur in accordance with ASU No. 2016-09, *Compensation — Stock Compensation (Topic 718): Improvement to Employee Share-based Payment Accounting*. The Group, with the assistance of an independent third-party valuation firm, determined the fair value of the stock options granted to employees. The binomial option pricing model was applied in determining the estimated fair value of the options granted to employees and non-employees.

(y) Income taxes

The Group follows the liability method of accounting for income taxes in accordance with ASC 740, *Income Taxes* ("ASC 740"). Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities using enacted tax rates that will be in effect in the period in which the differences are expected to reverse. The Group records a valuation allowance to offset deferred tax assets if based on the weight of available evidence, it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized. The effect on deferred taxes of a change in tax rate is recognized in tax expense in the period that includes the enactment date of the change in tax rate.

The Group accounted for uncertainties in income taxes in accordance with ASC 740. Interest and penalties related to unrecognized tax benefit recognized in accordance with ASC 740 are classified in the consolidated statements of comprehensive loss as income tax expenses.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(z) Comprehensive loss

Comprehensive loss is defined as the changes in equity of the Group during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. Among other disclosures, ASC 220, *Comprehensive Income*, requires that all items that are required to be recognized under current accounting standards as components of comprehensive loss be reported in a financial statement that is displayed with the same prominence as other financial statements. For each of the periods presented, the Group's comprehensive loss includes net loss and foreign currency translation differences, and is presented in the consolidated statements of comprehensive loss.

(aa) Segment reporting

The Group's Chief Executive Officer is the chief operating decision-maker that reviews the consolidated financial results when making decisions about allocating resources and assessing the performance of the Group as a whole and hence, the Group has only one reportable segment in accordance with ASC 280, *Segment Reporting*. The Group operates and manages its business as a single segment. As the Group's long-lived assets are substantially all located in the PRC and all the Group revenues are derived from within the PRC, no geographical segments are presented.

(ab) Loss per share

Loss per share is calculated in accordance with ASC 260, *Earnings per Share*. Basic loss per ordinary share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period.

Diluted loss per share is calculated by dividing net loss attributable to ordinary shareholders as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary equivalent shares outstanding during the period. Ordinary equivalent shares consist of the ordinary shares issuable upon the conversion of the share options, using the treasury stock method. Ordinary share equivalents are excluded from the computation of diluted loss per share if their effects would be anti-dilutive. Basic and diluted loss per ordinary share is presented in the Group's consolidated statements of comprehensive loss.

2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(ac) Concentration of Risks

Concentration of credit risk

Financial instruments that potentially subject the Group to significant concentration of credit risk consist primarily of cash and cash equivalents and accounts receivables. As of December 31, 2018 and 2019, the aggregate amounts of cash and cash equivalents of RMB7,016 and RMB5,045 (US$725), respectively, were held at major financial institutions located in the PRC and RMB5,871 and RMB1,080 (US$155), respectively, were deposited with major financial institutions located outside the PRC. Management believes that these financial institutions are of high credit quality and continually monitors the credit worthiness of these financial institutions. Historically, deposits in Chinese banks are secured due to the state policy on protecting depositors' interests. However, China promulgated a new Bankruptcy Law in August 2006 that came into effect on June 1, 2007 which contains a separate article expressly stating that the State Council may promulgate implementation measures for the bankruptcy of Chinese banks based on the Bankruptcy Law. Under the new Bankruptcy Law, a Chinese bank may go into bankruptcy. In addition, since China's concession to the World Trade Organization, foreign banks have been gradually permitted to operate in China and have been significant competitors against Chinese banks in many aspects, especially since the opening of the Renminbi business to foreign banks in late 2006. Therefore, the risk of bankruptcy of those Chinese banks in which the Group has deposits has increased. In the event of bankruptcy of one of the banks which holds the Group's deposits, the Group is unlikely to claim its deposits back in full since the bank is unlikely to be classified as a secured creditor based on PRC laws.

Accounts receivables, unsecured and denominated in RMB, derived from sales of the Group's cancer screening and detection test and physical checkup package services, are exposed to credit risk. As of December 31, 2018 and 2019, the Group had one customer and two customers, respectively, each with a receivable balance exceeding 10% of the total accounts receivable balance. The risk is mitigated by credit evaluations the Group performs on its customers.

Business, customer, political, social and economic risks

The Group participates in a dynamic industry and believes that changes in any of the following areas could have a material adverse effect on the Group's future financial position, results of operations or cash flows: changes in the overall demand for services; competitive pressures due to new entrants; advances and new trends in industry standards; changes in certain strategic relationships or customer relationships; regulatory considerations; intellectual property considerations; and risks associated with the Group's ability to attract and retain employees necessary to support its growth. The Group's operations could be also adversely affected by significant political, economic and social uncertainties in the PRC.

For the years ended December 31, 2018 and 2019, the Group had one customer and two customers, respectively, that accounted for more than 10% of the total revenues.

For the years ended December 31, 2018 and 2019, the Group had two suppliers and two suppliers, respectively, that accounted for more than 10% of cost of revenues.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(ac) Concentration of Risks (continued)

Currency convertibility risk

A significant portion of the Group's expenses, assets and liabilities are denominated in RMB. On January 1, 1994, the PRC government abolished the dual rate system and introduced a single rate of exchange as quoted daily by the People's Bank of China (the "PBOC"). However, the unification of the exchange rates does not imply that the RMB may be readily convertible into U.S. dollar or other foreign currencies. All foreign exchange transactions continue to take place either through the PBOC or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the PBOC. Approvals of foreign currency payments by the PBOC or other institutions require submitting a payment application form together with relevant documents.

Additionally, the value of the RMB is subject to changes in central government policies and international economic and political developments affecting supply and demand in the PRC foreign exchange trading system market.

Foreign currency exchange rate risk

From July 21, 2005, the RMB is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. For U.S. dollar against RMB, there was appreciation of approximately 5.7% and appreciation of approximately 1.3%, in the years ended December 31, 2018 and 2019. It is difficult to predict how market forces or PRC or the U.S. government policy may impact the exchange rate between the RMB and the U.S. dollar in the future.

The functional currency and the reporting currency of the Company and AnPac US are the US$ and the RMB, respectively. Most of the revenues and costs of the Group are denominated in RMB, while a portion of cash and cash equivalents and convertible loans ("CL") are denominated in US$. It is difficult to predict how market forces or PRC or the U.S. government policy may impact the exchange rate between the Renminbi and the US$ in the future. Any significant fluctuation of the valuation of RMB may materially affect the Group's cash flows, revenues, earnings and financial position, and the value of any dividends payable on the ADS in US$.

Liquidity Risks

As of December 31, 2019, the Group had RMB6,125 (US$880) of cash and cash equivalents and a working capital deficit of RMB44,026 (US$6,324). For the year ended December 31, 2019, the Group incurred RMB48,600 (US$6,980) of negative cash flows from operations and RMB3,161 (US$454) of capital expenditures.

(ad) Recent accounting pronouncements

The Group is an emerging growth company ("EGC") as defined by the Jumpstart Our Business Startups Act ("JOBS Act"). The JOBS Act provides that an EGC can take advantage of extended transition periods for complying with new or revised accounting standards. This allows an EGC to delay adoption of certain accounting standards until those standards would otherwise apply to private companies. The Group elected to take advantage of the extended transition periods. However, this election will not apply should the Group cease to be classified as an EGC.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(ad) Recent accounting pronouncements (continued)

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842) ("ASU 2016-02"). ASU 2016-02 modifies existing guidance for off-balance sheet treatment of a lessees' operating leases by requiring lessees to recognize lease assets and lease liabilities. Under ASU 2016-02, lessor accounting is largely unchanged. ASU 2016-02 is effective for fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. The Group will adopt ASU 2016-02 on January 1, 2021 using the modified retrospective method and will not restate comparable periods. The Group is currently evaluating the impact on its consolidated financial statements of adopting this guidance. The Group currently believes the most significant change will be related to the recognition of right-of-use assets and operating lease liabilities on the consolidated balance sheets upon adoption, which will increase total assets and liabilities.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments — Credit Losses* ("ASU 2016-13"). The amendments in ASU 2016-13 update guidance on reporting credit losses for financial assets. These amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The Group will adopt ASU 2016-13 on January 1, 2022, and is currently evaluating the impact on its consolidated financial statements of adopting this guidance.

In January 2017, the FASB issued ASU 2017-04, "Intangibles — Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which simplifies how an entity is required to test goodwill for impairment by eliminating step two from the goodwill impairment test. Step two of the goodwill impairment test measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with its carrying amount. The new guidance is effective prospectively for us for the year ending March 31, 2021 and interim reporting periods during the year ending March 31, 2021. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Group is in the process of evaluating the impact of adoption of this guidance on the Group's consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740)*: *Simplifying the Accounting for Income Taxes*. This guidance removes certain exceptions to the general principles in Topic 740 and enhances and simplifies various aspects of the income tax accounting guidance, including requirements such as tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. This standard is effective for the Company for the annual reporting periods beginning January 1, 2022 and interim periods beginning January 1, 2023. Early adoption is permitted. The Group does not expect any material impact on the Group's consolidated financial statements.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(ad) Recent accounting pronouncements (continued)

In January 2020, the FASB issued ASU 2020-01, *Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815) - Clarifying the Interactions* between Topic 321, Topic 323, and Topic 815. This guidance addresses accounting for the transition into and out of the equity method and provides clarification of the interaction of rules for equity securities, the equity method of accounting, and forward contracts and purchase options on certain types of securities. This standard is effective for the Company beginning January 1, 2022 including interim periods within the fiscal year. Early adoption is permitted. The Group does not expect any material impact on the Company's consolidated financial statements.

(ae) Adopted accounting standards

In January 2016, the FASB issued ASU No. 2016-01, which improves the recognition and measurement of financial instruments. The new guidance requires equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income and separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (i.e., securities or loans and receivables) on the balance sheet or the accompanying notes to the financial statements. The new guidance is effective for public companies for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Group adopted the ASU effective January 1, 2019. The unrealized gains (losses), net of tax, on the available-for-sale securities of RMB1,063 were reclassified from retained earnings to accumulated other comprehensive income as of January 1, 2019.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash ("ASU 2016-18"), which amends ASC 230 to add or clarify guidance on the classification and presentation of restricted cash in the statement of cash flows. This ASU requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This ASU does not provide a definition of restricted cash or restricted cash equivalents. The amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. As a result of this update, restricted cash are included within cash and cash equivalents on the statements of consolidated cash flows. The Group adopted ASU 2016-18 effective January 1, 2019. No cumulative impact was recognized as of January 1, 2019.

In January 2017, the FASB issued ASU No. 2017-01 ("ASU 2017-01"), Business Combinations (Topic 805): Clarifying the Definition of a Business. ASU 2017-01 clarifies the framework for determining whether an integrated set of assets and activities meets the definition of a business. The revised framework establishes a screen for determining whether an integrated set of assets and activities is a business and narrows the definition of a business, which is expected to result in fewer transactions being accounted for as business combinations. Acquisitions of integrated sets of assets and activities that do not meet the definition of a business are accounted for as asset acquisitions. ASU 2017-01 is effective for the Group for annual reporting periods beginning January 1, 2019 and interim periods within annual periods beginning January 1, 2020. This standard has no material impact on its consolidated financial statements.

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2. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES (CONTINUED)

(ae) Adopted accounting standards (continued)

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement — Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"). This update allows companies the option to reclassify to retained earnings the tax effects related to items in accumulated other comprehensive income (loss) as a result of the Tax Cuts and Jobs Act that was enacted in the United States on December 22, 2017. This update is effective in fiscal years, including interim periods, beginning after December 15, 2018, and early adoption is permitted. This guidance should be applied either in the period of adoption or retrospectively to each period in which the effects of the change in the U.S. federal income tax rate in the Tax Cuts and Jobs Act is recognized. The Group adopted ASU 2018-2 effective January 1, 2019. No cumulative impact was recognized as of January 1, 2019.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement*. The update eliminates, modifies, and adds certain disclosure requirements for fair value measurements. This update is effective in fiscal years, including interim periods, beginning after December 15, 2019, and early adoption is permitted. The added disclosure requirements and the modified disclosure on the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented. All other changes to disclosure requirements in this update should be applied retrospectively to all periods presented upon their effective date. The Group adopted ASU 2018-13 effective January 1, 2019. No cumulative impact was recognized as of January 1, 2019.

3. OTHER CURRENT ASSETS

Other current assets consists of the following:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Capitalized listing expense	—	9,764	1,404
Tax recoverable	1,431	1,574	226
Others	647	1,452	207
Total	2,078	12,790	1,837

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4. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consists of the following:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Buildings	15,771	16,029	2,302
Leasehold improvements	52	52	8
Furniture, fixtures and equipment	8,466	10,352	1,487
Motor vehicles	526	530	76
Total	24,815	26,963	3,873
Less:			
Accumulated depreciation	(7,093)	(8,728)	(1,255)
	17,722	18,235	2,618
Construction in progress	419	633	92
Property and equipment, net	18,141	18,868	2,710

Depreciation expense was RMB2,357 and RMB2,059 (US$296) for the years ended December 31, 2018 and 2019, respectively.

No impairment charges were recognized on the property and equipment for the years ended December 31, 2018 and 2019.

5. LAND USE RIGHTS, NET

The land use rights assets as of December 31, 2019 and 2018 are summarized as follows:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Land use rights, cost	1,388	1,388	199
Less:			
Accumulated amortization	(166)	(194)	(27)
Land use rights, net	1,222	1,194	172

Amortization expense of the land use rights for the years ended December 31, 2018 and 2019 was RMB257 and RMB28 (US$4), respectively.

As of December 31, 2019, expected amortization expense for the land use rights is approximately RMB28 in 2020, RMB28 in 2021, RMB28 in 2022, RMB28 in 2023, RMB28 in 2024 and RMB1,054 in 2025 and thereafter.

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6. INTANGIBLE ASSETS, NET

Intangible assets, net consist of the following:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Software	934	1,305	187
Medical license	5,300	5,300	761
Total	6,234	6,605	948
Less: Accumulated amortization	(828)	(1,405)	(201)
Total	5,406	5,200	747

Amortization expense of intangible assets for the years ended December 31, 2018 and 2019 amounted to RMB530 and RMB577 (US$83), respectively.

The estimated aggregate amortization expense for each of the five succeeding years is as follows:

Year ending December 31,	RMB
2020	594
2021	575
2022	518
2023	391
2024	353
Thereafter	2,769

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7. LONG-TERM INVESTMENTS

As at December 31, 2018 and 2019, long-term investments consisted of the following:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Equity method investments			
Anpac Beijing Health Management Co., Ltd (“Anpac Beijing”)	607	802	115
Shanghai Moxu Bio-medical Science Co., Ltd.(“Moxu”)	99	94	14
Equity securities without readily determinable fair values			
Jiangsu Anpac Health Management Co., Ltd. (“Jiangsu Anpac”)	2,750	2,750	395
Less:			
Impairment	—	(1,320)	(190)
Total	3,456	2,326	334

Equity method investments

On October 19, 2017, the Group and other third parties established Anpac Beijing, of which the Group owned 35% of the investment. In October 2019, the Group’s registered shareholding ratio of Anpac Beijing decreased from 35% to 18% according to the resolution of Anpac Beijing signed in October and the Group’s paid-in shareholding ratio is 35% in both 2018 and 2019.

On June 8, 2018, the Group and other third parties established Moxu, of which the Group owned 20% of the investment.

Equity securities without readily determinable fair values

In January 2016, the Group and other third parties established Jiangsu Anpac, of which the Group owned 10% of the investment. In November 2017, the Group further acquired a 5% equity interest. The Group accounted for the investment under cost method since the Group does not have the ability to exert significant influence over Jiangsu Anpac prior to January 1, 2019. With the adoption of ASU 2016-01, the Group accounted for it as equity securities without readily determinable fair values. The Group elected to use the measurement alternative to measure such investments at fair value based on the income approach using the discounted cash flow associated with the underlying assets, which incorporated certain assumptions including the investees’ revenue, growth rates and projected operating costs based on current economic condition, expectation of management and projected trends of current operating results.

8. SHORT-TERM DEBT

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Short-term bank and other borrowings (i)	8,000	14,000	2,011
Convertible loans (ii)	17,961	24,568	3,529
Total	25,961	38,568	5,540

(i) The short-term borrowings in 2019 consists of an RMB8,000 and an RMB6,000 borrowing that has a fixed interest rate of 11% and 4.35%, respectively and are pledged by certain properties of the Group and Dr. Chris Chang Yu, and guaranteed by Dr. Chris Chang Yu.

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8. SHORT-TERM DEBT (CONTINUED)

(ii) During April to August of 2018, the Group issued convertible loans with an aggregate principal amount of US$2,500 to Jiaxing Zhijun Investment Management Co., Ltd. ("Zhijun"). The CL is originally due in one year and bears interest of 9% per annum if the conversion feature is not triggered. The CL is ultimately guaranteed by Dr. Chris Chang Yu's personal assets.

Conversion feature

During the term of the CL, if the Group completes a financing round that raises in aggregate, an amount greater than US$5,000 (or an amount otherwise mutually agreed between the Group and Zhijun), Zhijun may convert the principal amount of the CL into the Group's ordinary shares at a premium of 25% of the loan principal or at the conversion price based on the agreed Group's valuation of RMB488,000 after the effectiveness of the second modification of CL on October 30, 2019 as mentioned below.

Modifications of CL

On April 26, 2019, the Group and Zhijun agreed to extend the term of the CL to October 31, 2019. No other terms of the CL were modified. On October 30, 2019 the Group and Zhijun agreed to further extend the term of the CL to April 30, 2020, and the conversion feature has also been changed as mentioned above. In accordance with ASC 470-50, Debt, as the present value of cash flows under the term of the new debt instrument did not differ by more than 10% from the present value of the remaining cash flows under the term of the original debt instrument, the modification was accounted for prospectively as yield adjustments based on the revised terms.

The Group has elected to recognize the CL at fair value and therefore there was no further evaluation of embedded features for bifurcation. The Group recognized an unrealized loss of RMB784 and RMB5,296 (US$761) in other expense for the years ended December 31, 2018 and 2019, except for the fair value changes related to the Group's own credit risks which are recognized in accumulated other comprehensive loss for the year ended December 31, 2019.

9. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Salary and welfare payable	7,735	9,498	1,364
Payable for business combination and long-term investment	300	—	—
Payable for acquisition of noncontrolling interests	245	245	35
Accrued rental	801	1,550	223
Accrued expenses	691	4,430	636
Value added tax and other taxes payable	523	100	14
Payable for property and equipment	28	15	2
Accrued utilities	5	5	1
Other payables	531	2,939	423
Total	10,859	18,782	2,698

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10. ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

Other comprehensive (loss) income includes the foreign currency translation differences and fair value change relating to Company's own credit risk on convertible loan. A rollforward of the amounts included in accumulated other comprehensive (loss) income for the years ended December 31, 2018 and 2019 was as follows:

	Foreign currency translation adjustments	Fair value change	Total
		RMB	
Balance as of January 1, 2018	(1,773)	—	(1,773)
Foreign currency translation differences	797	—	797
Balance as of December 31, 2018	(976)	—	(976)
Cumulative effect of the adoption of ASU 2016-01*	—	1,063	1,063
Balance as of January 1, 2019	(976)	1,063	87
Fair value change relating to Company's own credit risk on convertible loan	—	(955)	(955)
Foreign currency translation differences	2,978	—	2,978
Balance as of December 31, 2019	2,002	108	2,110
		US$	
Balance as of December 31, 2019	288	15	303

*Adjustment of fair value change related to Company's own credit risk on convertible loan from accumulated other comprehensive income to opening retained earnings as a result of the adoption of ASU 2016-01 on January 1, 2019.

There have been no reclassifications out of accumulated other comprehensive income to net income for the periods presented.

11. SHARE BASED COMPENSATION

On February 1, 2010, the shareholders and Board of Directors (the "Board") of the Company approved a resolution which authorized the chairman of the Board to grant share options to its eligible employees, directors, officers and consultants of the Group of a number of shares not exceeding 1,190,000 before July 1, 2017. On October 19, 2015, the shareholders and the Board approved a resolution to increase the authorized number to grant in the future up to 1,866,600. On July 1, 2017, in order to provide additional incentives to attract and retain key employees, directors, officers and consultants of outstanding ability and to motivate them to exert their best efforts, the shareholders and the Board further approved a resolution to grant in the future up to 860,000.

The options granted are vested either (i) immediately upon grant date; or (ii) over various vesting schedule which no more than four years.

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11. SHARE BASED COMPENSATION (CONTINUED)

On October 31, 2019, the shareholders and the Board approved the 2019 Share Incentive Plan ("2019 Plan") which authorized the compensation committee or such other committee to grant share options to directors, service provider, advisor, employees and consultants of the Group of a number of shares not exceeding 1,105,300. As of December 31, 2019, no options has been granted under 2019 Plan.

On October 31, 2019, the board of directors approved a share split of 1-for-100, pursuant to which the authorized share capital of the Class A and Class B ordinary shares would further increase to 70,000,000 and 30,000,000 respectively, with a par value of US$0.01. The registration of the above changes was completed on November 12, 2019 and the number of underlying shares and the fair market value per ordinary share as at grant dates have been retrospectively adjusted accordingly.

Employees

The options granted to employees are measured based on the grant date fair value of the equity instrument. They are accounted for as equity awards and contain only service vesting conditions. The following table summarized the Group's employee share option activities:

	Number of Options	Weighted Average Exercise Price	Weighted Average Grant date Fair Value	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
		US$ per option	US$ per option	Years	US$
Share options outstanding at January 1, 2018	427,100	0.0001	4.93	7.21	4,041
Granted	206,000	0.0005	9.53		
Forfeited	(1,600)	0.0010	4.45		
Share options outstanding at January 1, 2019	631,500	0.0002	6.43	7.22	6,090
Granted	327,000	0.0004	9.80		
Forfeited	(42,000)	Nil	9.68		
Share options outstanding at December 31, 2019	916,500	0.0003	7.48	7.26	8,985
Vested and expected to vest at December 31, 2019	916,500	0.0003	7.48	7.26	8,985
Exercisable as of December 31, 2019	592,000	0.0002	6.30	6.38	5,804

The aggregate intrinsic value in the table above represents the difference between the exercise price of the awards and the fair value of the underlying Ordinary Shares at each reporting date, for those awards that had exercise price below the estimated fair value of the relevant Ordinary Shares.

The total fair value of the equity awards vested during the years ended December 31, 2018 and 2019 were RMB2,312 and RMB12,376 (US$1,778), respectively. As of December 31, 2019, there was RMB 15,595 (US$2,240) in total unrecognized employee share-based compensation expense related to unvested options, that may be adjusted for actual forfeitures occurring in the future. Total unrecognized compensation cost may be recognized over a weighted-average period of 2.27 years.

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11. SHARE BASED COMPENSATION (CONTINUED)

Nonemployees

The options granted to nonemployees are accounted for as equity awards with service and/or performance vesting conditions. The following table summarized the Group's nonemployee share option activity:

	Number of Options	Weighted Average Exercise Price US$ per option	Weighted Average Grant date Fair Value US$ per option	Weighted Average Remaining Contractual Term Years	Aggregate Intrinsic Value US$
Share options outstanding at January 1, 2018	219,400	0.0000	4.91	7.22	2,076
Granted	53,700	0.0005	9.55		
Forfeited	(160,000)	Nil	4.44		
Exercised	(19,400)	Nil	6.50		
Share options outstanding at January 1, 2019	93,700	0.0004	7.53	8.11	904
Granted	153,300	0.0003	9.80		
Share options outstanding at December 31, 2019	247,000	0.0003	8.94	8.40	2,422
Vested and expected to vest at December 31, 2019	247,000	0.0003	8.94	8.40	2,422
Exercisable as of December 31, 2019	202,600	0.0003	9.00	8.21	1,986

The aggregate intrinsic value in the table above represents the difference between the exercise price of the awards and the fair value of the underlying Ordinary Shares at each reporting date, for those awards that had exercise price below the estimated fair value of the relevant Ordinary Shares.

The total fair value of the equity awards vested during the years ended December 31, 2018 and 2019 were RMB3,004 and RMB9,284 (US$1,334) respectively. As of December 31, 2019, there was RMB 2,859 (US$411) of total unrecognized nonemployee share-based compensation expenses, related to unvested share-based awards. Total unrecognized compensation cost may be recognized over a weighted-average period of 0.71 years.

Fair value of options

The Company uses the binomial tree option pricing model to estimate the fair value of share options with the assistance of an independent third-party valuation firm. The assumptions used to value the share options granted to employees and nonemployee were as follows:

	2018	2019
Risk-free interest rate	2.46%-3.11%	1.55%-2.50%
Expected volatility range	62.14%-63.61%	60.37%-64.48%
Exercise multiple	2.5	2.5
Fair market value per ordinary share as at grant dates	US$9.46-9.61	US$9.61-9.80

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11. SHARE BASED COMPENSATION (CONTINUED)

Fair value of options (Continued)

The estimated fair value of the Company's ordinary shares at their respective grant dates, was determined with the assistance of an independent third-party valuation firm. The risk-free interest rate for periods within the contractual life of the options is based on the U.S. Treasury yield curve in effect at the time of grant for a term consistent with the contractual term of the awards. Expected volatility is estimated based on the historical volatility ordinary shares of several comparable companies in the same industry. The expected exercise multiple is based on management's estimation, which the Company believes is representative of the future.

The Company also entered into a share purchase agreement with CRS Holdings Inc. ("CRS", a company controlled by Dr. Chris Chang Yu, who has also been served as the Chief Executive Officer since the inception of the Group) in 2019. Per the share purchase agreement, CRS purchased 214,000 ordinary shares at a consideration of $3.27 per share. The below fair value offering price in the share purchase agreement with CRS essentially represents compensation to Dr. Chris Chang Yu, for past services incurred.

The following table sets forth the amount of share-based compensation expense included in each of the relevant financial statement line items:

	For the year ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Cost of revenues	317	327	47
Selling and marketing expenses	2,871	5,393	775
Research and development expenses	1,958	2,534	364
General and administrative expenses	2,790	24,601	3,533
Total share-based compensation expenses	7,936	32,855	4,719

12. INCOME TAXES

BVI

The Company is incorporated in the BVI and conducts its primary business operations through the subsidiaries in the PRC and the U.S. Under the current laws of the BVI, the Company is not subject to tax on income or capital gains. Additionally, upon payments of dividends by the Company to its shareholders, no BVI withholding tax will be imposed.

PRC

The Company's subsidiaries in the PRC are subject to the statutory rate of 25%, in accordance with the Enterprise Income Tax law (the "EIT Law"), which was effective since January 1, 2008. Changhe Bio-Medical Technology (Yangzhou) Co., Ltd., Changwei System Technology (Shanghai) Co., Ltd., Shanghai Xinshenpai Technology Co., Ltd., AnPac Bio-Medical Technology (Shanghai) Co., Ltd., Lishui AnPac Medical Laboratory Co., Ltd., Shiji (Hainan) Medical Technology Ltd. and Penghui Health Management Co., Ltd. are entitled to a preferential income tax rate of 20%, as they qualify as small and micro-sized enterprises.

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12. INCOME TAXES (CONTINUED)

PRC (Continued)

Dividends, interests, rent and royalties payable by the Company's PRC subsidiaries, to non-PRC resident enterprises, and proceeds from any such non-resident enterprise investor's disposition of assets (after deducting the net value of such assets) shall be subject to 10% withholding tax, unless the respective non-PRC resident enterprise's jurisdiction of incorporation has a tax treaty or arrangements with PRC that provides for a reduced withholding tax rate or an exemption from withholding tax.

United States

AnPac US is subject to the U.S. federal corporate income tax at a rate of 21% for the years ended December 31, 2018 and 2019, respectively. AnPac US is also subject to state income tax in California for the years ended December 31, 2018 and 2019.

The Group's loss before income taxes consisted of:

	Years ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Non-PRC	(18,944)	(56,658)	(8,137)
PRC	(23,551)	(45,181)	(6,490)
Total	(42,495)	(101,839)	(14,627)

The current and deferred components of income tax benefit appearing in the consolidated statements of comprehensive income are as follows:

	Years ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Current tax	111	130	18
Deferred tax	88	88	13
Total	199	218	31

The reconciliation of tax computed by applying the statutory income tax rate of 25% for the years ended December 31, 2018 and 2019 applicable to the PRC operations to income tax benefit were as follows:

	Years ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Loss before income taxes	(42,495)	(101,839)	(14,627)
Income tax benefit computed at the statutory income tax rate at 25%	10,624	25,460	3,657
Non-deductible expenses	(4,485)	(5,141)	(738)
International rate differences	(2,227)	(11,367)	(1,633)
Preferential tax rate differences	(210)	(710)	(102)
Effect of change in tax rate	(826)	789	113
Change in valuation allowance	(2,677)	(8,813)	(1,266)
Income tax benefit	199	218	31

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12. INCOME TAXES (CONTINUED)

Deferred Taxes

The significant components of deferred taxes were as follows:

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Deferred tax assets:			
Net loss carryforward	14,705	23,148	3,325
Accrued expenses	1,043	1,479	212
Bad debt expenses	85	70	10
Others	120	69	10
Valuation allowance	(15,953)	(24,766)	(3,557)
Total deferred tax assets	—	—	—
Deferred tax liabilities:			
Long-lived assets arising from acquisition	(1,222)	(1,134)	(163)
Total deferred tax liabilities	(1,222)	(1,134)	(163)

The Group operates through several subsidiaries. Valuation allowance is considered for each of the entities.

Realization of the net deferred tax assets is dependent on factors including future reversals of existing taxable temporary differences and adequate future taxable income, exclusive of reversing deductible temporary differences and tax loss carry forwards. The Group evaluates the potential realization of deferred tax assets on an entity-by-entity basis. As of December 31, 2018 and 2019, the Company and all of its subsidiaries were in cumulative loss position, valuation allowances were provided against deferred tax assets in entities where it was determined it was more likely than not that the benefits of the deferred tax assets will not be realized.

As of December 31, 2019, the Group had tax losses of RMB136,796 (US$19,896) derived from entities in the PRC and the U.S., of which can be carried forward per tax regulation to offset future taxable income. The PRC taxable losses of RMB 109,181 (US$ 15,683) will expire from 2020 to 2024 if not utilized. The U.S. taxable losses of RMB19,043 (US$2,735) can be utilized indefinitely while the remainder will expire from 2035 to 2037.

Unrecognized Tax Benefits

As of December 31, 2018 and 2019, the Group recorded an unrecognized tax benefit of RMB9,398 and RMB11,847 (US$1,702), respectively, of which RMB9,235 and RMB11,847 (US$1,702), respectively, were presented on a net basis against the deferred tax assets related to tax loss carry forwards on the consolidated balance sheets. The unrecognized tax benefits were primarily related to transfer pricing and deductibility of expense. The amounts of unrecognized tax benefits will change in the next 12 months, pending clarification of current tax law or audit by the tax authorities, however, an estimate of the range of the possible change cannot be made at this time. As of December 31, 2018 and 2019, unrecognized tax benefits of RMB130 and Nil, if ultimately recognized, will impact the effective tax rate.

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12. INCOME TAXES (CONTINUED)

Unrecognized Tax Benefits (continued)

A roll-forward of unrecognized tax benefits is as follows:

	Years ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Balance at beginning of year	6,936	9,398	1,350
Addition based on tax positions related to the current year	3,064	2,810	404
Decrease based on tax positions related to prior years	(602)	(361)	(52)
Balance at end of year	9,398	11,847	1,702

The Group recorded interest accrued in relation to the unrecognized tax benefit in income tax expense of RMB40 and Nil for the years ended December 31, 2018 and 2019, respectively.

13. RESTRICTED NET ASSETS

In accordance with the PRC Regulations on Enterprises with Foreign Investment, an enterprise established in the PRC with foreign investment is required to make appropriations to certain statutory reserves, namely a general reserve fund, an enterprise expansion fund, a staff welfare fund and a bonus fund, all of which are appropriated from net profit as reported in its PRC statutory accounts. A foreign invested enterprise is required to allocate at least 10% of its annual after-tax profits to a general reserve fund until such fund has reached 50% of its respective registered capital. Appropriations to the enterprise expansion fund and staff welfare and bonus funds are at the discretion of the board of directors for the foreign invested enterprises. For other subsidiaries incorporated in the PRC, the general reserve fund was appropriated based on 10% of net profits as reported in each subsidiary's PRC statutory accounts. General reserve and statutory surplus funds are restricted to set-off against losses, expansion of production and operation and increasing registered capital of the respective company. Staff welfare and bonus fund and statutory public welfare funds are restricted to capital expenditures for the collective welfare of employees. The reserves are not allowed to be transferred to the Company in terms of cash dividends, loans or advances, nor are they allowed for distribution except under liquidation. As of December 31, 2018 and 2019, the PRC subsidiaries did not have after-tax profit and therefore no statutory reserves were allocated.

In addition, under PRC laws and regulations, the Company's PRC subsidiaries are restricted in their ability to transfer their net assets to the Company in the form of dividend payments, loans or advances. As of December 31, 2018 and 2019, restricted net assets of the Company's PRC subsidiaries were RMB2,580 and RMB5,406(US$777), respectively.

Furthermore, cash transfers from the Group's PRC subsidiaries to the Group's subsidiaries outside of the PRC are subject to the PRC government control of currency conversion. Shortages in the availability of foreign currency may restrict the ability of the Group's PRC subsidiaries to remit sufficient foreign currency to pay dividends or other payments to the Company, or otherwise satisfy their foreign currency denominated obligations.

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14. RELATED PARTY TRANSACTIONS AND BALANCES

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operational decisions. The related parties that had transactions or balances with the Group in 2018 and 2019 consisted of:

Related Party	Nature of the party	Relationship with the Group
Dr. Chris Chang Yu	Individual	Founder and Chairman
Ms. Lin Yu	Individual	Director of the Group
Anpai (Shanghai) Healthcare Management and Consulting Co., Ltd. (“Anpai”)	Health management	Equity investee of the Group
Anpac Beijing	Health management	Equity investee of the Group
Jiaxing Zhijun Sihang Investment Partnership Enterprises (limited partnership) (“Jiaxing Zhijun”)	Private equity investment	Shareholder
Zhijun	Investment management	General partner of the shareholder
CRS	Investor	Controlled by Dr. Chris Chang Yu
Jiangsu Anpac	Health management	Equity investee of the Group
Shanghai Yulin Information Technology Co., Ltd. (“Shanghai Yulin”)	Information technology	Controlled by Ms. Lin Yu

(a) *Related party balances*

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Due from related parties:			
Anpai	269	535	77
Jiangsu Anpac	—	1	—
Jiaxing Zhijun	—	6	1
Shanghai Yulin	—	13	2
	269	555	80

Amounts due from Anpai, Jingsu Anpac and Jiaxing Zhijun comprise of accounts receivable. Amounts due from Shanghai Yulin comprise of other current assets.

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
Due to related parties:			
CRS	2,413	1,894	272
Jiaxing Zhijun	25,000	—	—
Zhijun	824	2,403	345
Jiangsu Anpac	450	300	43
	28,687	4,597	660

Amounts due to CRS and Jiangsu Anpac comprise of loans which were interest-free, unsecured and repayable on demand while amounts due to Zhijun comprise of the accrued interest expense due to Zhijun of RMB2,403 (US$345) for the CL.

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14. RELATED PARTY TRANSACTIONS AND BALANCES (CONTINUED)

(b) *Related party transactions*

During the years ended December 31, 2018 and 2019, related party transactions consisted of the following:

	Year Ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Revenue rendered to Anpac Beijing	231	3	—
Revenue rendered to Jiangsu Anpac	110	64	9
Revenue rendered to Anpai	298	616	88
Consulting service received from Anpac Beijing	700	2,199	316
Advance from Jiaxing Zhijun	25,000	—	—
Purchase ordinary shares with the advance from Jiaxing Zhijun	—	25,000	3,591
CL from Zhijun	16,445	—	—
Interest expense to Zhijun	824	1,579	227
Loan from CRS	1,431	1,202	173
Repayment of loan to CRS	(1,144)	(1,262)	(181)
Loan to Shanghai Yulin	—	(2,885)	(414)
Repayment of loan from Shanghai Yulin	—	2,872	413
Repayment to Jiangsu Anpac	(350)	(150)	(22)

(c) *Guarantor*

The Group's short-term borrowings in 2019 consisting of an RMB8,000 and RMB6,000 borrowing are guaranteed by Dr. Chris Chang Yu.

15. FAIR VALUE MEASUREMENTS

As of December 31, 2019, assets and liabilities measured or disclosed at fair value are summarized below:

	Fair value measurements as of December 31, 2019 using						
	Total fair value		Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Impairment	
	RMB	US$	RMB	RMB	RMB	RMB	US$
Fair value measurement — Recurring:							
CL	24,568	3,529	—	—	24,568	—	—
Fair value measurement — Non-Recurring:							
Equity investments accounted for at fair value using the measurement alternative	1,430	205	—	—	1,430	1,320	190

The Group recognized an unrealized loss of RMB5,296 (US$761) for measuring CL using the binomial tree model described in Note 2 (q) occurring in the year ended December 31, 2019. There was no transfer into or out of Level 3 of the fair value hierarchy for the year ended December 31, 2019.

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15. FAIR VALUE MEASUREMENTS (CONTINUED)

The Group measures equity securities without readily determinable fair value and do not qualify for the existing practical expedient in ASC 820 at fair value on a nonrecurring basis using the measurement alternative, as there are no observable price changes in orderly transactions for identical or similar investments of the same issuer. As a result of reduced expectations of future cash flows from long-term investment of Jiangsu AnPac, the Group determined that the long-term investment with a carrying amount of RMB2,750 was not fully recoverable and consequently recorded an impairment charge of RMB1,320 for the years ended December 31, 2019. The investments are re-measured to fair value using valuation methodologies which require management to use significant unobservable inputs (level 3) such as revenue growth rate and discount rate.

16. COMMITMENTS AND CONTINGENCIES

(a) Operating lease commitments

As lessee

The Group has entered into lease agreements for its business operations. Such leases are classified as operating leases.

Future minimum lease payments under non-cancellable operating lease agreements at December 31, 2019 were as follows:

Year ending December 31,	RMB	US$
2020	3,215	462
2021	2,492	358
2022	2,019	290
Thereafter	9,489	1,363
Total	17,215	2,473

(b) Litigation

In the ordinary course of the business, the Group is subject to periodic legal or administrative proceedings. As of December 31, 2018 and 2019, the Group is not a party to any legal or administrative proceedings which will have a material adverse effect on the Group’s business, financial position, results of operations and cash flows.

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17. LOSS PER SHARE

Basic and diluted loss per share for each of the years presented is calculated as follows:

	Year Ended December 31,		
	2018	2019	2019
	RMB	RMB	US$
Numerator:			
Net loss used in calculating loss per share-basic and diluted	(42,063)	(101,060)	(14,515)
Denominator:			
Weighted average number of ordinary shares outstanding used in calculating basic and diluted	8,524,100	8,937,600	8,937,600
Basic and diluted loss per share:			
To ordinary shares	(4.93)	(11.31)	(1.62)

The Group did not include share options in the computation of diluted loss per share for the year ended December 31, 2018 and 2019 because those share options were anti-dilutive for loss per share.

18. SUBSEQUENT EVENTS

The Company evaluated subsequent events through May 15, 2020, the date on which these consolidated financial statements were issued.

On January 30, 2020, the Company completed its IPO on the NASDAQ Global Market. The Company offered 1,333,360 ADSs representing 1,333,360 Class A ordinary shares at US$12.00 per ADS.

As a result of the pandemic of COVID-19 in China, the United States and the world, the Company's operations have been, and may continue to be, adversely impacted by disruptions in business activities, commercial transactions and general uncertainties surrounding the duration of the outbreaks and the various governments' business, travel and other restrictions. These adverse effects could include the Company's ability to market and conduct its tests in China, commercialize its tests in the United States and carry out research studies and activities in China and the United States, temporary closures of its laboratory facilities and offices in China and the United States and its customers' and suppliers' facilities, the delay in construction of its new Philadelphia laboratory, delayed supply of products and services from its suppliers, and delayed or cancelled orders from its customers (such as due to temporary decreased demand for disease screening and detection or physical checkup services or generally due to reduced commercial activities). In addition, the Company's business operations could be disrupted if any of its employees is suspected of contracting the coronavirus or any other epidemic disease, since its employees could be quarantined and/or its offices be shut down for disinfection.

In particular, the closing of blood sampling points countrywide in China since the Chinese New Year, as a measure by the Chinese government to contain the spread of COVID-19, has significantly reduced the number of samples that the Company could collect for its CDA tests. Despite partial recovery of the blood sampling points in April 2020, the number of blood samples that the Company can collect is still limited. There have also been delays of orders and cancellation of some orders for planned CDA tests and physical checkups from the Company's customers. As a result, the Company expects that its revenues in the first half of 2020 will decrease significantly and its revenues for the year of 2020 will also decrease compared to the first half of 2019 and full year of 2019, respectively. While the Company strives to bring in new customers and launch new tests to mitigate the negative impact of COVID-19, it has no control over the development of the COVID-19 situations in China, the United States or around the world and therefore may not be able to achieve a revenue growth or maintain its historical revenue level in future periods. Moreover, the Company's plan to commercialize its CDA test in the United States has been delayed (as indicated by the delay in construction of their new Philadelphia laboratory), and will likely continue to be adversely affected, by the COVID-19 outbreak in the United States.

The downturn brought by and the duration of the coronavirus pandemic is difficult to assess or predict and actual effects will depend on many factors beyond the Company's control, including the increased world-wide spread of COVID-19 and the relevant governments' actions to contain COVID-19 or treat its impact. The extent to which COVID-19 impacts the Company's results remains uncertain. The business, results of operations, financial condition and prospects could be adversely affected directly, as well as to the extent that the coronavirus or any other epidemic harms the Chinese and the United States' economies in general.

In February 2020, the Group has redeemed the CL with principal amount of US$1,750. In April 2020, the Group and Zhijun agreed to extend the principal amount of US$750 to May 31, 2020.

In March 2020, the Group has repaid the short-term borrowing with principal amount of RMB8,000.

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

19. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION

Condensed balance sheets

	As of December 31,		
	2018	2019	2019
	RMB	RMB	US$
ASSETS			
Current assets			
Cash and cash equivalents	3,703	44	6
Amounts due from related parties	53,672	99,704	14,322
Other current assets	82	872	125
Total current assets	57,457	100,620	14,453
Non-current assets:			
Investments in subsidiaries	(49,811)	(72,289)	(10,383)
Other assets	851	760	109
TOTAL ASSETS	8,497	29,091	4,179
LIABILITIES AND SHAREHOLDERS' DEFICIT			
Current liabilities:			
Short-term debt	17,961	24,568	3,529
Amounts due to related parties	12,600	18,194	2,613
Accrued expenses and other current liabilities	329	2,302	331
Total liabilities	30,890	45,064	6,473
Shareholders' deficit:			
Ordinary shares (US$0.01 par value per share; 100,000,000 shares and Nil authorized as of December 31, 2018 and 2019; 8,596,900 and Nil shares issued and outstanding as of December 31, 2018 and 2019, respectively)	569	—	—
Class A Ordinary shares (US$0.01 par value per share; Nil and 70,000,000 shares authorized as of December 31, 2018 and 2019; Nil and 7,004,900 shares issued and outstanding as of December 31, 2018 and 2019, respectively)	—	466	67
Class B Ordinary shares (US$0.01 par value per share; Nil and 30,000,000 shares authorized as of December 31, 2018 and 2019; Nil and 2,863,100 shares issued and outstanding as of December 31, 2018 and 2019, respectively)	—	191	27
Additional paid-in capital	152,367	257,736	37,021
Accumulated deficits	(174,353)	(276,476)	(39,712)
Accumulated other comprehensive (loss) income	(976)	2,110	303
Total shareholders' deficit	(22,393)	(15,973)	(2,294)
TOTAL LIABILITIES AND SHAREHOLDERS' DEFICIT	8,497	29,091	4,179

ANPAC BIO-MEDICAL SCIENCE CO., LTD.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(Amounts in thousands of RMB and US$, except for number of shares and per share data)

19. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION (Continued)

Condensed statements of comprehensive loss

	As of December 31		
	2018	2019	2019
	RMB	RMB	US$
Operating loss:			
Selling and marketing expenses	(2,871)	(5,393)	(775)
Research and development expenses	(1,958)	(2,534)	(364)
General and administrative expenses	(3,537)	(31,884)	(4,579)
Loss from operations	(8,366)	(39,811)	(5,718)
Interest expense	(828)	(1,576)	(226)
Other expense, net	(784)	(5,273)	(757)
Share of losses of subsidiaries	(32,085)	(54,400)	(7,814)
Loss before income taxes and net loss	(42,063)	(101,060)	(14,515)
Other comprehensive income, net of tax			
- Fair value change relating to Company's own credit risk on convertible loan	—	(955)	(137)
- Foreign currency translation difference	797	2,978	428
Total comprehensive loss	(41,266)	(99,037)	(14,224)

Condensed statements of cash flows

	As of December 31		
	2018	2019	2019
	RMB	RMB	US$
Net cash used in operating activities	(1,259)	(11,922)	(1,712)
Net cash used in investing activities	(12,475)	(31,415)	(4,512)
Net cash generated from financing activities	15,150	39,648	5,695
Effect of exchange rate changes on cash and cash equivalents	125	30	4
Net increase (decrease) in cash and cash equivalents	1,541	(3,659)	(525)
Cash and cash equivalents at beginning of year	2,162	3,703	531
Cash and cash equivalents at end of year	3,703	44	6

(a) Basis of presentation

Condensed financial information is used for the presentation of the Company, or the parent company. The condensed financial information of the parent company has been prepared using the same accounting policies as set out in the Company's consolidated financial statements except that the parent company used the equity method to account for investments in its subsidiaries

The parent company records its investments in its subsidiaries under the equity method of accounting as prescribed in ASC 323, I*nvestments-Equity Method and Joint Ventures*. Such investments are presented on the condensed balance sheets as "Investments in subsidiaries" and their respective profit or loss as "Share of loss in subsidiaries' on the condensed statements of comprehensive loss. Equity method accounting ceases when the carrying amount of the investment, including any additional financial support, in a subsidiary is reduced to zero unless the parent company has guaranteed obligations of the subsidiary or is otherwise committed to provide further financial support. If the subsidiary subsequently reports net income, the parent company shall resume applying the equity method only after its share of that net income equals the share of net loss not recognized during the period the equity method was suspended.

The subsidiaries did not pay any dividends to the Company for the years presented.

Exhibit 2.7

Description of Rights of Each Class of Securities Registered under Section 12 of the Securities Exchange Act of 1934

American Depositary Shares ("ADSs"), each representing one Class A ordinary share of AnPac Bio-Medical Science Co., Ltd. (our "company") are listed on the NASDAQ Global Market and the shares are registered under Section 12(b) of the Exchange Act. Shares underlying the ADSs are held by Citibank, N.A., as depositary, and holders of ADSs will not be treated as holders of the ordinary shares. In addition, we have registered under the Securities Act certain warrants that we issued to representatives of the underwriters for our initial public offering. This exhibit contains a description of the rights of (i) the holders of ordinary shares, (ii) the ADS holders and (iii) the warrant holders.

Description of Ordinary Shares (Items 9.A.3, 9.A.5, 9.A.6, 10.B.3, 10.B.4, 10.B.6, 10.B.7, 10.B.8, 10.B.9 and 10.B.10 of Form 20-F)

General

Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Our ordinary shares are issued in registered form and are issued when registered in our register of members. Our shareholders who are non-residents of the BVI may freely hold and vote their shares. Each of our Class A and Class B ordinary shares has a par value US$0.01.

Each Class B ordinary share is convertible into one (1) Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment or disposition of Class B ordinary shares by a holder thereof to any person other than holders of Class B ordinary shares or their affiliates, or upon a change of ultimate beneficial ownership of the holder of any Class B ordinary share to any person or entity who is not an affiliate of the holder, such Class B ordinary shares shall be automatically and immediately converted into the same number of Class A ordinary shares.

Preemptive Rights

The shareholders of our company do not have preemptive right.

Transfer of Shares

Subject to any applicable restrictions or limitations arising pursuant to (i) our Memorandum and articles of association, or M&A; or (ii) the BVI Act, any of our shareholders may transfer all or any of his or her shares by an instrument of transfer in the usual or common form or in any other form which our directors may approve (such instrument of transfer being signed by the transferor and containing the name and address of the transferee). Our directors may decline to register any transfer of shares which is not fully paid up or on which our company has a lien. In addition, our directors may also decline to register any transfer of any shares unless (i) the instrument of transfer is lodged with our company, accompanied by the relevant share certificate, (ii) the instrument of transfer is in respect of only one class of shares, (iii) the instrument of transfer is properly stamped, if required, (iv) in the case of a transfer to joint holders, the number of joint holders to whom the share is to be transferred does not exceed four, and (v) a fee of such maximum sum as the NASDAQ Global Market may determine to be payable, or such lesser sum as our board of directors may require, is paid to our company in respect thereof.

Dividend Rights

Subject to the BVI Act and our M&A, our directors may, by resolution, declare dividends at a time and amount as they think fit if they are satisfied, based on reasonable grounds, that, immediately after distribution of the dividend, the value of our assets will exceed our liabilities and we will be able to pay our debts as they fall due. There is no further BVI law restriction on the amount of funds which may be distributed by us by dividend, including all amounts paid by way of the subscription price for ordinary shares regardless of whether such amounts may be wholly or partially treated as share capital or share premium under certain accounting principles. Shareholder approval is not (except as otherwise provided in our M&A) required to pay dividends under BVI law. In accordance with, and subject to, our M&A, no dividend shall bear interest as against the company (except as otherwise provided in our M&A).

Voting Rights

In respect of all matters subject to a shareholders' vote, each Class A ordinary share shall entitle the holder thereof to one (1) vote per share and each Class B ordinary share shall entitle the holder to ten (10) votes per share on all matters subject to vote at our general meetings. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Voting at any shareholders' meeting is by show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. A poll may be demanded by the chairman of such meeting or any shareholder present in person or by proxy.

Rights, Preferences and Restrictions of Ordinary Shares

Subject to the restrictions described under the section titled "Dividend Rights" above, our directors may (subject to the M&A) authorize dividends at such time and in such amount as they determine. In the event of a liquidation or dissolution of the company, the holders of ordinary shares are (subject to the M&A) entitled to share ratably in all surplus assets remaining available for distribution to them after payment and discharge of all claims, debts, liabilities and obligations of the company and after provision is made for each class of shares (if any) having preference over the ordinary shares if any at that time. There are no sinking fund provisions applicable to our ordinary shares. Holders of our ordinary shares have no pre-emptive rights. Subject to the provisions of the BVI Act, we may, (subject to the M&A) with board or shareholders' consent, repurchase our ordinary shares provided always that the company will, immediately after the repurchase, satisfy the solvency test. The company will satisfy the solvency test, if (i) the value of the company's assets exceeds its liabilities; and (ii) the company is able to pay its debts as they fall due.

In accordance with the BVI Act:

(i) the company may purchase, redeem or otherwise acquire its own shares in accordance with either (a) Sections 60, 61 and 62 of the BVI Act (save to the extent that those Sections are negated, modified or inconsistent with provisions for the purchase, redemption or acquisition of its own shares specified in the company's M&A); or (b) such other provisions for the purchase, redemption or acquisition of its own shares as may be specified in the company's M&A. The company's M&A provide that such Sections 60, 61 and 62 of the BVI Act do not apply to the company; and

(ii) where a company may purchase, redeem or otherwise acquire its own shares otherwise than in accordance with Sections 60, 61 and 62 of the BVI Act, it may not purchase, redeem or otherwise acquire the shares without the consent of the member whose shares are to be purchased, redeemed or otherwise acquired, unless the company is permitted by the M&A to purchase, redeem or otherwise acquire the shares without that consent; and

(iii) unless the shares are held as treasury shares in accordance with Section 64 of the BVI Act, any shares acquired by the company are deemed to be canceled immediately on purchase, redemption or other acquisition.

Variation of the Rights of Shareholders

As permitted by the BVI Act and our M&A, whenever the capital of our company is divided into different classes, the rights attached to any such class may only be materially adversely varied with the consent in writing of the holders of not less than two-thirds (2/3rds) of the issued shares of that class or with the sanction of a resolution of our shareholders passed at a separate meeting of the holders of the shares of that class by the holders of not less than two-thirds (2/3rds) of the issued shares of that class.

Limitations on the Right to Own Shares

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.

Anti-takeover Provisions in our M&A

Our M&A contain provisions which may have the effect of limiting the ability of others to acquire control of our company or cause us to engage in change-of-control transactions. These provisions could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our dual-class voting structure gives disproportionate voting power to the holders of our Class A and Class B ordinary shares. Our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix their designations, powers, preferences, privileges, and relative participating, optional or special rights and the qualifications, limitations or restrictions, including dividend rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights associated with our ordinary shares, in the form of ADS or otherwise. Preferred shares could be issued quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult.

Disclosure of Shareholder Ownership

There are no provisions in our memorandum and articles of association governing the ownership threshold above which shareholder ownership must be disclosed.

Differences in Corporate Law

The BVI Act 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 BVI Act applicable to us and the laws applicable to companies incorporated in the State of Delaware.

Mergers, Consolidations and Similar Arrangements

The BVI Act provides for mergers as that expression is understood under US corporate law. Common law mergers are also permitted outside of the scope of the BVI Act. Under the BVI Act, two or more companies may either merge into one of such existing companies, or the surviving company, or consolidate with both existing companies ceasing to exist and forming a new company, or the consolidated company. The procedure for a merger or consolidation between our company and another company (which need not be a BVI company) is set out in the BVI Act. The directors of the BVI company or BVI companies which are to merge or consolidate must approve a written plan of merger or consolidation which must also be authorized by a resolution of members (and the outstanding shares of every class of shares that are entitled to vote on the merger or consolidation as a class if the memorandum or articles of association so provide or if the plan of merger or consolidation contains any provisions that, if contained in a proposed amendment to the memorandum or articles, would entitle the class to vote on the proposed amendment as a class) of the shareholders of the BVI company or BVI companies which are to merge. A foreign company which is able under the laws of its foreign jurisdiction to participate in the merger or consolidation is required by the BVI Act to comply with the laws of that foreign jurisdiction in relation to the merger or consolidation. The BVI company must then execute articles of merger or consolidation, containing certain prescribed details. The plan and articles of merger or consolidation are then filed with the Registrar of Corporate Affairs in the BVI, or the Registrar. If the surviving company or the consolidated company is to be incorporated under the laws of a jurisdiction outside BVI, it shall file the additional instruments required under Section 174(2)(b) of the BVI Act. The Registrar then (if he or she is satisfied that the requirements of the BVI Act have been complied with) registers, in the case of a merger, the articles of merger or consolidation and any amendment to the M&A of the surviving company and, in the case of a consolidation, the M&A of the new consolidated company and issues a certificate of merger or consolidation (which is conclusive evidence of compliance with all requirements of the BVI Act in respect of the merger or consolidation). The merger or consolidation is effective on the date that the articles of merger or consolidation are registered by the Registrar or on such subsequent date, not exceeding thirty days, as is stated in the articles of merger or consolidation but if the surviving company or the consolidated company is a company incorporated under the laws of a jurisdiction outside the BVI, the merger or consolidation is effective as provided by the laws of that other jurisdiction.

As soon as a merger or consolidation becomes effective (among other things), (a) the surviving company or consolidated company (so far as is consistent with its amended memorandum and articles of association, as amended or established by the articles of merger or consolidation) has all rights, privileges, immunities, powers, objects and purposes of each of the constituent companies; (b) the memorandum and articles of association of any surviving company are automatically amended to the extent, if any, that changes to its amended memorandum and articles of association are contained in the articles of merger; (c) assets of every description, including choses-in-action and the business of each of the constituent companies, immediately vest in the surviving company or consolidated company; (d) the surviving company or consolidated company is liable for all claims, debts, liabilities and obligations of each of the constituent companies; (e) no conviction, judgment, ruling, order, claim, debt, liability or obligation due or to become due, and no cause existing, against a constituent company or against any shareholder, director, officer or agent thereof, is released or impaired by the merger or consolidation; and (f) no proceedings, whether civil or criminal, pending at the time of a merger or consolidation by or against a constituent company, or against any shareholder, director, officer or agent thereof, are abated or discontinued by the merger or consolidation, but: (i) the proceedings may be enforced, prosecuted, settled or compromised by or against the surviving company or consolidated company or against the shareholder, director, officer or agent thereof, as the case may be or (ii) the surviving company or consolidated company may be substituted in the proceedings for a constituent company but if the surviving company or the consolidated company is incorporated under the laws of a jurisdiction outside the BVI, the effect of the merger or consolidation is the same as noted foregoing except in so far as the laws of the other jurisdiction otherwise provide.

The Registrar shall strike off the register of companies each constituent company that is not the surviving company in the case of a merger and all constituent companies in the case of a consolidation (save that this shall not apply to a foreign company).

If the directors determine it to be in the best interests of us, it is also possible for a merger to be approved as a court approved plan of arrangement or as a scheme of arrangement in accordance with (in each such case) the BVI Act. The convening of any necessary shareholders meetings and subsequently the arrangement must be authorized by the BVI court. A scheme of arrangement requires the approval of 75% of the votes of the shareholders or class of shareholders, as the case may be. If the effect of the scheme is different in relation to different shareholders, it may be necessary for them to vote separately in relation to the scheme, with it being required to secure the requisite approval level of each separate voting group. Under a plan of arrangement, a BVI court may determine what shareholder approvals are required and the manner of obtaining the approval.

Shareholders' Suits

Under the provisions of the BVI Act, the memorandum and articles of association of a company are binding as between the company and its members and between the members. In general, members are bound by the decision of the majority or special majorities as set out in the articles of association or in the BVI Act. As for voting, the usual rule is that with respect to normal commercial matters members may act from self-interest when exercising the right to vote attached to their shares.

If the majority members have infringed a minority member's rights, the minority may seek to enforce its rights either by derivative action or by personal action. A derivative action concerns the infringement of the company's rights where the wrongdoers are in control of the company and are preventing it from taking action, whereas a personal action concerns the infringement of a right that is personal to the particular member concerned.

The BVI Act provides for a series of remedies available to members. Where a company incorporated under the BVI Act conducts some activity which breaches the BVI Act or the company's memorandum and articles of association, the BVI High Court can issue a restraining or compliance order. Members can now also bring derivative, personal and Representative Actions under certain circumstances.

The traditional English basis for members' remedies have also been incorporated into the BVI Act: where a member of a company considers that the affairs of the company have been, are being or are likely to be conducted in a manner likely to be oppressive, unfairly discriminating or unfairly prejudicial to him, he may apply to the BVI High Court for an order on such conduct.

Any member of a company may apply to the BVI High Court for the appointment of a liquidator for the company and the Court may appoint a liquidator for the company if it is of the opinion that it is just and equitable to do so.

The BVI Act provides that any member of a company is entitled to payment of the fair value of his shares upon dissenting from any of the following:

(a) a merger;

(b) a consolidation;

(c) any sale, transfer, lease, exchange or other disposition of more than 50 per cent in value of the assets or business of the company if not made in the usual or regular course of the business carried on by the company but not including (i) a disposition pursuant to an order of the court having jurisdiction in the matter; (ii) a disposition for money on terms requiring all or substantially all net proceeds to be distributed to the members in accordance with their respective interest within one year after the date of disposition; or (iii) a transfer pursuant to the power of the directors to transfer assets for the protection thereof;

(d) a redemption of 10 per cent, or fewer, of the issued shares of the company required by the holders of 90 percent, or more, of the shares of the company pursuant to the terms of the BVI Act; and

(e) an arrangement, if permitted by the BVI High Court.

Generally any other claims against a company by its members must be based on the general laws of contract or tort applicable in the BVI or their individual rights as members as established by the company's memorandum and articles of association.

The BVI Act provides that if a company or a director of a company engages in, proposes to engage in or has engaged in, conduct that contravenes the BVI Act or the memorandum or articles of association of the company, the BVI High Court may, on the application of a member or a director of the company, make an order directing the company or director to comply with, or restraining the company or director from engaging in conduct that contravenes the BVI Act or the memorandum or articles of association.

Indemnification of Directors and Executive Officers and Limitation of Liability

BVI law does not limit the extent to which a company's articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the BVI High Court to be contrary to public policy (e.g. for purporting to provide indemnification against the consequences of committing a crime). An indemnity will be void and of no effect and will not apply to a person unless the person acted honestly and in good faith and in what he believed to be in the best interests of the company and, in the case of criminal proceedings, the person had no reasonable cause to believe that his conduct was unlawful. Our memorandum and articles of association provide that every director and officer of our company shall be indemnified against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such indemnified person, other than by reason of such indemnified person's own dishonesty, wilful default or fraud, in or about the conduct of our company's business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such indemnified person in defending (whether successfully or otherwise) any civil proceedings concerning our company or its affairs in any court whether in the British Virgin Islands or elsewhere. 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 or she reasonably believes to be in the best interests of the corporation. He or she must not use his or her 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 BVI law, directors must not place themselves in a position in which there is a conflict between their duty to the company and their personal interests. This means that, strictly speaking, a director should not participate in a decision in circumstances where he has a potential conflict. That is, he should declare his interest and abstain. The BVI Act provides that a director "shall, forthwith after becoming aware of the fact that he is interested in a transaction entered into or to be entered into by the company, disclose the interest to the board of the company." The failure of a director to so disclose an interest does not affect the validity of a transaction entered into by the director or the company, provided that the director's interest was disclosed to the board prior to the company's entry into the transaction or was not required to be disclosed (for example where the transaction is between the company and the director himself or is otherwise in the ordinary course of business and on usual terms and conditions). Typically a company's memorandum and articles of association will allow a director interested in a particular transaction to vote on it, attend meetings at which it is considered, and sign documents on behalf of the company which relate to the transaction.

Under the laws of the BVI, a transaction entered into by the company in respect of which a director is interested will not be voidable by the company where the members have approved or ratified the transaction in knowledge of the material facts of the interest of the director in the transaction, or if the company received fair value for the transaction.

Broadly speaking, the duties that a director owes to a company may be divided into two categories. The first category encompasses fiduciary duties, that is, the duties of loyalty, honesty and good faith. The second category encompasses duties of skill and care. Each is considered in turn below.

A director's fiduciary duties can be summarized as follows:

(a) Bona Fides: The directors must act bona fide in what they consider is in the best interests of the company (or, if permitted as above, that company's parent company).

(b) Proper Purpose: The directors must exercise the powers that are vested in them for the purpose for which they were conferred and not for a collateral purpose.

(c) Unfettered Discretion: Since the powers of the directors are to be exercised by them in trust for the company, they should not improperly fetter the exercise of future discretion.

(d) Conflict of Duty and Interest: as per the above.

In addition to their fiduciary duties a director has the duties of care, diligence and skill which are owed to the company itself and not, for example, to individual members (subject to the limited exceptions as to enforcement on behalf of the company).

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. As permitted by BVI law, our articles of association provide that 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.

BVI law and our M&A provide that upon the written request of shareholders entitled to exercise thirty per cent (30%) or more of the voting rights in respect of the matter for which the meeting is requested, the directors shall convene a meeting of shareholders. As a BVI 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 investors on a board of directors since it permits the investor 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 British Virgin Islands but our 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 articles of association, a director may be removed from office, by a resolution of shareholders passed at a meeting of shareholders or by a written resolution passed by a least fifty per cent (50%) of the voters of all shareholders of the company entitled to vote, notwithstanding anything in the articles of association or in any agreement between the company and such director.

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.

British Virgin Islands law has no comparable statute. As a result, we are not afforded the same statutory protections in the British Virgin Islands as we would be offered by the Delaware business combination statute. However, although British Virgin Islands law does not regulate transactions between a company and its significant shareholders, it does provide that such transactions must be entered into bona fide in the best interests of the company and not with the effect of constituting a fraud on the investors. See also "Shareholders' Suits" above. We have adopted a code of business conduct and ethics which requires employees to fully disclose any situations that could reasonably be expected to give rise to a conflict of interest, and sets forth relevant restrictions and procedures when a conflict of interest arises to ensure the best interest of the company.

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.

The liquidation of a company may be a voluntary solvent liquidation or a liquidation under the Insolvency Act. Where a company has been struck off the Register of Companies under the BVI Act continuously for a period of seven years it is dissolved with effect from the last day of that period.

Voluntary Liquidation

If the liquidation is a solvent liquidation, the provisions of the BVI Act governs the liquidation. A company may only be liquidated under the BVI Act as a solvent liquidation if it has no liabilities or it is able to pay its debts as they fall due and the value of its assets exceeds its liabilities. Subject to the memorandum and articles of association of a company, a liquidator may be appointed by a resolution of directors or resolution of members but if the directors have commenced liquidation by a resolution of directors the members must approve the liquidation plan by a resolution of members save in limited circumstances.

A liquidator is appointed for the purpose of collecting in and realizing the assets of a company and distributing proceeds to creditors.

Liquidation under the Insolvency Act

The Insolvency Act governs an insolvent liquidation. Pursuant to the Insolvency Act, a company is insolvent if it fails to comply with the requirements of a statutory demand that has not be set aside pursuant to the Insolvency Act, execution or other process issued on a judgment, decree or order of court in favor of a creditor of the company is returned wholly or partly unsatisfied or either the value of the company's liabilities exceeds its assets or the company is unable to pay its debts as they fall due. The liquidator must be either the Official Receiver in BVI or a BVI licensed insolvency practitioner. An individual resident outside the BVI may be appointed to act as liquidator jointly with a BVI licensed insolvency practitioner or the Official Receiver. The members of the company may appoint an insolvency practitioner as liquidator of the company or the court may appoint an Official Receiver or an eligible insolvency practitioner. The application to the court can be made by one or more of the following: (i) the company, (ii) a creditor, (iii) a member, or (iv) the supervisor of a creditors' arrangement in respect of the company, the Financial Services Commission and the Attorney General in the BVI.

The court may appoint a liquidator if:

(a) the company is insolvent;

(b) the court is of the opinion that it is just and equitable that a liquidator should be appointed; or

(c) the court is of the opinion that it is in the public interest for a liquidator to be appointed.

An application under (a) above by a member may only be made with leave of the court, which shall not be granted unless the court is satisfied that there is prima facie case that the company is insolvent. An application under (c) above may only be made by the Financial Services Commission or the Attorney General and they may only make an application under (c) above if the company concerned is, or at any time has been, a regulated person (i.e. a person that holds a prescribed financial services license) or the company is carrying on, or at any time has carried on, unlicensed financial services business.

Order of Preferential Payments upon Liquidation

Upon the insolvent liquidation of a company, the assets of a company shall be applied in accordance with the following priorities: (a) in paying, in priority to all other claims, the costs and expenses properly incurred in the liquidation in accordance with the prescribed priority; (b) after payment of the costs and expenses of the liquidation, in paying the preferential claims admitted by the liquidator (wages and salary, amounts to the BVI Social Security Board, pension contributions, government taxes) — preferential claims rank equally between themselves and, if the assets of the company are insufficient to meet the claims in full, they shall be paid ratably; (c) after the payment of preferential claims, in paying all other claims admitted by the liquidator, including those of non-secured creditors — the claims of non-secured creditors of the company shall rank equally among themselves and if the assets of the company are insufficient to meet the claims in full, such non-secured creditors shall be paid ratably; (d) after paying all admitted claims, paying any interest payable under the BVI Insolvency Act; and finally (e) any surplus assets remaining after payment of the costs, expenses and claims above shall be distributed to the members in accordance with their rights and interests in the company. Part VIII of the Insolvency Act provides for various applications which may be made by a liquidator to set aside transactions which have unfairly diminished the assets which are available to creditors.

The appointment of a liquidator over the assets of a company does not affect the right of a secured creditor to take possession of and realize or otherwise deal with assets of the company over which that creditor has a security interest. Accordingly, a secured creditor may enforce its security directly without recourse to the liquidator, in priority to the order of payments described in the preceding paragraph. However, so far as the assets of a company in liquidation available for payment of the claims of unsecured creditors are insufficient to pay the costs and expenses of the liquidation and the preferential creditors, those costs, expenses and claims have priority over the claims of charges in respect of assets that are subject to a floating charge created by a company and shall be paid accordingly out of those assets.

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. Under the BVI Act and our articles of association, our company may be dissolved, liquidated or wound up by a resolution of our shareholders.

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 British Virgin Islands law and our articles of association, if our share capital is divided into more than one class of shares, the rights attached to any class may only be materially adversely varied with the consent in writing of the holders of not less than two-thirds (2/3rds) of the issued shares of that class or with the sanction of a resolution of our shareholders passed at a separate meeting of the holders of the shares of that class by the holders of not less than two-thirds (2/3rds) of the issued shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by, inter alia, the creation, allotment or issue of further shares ranking *pari passu* with or subsequent to them or the redemption or purchase of any shares of any class by the company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

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. As permitted by British Virgin Islands law, our memorandum and articles of association may be amended by a resolution of shareholders or by a resolution of directors, save that no amendment may be made by a resolution of directors: (i) to restrict the rights or powers of the shareholders to amend the memorandum or articles; (ii) to change the percentage of shareholders required to pass a resolution of shareholders to amend the memorandum or articles; (iii) in circumstances where the memorandum or articles cannot be amended by the shareholders; or (iv) to certain specified clauses of the articles of association.

Description of Debt Securities, Warrants and Rights and Other Securities (Items 9.A.7, 12.A, 12.B and 12.C of Form 20-F)

Underwriters' Warrants

Description and Exercise of the Warrants

On February 3, 2020, we issued to each of WestPark Capital, Inc. ("WestPark") and Univest Securities, LLC ("Univest"), as the representatives of the underwriters for our initial public offering, warrants (the "Warrants") to purchase, in whole or in part, up to 56,668 of our Class A ordinary shares, in the form of American Depositary Shares. All of the Warrants were outstanding as of March 31, 2020. The Warrants will be exercisable at $15.00 per American Depositary Share. The exercise price and the number of shares issuable upon exercise of the Warrants may be adjusted in certain circumstances including in the event of a stock dividend, share subdivision or our recapitalization, reorganization, merger or consolidation.

The Warrants will be exercisable at any time or from time to time during the period from January 28, 2020 to 4:00 p.m., Eastern Time, January 28, 2025. If the subscription rights represented by the Warrants are not exercised at or before 4:00 p.m., Eastern time, January 28, 2025, then the Warrants shall become void without further force or effect. The Warrants are exercisable on a cash or cashless basis.

Registration Rights

Although the Warrants and the underlying Class A ordinary shares have been registered in our F-1 registration statement (File No. 333-234408), the Warrants provide for registration rights upon request, in certain cases. The one-off demand registration right provided will terminate on January 28, 2025. The piggyback registration right provided will be for a period of no more than two years from January 28, 2025. We will bear all fees and expenses attendant to registering the securities issuable on exercise of the Warrants, other than underwriting commissions incurred and payable by the holders.

Redemption

Not applicable.

Debt Securities, Rights and Other Securities

Not applicable.

Description of American Depositary Shares (Items 12.D.1 and 12.D.2 of Form 20-F)

Citibank, N.A. acts as the depositary for the American Depositary Shares. Citibank's depositary offices are located at 388 Greenwich Street, New York, New York 10013. American Depositary Shares are frequently referred to as "ADSs" and represent ownership interests in securities that are on deposit with the depositary. ADSs may be represented by certificates that are commonly known as "American Depositary Receipts" or "ADRs." The depositary typically appoints a custodian to safekeep the securities on deposit. In this case, the custodian is Citibank, N.A.—Hong Kong, located at 9/F, Citi Tower, One Bay East, 83 Hon Hai Road, Kwun Tong, Kowloon, Hong Kong.

We have appointed Citibank as depositary pursuant to a deposit agreement. A copy of the deposit agreement is on file with the SEC under cover of a registration statement on Form F-6. You may obtain a copy of the deposit agreement from the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and from the SEC's website (www.sec.gov). Please refer to Registration Number 333-234548 when retrieving such copy.

The following is a summary description of the material terms of the ADSs and of your material rights as an owner of ADSs. Please remember that summaries by their nature lack the precision of the information summarized and that the rights and obligations of an owner of ADSs will be determined by reference to the terms of the deposit agreement and not by this summary. For the complete information, you should read the entire deposit agreement and the form of American Depositary Receipt. The portions of this summary description that are italicized describe matters that may be relevant to the ownership of ADSs but that may not be contained in the deposit agreement.

Each ADS represents the right to receive, and to exercise the beneficial ownership interests in, one (1) Class A ordinary shares that are on deposit with the depositary and/or custodian. An ADS also represents the right to receive, and to exercise the beneficial interests in, any other property received by the depositary or the custodian on behalf of the owner of the ADS but that has not been distributed to the owners of ADSs because of legal restrictions or practical considerations. We and the depositary may agree to change the ADS-to-Class A ordinary shares ratio by amending the deposit agreement. This amendment may give rise to, or change, the depositary fees payable by ADS owners. The custodian, the depositary and their respective nominees will hold all deposited property for the benefit of the holders and beneficial owners of ADSs. The deposited property does not constitute the proprietary assets of the depositary, the custodian or their nominees. Beneficial ownership in the deposited property will under the terms of the deposit agreement be vested in the beneficial owners of the ADSs. The depositary, the custodian and their respective nominees will be the record holders of the deposited property represented by the ADSs for the benefit of the holders and beneficial owners of the corresponding ADSs. A beneficial owner of ADSs may or may not be the holder of ADSs. Beneficial owners of ADSs will be able to receive, and to exercise beneficial ownership interests in, the deposited property only through the registered holders of the ADSs, the registered holders of the ADSs (on behalf of the applicable ADS owners) only through the depositary, and the depositary (on behalf of the owners of the corresponding ADSs) directly, or indirectly, through the custodian or their respective nominees, in each case upon the terms of the deposit agreement.

The owner of ADSs becomes a party to the deposit agreement and therefore will be bound to its terms and to the terms of any ADR that represents ADSs. The deposit agreement and the ADR specify our rights and obligations as well as the owner's rights and obligations as owner of ADSs and those of the depositary. As an ADS holder you appoint the depositary to act on your behalf in certain circumstances. The deposit agreement and the ADRs are governed by New York law. However, our obligations to the holders of Class A ordinary shares will continue to be governed by the laws of the British Virgin Islands, which may be different from the laws in the United States.

In addition, applicable laws and regulations may require you to satisfy reporting requirements and obtain regulatory approvals in certain circumstances. You are solely responsible for complying with such reporting requirements and obtaining such approvals. Neither the depositary, the custodian, us or any of their or our respective agents or affiliates shall be required to take any actions whatsoever on your behalf to satisfy such reporting requirements or obtain such regulatory approvals under applicable laws and regulations.

We will not treat you, being an owner of ADSs, as one of our shareholders and you will not have direct shareholder rights. The depositary will hold on your behalf the shareholder rights attached to the Class A ordinary shares underlying your ADSs. As an owner of ADSs you will be able to exercise the shareholders rights for the Class A ordinary shares represented by your ADSs through the depositary only to the extent contemplated in the deposit agreement. To exercise any shareholder rights not contemplated in the deposit agreement you will, as an ADS owner, need to arrange for the cancellation of your ADSs and become a direct shareholder.

The manner in which you own the ADSs (e.g., in a brokerage account vs. as registered holder, or as holder of certificated vs. uncertificated ADSs) may affect your rights and obligations, and the manner in which, and extent to which, the depositary's services are made available to you. As an owner of ADSs, you may hold your ADSs either by means of an ADR registered in your name, through a brokerage or safekeeping account, or through an account established by the depositary in your name reflecting the registration of uncertificated ADSs directly on the books of the depositary (commonly referred to as the "direct registration system" or "DRS"). The direct registration system reflects the uncertificated (book-entry) registration of ownership of ADSs by the depositary. Under the direct registration system, ownership of ADSs is evidenced by periodic statements issued by the depositary to the holders of the ADSs. The direct registration system includes automated transfers between the depositary and The Depository Trust Company, or DTC, the central book-entry clearing and settlement system for equity securities in the United States. If you decide to hold your ADSs through your brokerage or safekeeping account, you must rely on the procedures of your broker or bank to assert your rights as ADS owner. Banks and brokers typically hold securities such as the ADSs through clearing and settlement systems such as DTC. The procedures of such clearing and settlement systems may limit your ability to exercise your rights as an owner of ADSs. Please consult with your broker or bank if you have any questions concerning these limitations and procedures. All ADSs held through DTC will be registered in the name of a nominee of DTC. This summary description assumes you have opted to own the ADSs directly by means of an ADS registered in your name and, as such, we will refer to you as the "holder." When we refer to "you," we assume the reader owns ADSs and will own ADSs at the relevant time.

The registration of the Class A ordinary shares in the name of the depositary or the custodian shall, to the maximum extent permitted by applicable law, vest in the depositary or the custodian the record ownership in the applicable Class A ordinary shares with the beneficial ownership rights and interests in such Class A ordinary shares being at all times vested with the beneficial owners of the ADSs representing the Class A ordinary shares. The depositary or the custodian shall at all times be entitled to exercise the beneficial ownership rights in all deposited property, in each case only on behalf of the holders and beneficial owners of the ADSs representing the deposited property.

Voting Rights

As a holder, you generally have the right under the deposit agreement to instruct the depositary to exercise the voting rights for the Class A ordinary shares represented by your ADSs. The voting rights of holders of Class A ordinary shares are described in "Description of Ordinary Shares" above.

At our request, the depositary will distribute to you any notice of shareholders' meeting received from us together with information explaining how to instruct the depositary to exercise the voting rights of the securities represented by ADSs. In lieu of distributing such materials, the depositary may distribute to holders of ADSs instructions on how to retrieve such materials upon request.

If the depositary timely receives voting instructions from a holder of ADSs, it will endeavor to vote the securities (in person or by proxy) represented by the holder's ADSs as follows:

- In the event of voting by show of hands, the depositary will vote (or cause the custodian to vote) all Class A ordinary shares held on deposit at that time in accordance with the voting instructions received from a majority of holders of ADSs who provide timely voting instructions.

- In the event of voting by poll, the depositary will vote (or cause the Custodian to vote) the Class A ordinary shares held on deposit in accordance with the voting instructions received from the holders of ADSs.

Securities for which no voting instructions have been received will not be voted (except (a) as set forth above in the case voting is by show of hands, (b) in the event of voting by poll, holders of ADSs in respect of which no timely voting instructions have been received shall be deemed to have instructed the depositary to give a discretionary proxy to a person designated by us to vote the Class A ordinary shares represented by such holders' ADSs; provided, however, that no such discretionary proxy shall be given with respect to any matter to be voted upon as to which we inform the depositary that (i) we do not wish such proxy to be given, (ii) substantial opposition exists, or (iii) the rights of holders of Class A ordinary shares may be adversely affected, and (c) as otherwise contemplated in the deposit agreement). Please note that the ability of the depositary to carry out voting instructions may be limited by practical and legal limitations and the terms of the securities on deposit. We cannot assure you that you will receive voting materials in time to enable you to return voting instructions to the depositary in a timely manner.

Dividends and Distributions

As a holder of ADSs, you generally have the right to receive the distributions we make on the securities deposited with the custodian. Your receipt of these distributions may be limited, however, by practical considerations and legal limitations. Holders of ADSs will receive such distributions under the terms of the deposit agreement in proportion to the number of ADSs held as of the specified record date, after deduction of the applicable fees, taxes and expenses.

Distributions of Cash

Whenever we make a cash distribution for the securities on deposit with the custodian, we will deposit the funds with the custodian. Upon receipt of confirmation of the deposit of the requisite funds, the depositary will arrange for the funds received in a currency other than U.S. dollars to be converted into U.S. dollars and for the distribution of the U.S. dollars to the holders, subject to the laws and regulations of the British Virgin Islands.

The conversion into U.S. dollars will take place only if practicable and if the U.S. dollars are transferable to the United States. The depositary will apply the same method for distributing the proceeds of the sale of any property (such as undistributed rights) held by the custodian in respect of securities on deposit.

The distribution of cash will be made net of the fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. The depositary will hold any cash amounts it is unable to distribute in a non-interest bearing account for the benefit of the applicable holders and beneficial owners of ADSs until the distribution can be effected or the funds that the depositary holds must be escheated as unclaimed property in accordance with the laws of the relevant states of the United States.

Distributions of Shares

Whenever we make a free distribution of Class A ordinary shares for the securities on deposit with the custodian, we will deposit the applicable number of Class A ordinary shares with the custodian. Upon receipt of confirmation of such deposit, the depositary will either distribute to holders new ADSs representing the Class A ordinary shares deposited or modify the ADS-to-Class A ordinary shares ratio, in which case each ADS you hold will represent rights and interests in the additional Class A ordinary shares so deposited. Only whole new ADSs will be distributed. Fractional entitlements will be sold and the proceeds of such sale will be distributed as in the case of a cash distribution.

The distribution of new ADSs or the modification of the ADS-to-Class A ordinary shares ratio upon a distribution of Class A ordinary shares will be made net of the fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. In order to pay such taxes or governmental charges, the depositary may sell all or a portion of the new Class A ordinary shares so distributed.

No such distribution of new ADSs will be made if it would violate a law (e.g., the U.S. securities laws) or if it is not operationally practicable. If the depositary does not distribute new ADSs as described above, it may sell the Class A ordinary shares received upon the terms described in the deposit agreement and will distribute the proceeds of the sale as in the case of a distribution of cash.

Distributions of Rights

Whenever we intend to distribute rights to subscribe for additional Class A ordinary shares, we will give prior notice to the depositary and we will assist the depositary in determining whether it is lawful and reasonably practicable to distribute rights to subscribe for additional ADSs to holders.

The depositary will establish procedures to distribute rights to subscribe for additional ADSs to holders and to enable such holders to exercise such rights if it is lawful and reasonably practicable to make the rights available to holders of ADSs, and if we provide all of the documentation contemplated in the deposit agreement (such as opinions to address the lawfulness of the transaction). You may have to pay fees, expenses, taxes and other governmental charges to subscribe for the new ADSs upon the exercise of your rights. The depositary is not obligated to establish procedures to facilitate the distribution and exercise by holders of rights to subscribe for new Class A ordinary shares other than in the form of ADSs.

The depositary will not distribute the rights to you if:

- We do not timely request that the rights be distributed to you or we request that the rights not be distributed to you; or
- We fail to deliver satisfactory documents to the depositary; or
- It is not reasonably practicable to distribute the rights.

The depositary will sell the rights that are not exercised or not distributed if such sale is lawful and reasonably practicable. The proceeds of such sale will be distributed to holders as in the case of a cash distribution. If the depositary is unable to sell the rights, it will allow the rights to lapse.

Elective Distributions

Whenever we intend to distribute a dividend payable at the election of shareholders either in cash or in additional shares, we will give prior notice thereof to the depositary and will indicate whether we wish the elective distribution to be made available to you. In such case, we will assist the depositary in determining whether such distribution is lawful and reasonably practicable.

The depositary will make the election available to you only if it is reasonably practicable and if we have provided all of the documentation contemplated in the deposit agreement. In such case, the depositary will establish procedures to enable you to elect to receive either cash or additional ADSs, in each case as described in the deposit agreement.

If the election is not made available to you, you will receive either cash or additional ADSs, depending on what a shareholder in the British Virgin Islands would receive upon failing to make an election, as more fully described in the deposit agreement.

Other Distributions

Whenever we intend to distribute property other than cash, Class A ordinary shares or rights to subscribe for additional Class A ordinary shares, we will notify the depositary in advance and will indicate whether we wish such distribution to be made to you. If so, we will assist the depositary in determining whether such distribution to holders is lawful and reasonably practicable.

If it is reasonably practicable to distribute such property to you and if we provide to the depositary all of the documentation contemplated in the deposit agreement, the depositary will distribute the property to the holders in a manner it deems practicable.

The distribution will be made net of fees, expenses, taxes and governmental charges payable by holders under the terms of the deposit agreement. In order to pay such taxes and governmental charges, the depositary may sell all or a portion of the property received.

The depositary will not distribute the property to you and will sell the property if:

- We do not request that the property be distributed to you or if we request that the property not be distributed to you; or
- We do not deliver satisfactory documents to the depositary; or
- The depositary determines that all or a portion of the distribution to you is not reasonably practicable.

The proceeds of such a sale will be distributed to holders as in the case of a cash distribution.

Redemption

Whenever we decide to redeem any of the securities on deposit with the custodian, we will notify the depositary in advance. If it is practicable and if we provide all of the documentation contemplated in the deposit agreement, the depositary will provide notice of the redemption to the holders.

The custodian will be instructed to surrender the shares being redeemed against payment of the applicable redemption price. The depositary will convert into U.S. dollars upon the terms of the deposit agreement the redemption funds received in a currency other than U.S. dollars and will establish procedures to enable holders to receive the net proceeds from the redemption upon surrender of their ADSs to the depositary. You may have to pay fees, expenses, taxes and other governmental charges upon the redemption of your ADSs. If less than all ADSs are being redeemed, the ADSs to be retired will be selected by lot or on a pro rata basis, as the depositary may determine.

Changes Affecting Class A Ordinary Shares

The Class A ordinary shares held on deposit for your ADSs may change from time to time. For example, there may be a change in nominal or par value, split-up, cancellation, consolidation or any other reclassification of such Class A ordinary shares or a recapitalization, reorganization, merger, consolidation or sale of assets of the Company.

If any such change were to occur, your ADSs would, to the extent permitted by law and the deposit agreement, represent the right to receive the property received or exchanged in respect of the Class A ordinary shares held on deposit. The depositary may in such circumstances deliver new ADSs to you, amend the deposit agreement, the ADRs and the applicable registration statement(s) on Form F-6, call for the exchange of your existing ADSs for new ADSs and take any other actions that are appropriate to reflect as to the ADSs the change affecting the Shares. If the depositary may not lawfully distribute such property to you, the depositary may sell such property and distribute the net proceeds to you as in the case of a cash distribution.

Issuance of ADSs upon Deposit of Class A Ordinary Shares

The depositary may create ADSs on your behalf if you or your broker deposit Class A ordinary shares with the custodian. The depositary will deliver these ADSs to the person you indicate only after you pay any applicable issuance fees and any charges and taxes payable for the transfer of the Class A ordinary shares to the custodian. Your ability to deposit Class A ordinary shares and receive ADSs may be limited by U.S. and British Virgin Islands legal considerations applicable at the time of deposit.

The issuance of ADSs may be delayed until the depositary or the custodian receives confirmation that all required approvals have been given and that the Class A ordinary shares have been duly transferred to the custodian. The depositary will only issue ADSs in whole numbers.

When you make a deposit of Class A ordinary shares, you will be responsible for transferring good and valid title to the depositary. As such, you will be deemed to represent and warrant that:

- The Class A ordinary shares are duly authorized, validly issued, fully paid, non-assessable and legally obtained.
- All preemptive (and similar) rights, if any, with respect to such Class A ordinary shares have been validly waived or exercised.
- You are duly authorized to deposit the Class A ordinary shares.
- The Class A ordinary shares presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim, and are not, and the ADSs issuable upon such deposit will not be, “restricted securities” (as defined in the deposit agreement).
- The Class A ordinary shares presented for deposit have not been stripped of any rights or entitlements.

If any of the representations or warranties are incorrect in any way, we and the depositary may, at your cost and expense, take any and all actions necessary to correct the consequences of the misrepresentations.

Transfer, Combination and Split Up of ADRs

As an ADR holder, you will be entitled to transfer, combine or split up your ADRs and the ADSs evidenced thereby. For transfers of ADRs, you will have to surrender the ADRs to be transferred to the depositary and also must:

- ensure that the surrendered ADR is properly endorsed or otherwise in proper form for transfer;
- provide such proof of identity and genuineness of signatures as the depositary deems appropriate;
- provide any transfer stamps required by the State of New York or the United States; and
- pay all applicable fees, charges, expenses, taxes and other government charges payable by ADR holders pursuant to the terms of the deposit agreement, upon the transfer of ADRs.

To have your ADRs either combined or split up, you must surrender the ADRs in question to the depositary with your request to have them combined or split up, and you must pay all applicable fees, charges and expenses payable by ADR holders, pursuant to the terms of the deposit agreement, upon a combination or split up of ADRs.

Withdrawal of Class A ordinary shares Upon Cancellation of ADSs

As a holder, you will be entitled to present your ADSs to the depositary for cancellation and then receive the corresponding number of underlying Class A ordinary shares at the custodian’s offices. Your ability to withdraw the Class A ordinary shares held in respect of the ADSs may be limited by U.S. and British Virgin Islands law considerations applicable at the time of withdrawal. In order to withdraw the Class A ordinary shares represented by your ADSs, you will be required to pay to the depositary the fees for cancellation of ADSs and any charges and taxes payable upon the transfer of the Class A ordinary shares. You assume the risk for delivery of all funds and securities upon withdrawal. Once canceled, the ADSs will not have any rights under the deposit agreement.

If you hold ADSs registered in your name, the depositary may ask you to provide proof of identity and genuineness of any signature and such other documents as the depositary may deem appropriate before it will cancel your ADSs. The withdrawal of the Class A ordinary shares represented by your ADSs may be delayed until the depositary receives satisfactory evidence of compliance with all applicable laws and regulations. Please keep in mind that the depositary will only accept ADSs for cancellation that represent a whole number of securities on deposit.

You will have the right to withdraw the securities represented by your ADSs at any time except for

- Temporary delays that may arise because (i) the transfer books for the Class A ordinary shares or ADSs are closed, or (ii) Class A ordinary shares are immobilized on account of a shareholders' meeting or a payment of dividends.

- Obligations to pay fees, taxes and similar charges.

- Restrictions imposed because of laws or regulations applicable to ADSs or the withdrawal of securities on deposit.

The deposit agreement may not be modified to impair your right to withdraw the securities represented by your ADSs except to comply with mandatory provisions of law.

Amendments and Termination

We may agree with the depositary to modify the deposit agreement at any time without your consent. We undertake to give holders 30 days' prior notice of any modifications that would materially prejudice any of their substantial rights under the deposit agreement. We will not consider to be materially prejudicial to your substantial rights any modifications or supplements that are reasonably necessary for the ADSs to be registered under the Securities Act or to be eligible for book-entry settlement, in each case without imposing or increasing the fees and charges you are required to pay. In addition, we may not be able to provide you with prior notice of any modifications or supplements that are required to accommodate compliance with applicable provisions of law.

You will be bound by the modifications to the deposit agreement if you continue to hold your ADSs after the modifications to the deposit agreement become effective. The deposit agreement cannot be amended to prevent you from withdrawing the Class A ordinary shares represented by your ADSs (except as permitted by law).

We have the right to direct the depositary to terminate the deposit agreement. Similarly, the depositary may in certain circumstances on its own initiative terminate the deposit agreement. In either case, the depositary must give notice to the holders at least 30 days before termination. Until termination, your rights under the deposit agreement will be unaffected.

After termination, the depositary will continue to collect distributions received (but will not distribute any such property until you request the cancellation of your ADSs) and may sell the securities held on deposit. After the sale, the depositary will hold the proceeds from such sale and any other funds then held for the holders of ADSs in a non-interest bearing account. At that point, the depositary will have no further obligations to holders other than to account for the funds then held for the holders of ADSs still outstanding (after deduction of applicable fees, taxes and expenses).

In connection with any termination of the deposit agreement, the depositary may make available to owners of ADSs a means to withdraw the Class A ordinary shares represented by ADSs and to direct the depositary of such Class A ordinary shares into an unsponsored American depositary share program established by the depositary. The ability to receive unsponsored American depositary shares upon termination of the deposit agreement would be subject to satisfaction of certain U.S. regulatory requirements applicable to the creation of unsponsored American depositary shares and the payment of applicable depositary fees.

Books of Depositary

The depositary will maintain ADS holder records at its depositary office. You may inspect such records at such office during regular business hours but solely for the purpose of communicating with other holders in the interest of business matters relating to the ADSs and the deposit agreement.

The depositary will maintain in New York facilities to record and process the issuance, cancellation, combination, split-up and transfer of ADSs. These facilities may be closed from time to time, to the extent not prohibited by law.

Limitations on Obligations and Liabilities

The deposit agreement limits our obligations and the depositary's obligations to you. Please note the following:

- We and the depositary are obligated only to take the actions specifically stated in the deposit agreement without negligence or bad faith.
- The depositary disclaims any liability for any failure to carry out voting instructions, for any manner in which a vote is cast or for the effect of any vote, provided it acts in good faith and in accordance with the terms of the deposit agreement.
- The depositary disclaims any liability for any failure to determine the lawfulness or practicality of any action, for the content of any document forwarded to you on our behalf or for the accuracy of any translation of such a document, for the investment risks associated with investing in Class A ordinary shares, for the validity or worth of the Class A ordinary shares, for any tax consequences that result from the ownership of ADSs, for the credit-worthiness of any third party, for allowing any rights to lapse under the terms of the deposit agreement, for the timeliness of any of our notices or for our failure to give notice.
- We and the depositary will not be obligated to perform any act that is inconsistent with the terms of the deposit agreement.
- We and the depositary disclaim any liability if we or the depositary are prevented or forbidden from or subject to any civil or criminal penalty or restraint on account of, or delayed in, doing or performing any act or thing required by the terms of the deposit agreement, by reason of any provision, present or future of any law or regulation, or by reason of present or future provision of any provision of our Articles of Association, or any provision of or governing the securities on deposit, or by reason of any act of God or war or other circumstances beyond our control.
- We and the depositary disclaim any liability by reason of any exercise of, or failure to exercise, any discretion provided for in the deposit agreement or in our Articles of Association or in any provisions of or governing the securities on deposit.
- We and the depositary further disclaim any liability for any action or inaction in reliance on the advice or information received from legal counsel, accountants, any person presenting Shares for deposit, any holder of ADSs or authorized representatives thereof, or any other person believed by either of us in good faith to be competent to give such advice or information.
- We and the depositary also disclaim liability for the inability by a holder to benefit from any distribution, offering, right or other benefit that is made available to holders of Class A ordinary shares but is not, under the terms of the deposit agreement, made available to you.
- We and the depositary may rely without any liability upon any written notice, request or other document believed to be genuine and to have been signed or presented by the proper parties.
- We and the depositary also disclaim liability for any consequential or punitive damages for any breach of the terms of the deposit agreement.
- No disclaimer of any Securities Act liability is intended by any provision of the deposit agreement.

- Nothing in the deposit agreement gives rise to a partnership or joint venture, or establishes a fiduciary relationship, among us, the depositary and you as ADS holder.

- Nothing in the deposit agreement precludes Citibank (or its affiliates) from engaging in transactions in which parties adverse to us or the ADS owners have interests, and nothing in the deposit agreement obligates Citibank to disclose those transactions, or any information obtained in the course of those transactions, to us or to the ADS owners, or to account for any payment received as part of those transactions.

Foreign Currency Conversion

The depositary will arrange for the conversion of all foreign currency received into U.S. dollars if such conversion is practical, and it will distribute the U.S. dollars in accordance with the terms of the deposit agreement. You may have to pay fees and expenses incurred in converting foreign currency, such as fees and expenses incurred in complying with currency exchange controls and other governmental requirements.

If the conversion of foreign currency is not practical or lawful, or if any required approvals are denied or not obtainable at a reasonable cost or within a reasonable period, the depositary may take the following actions in its discretion:

- Convert the foreign currency to the extent practical and lawful and distribute the U.S. dollars to the holders for whom the conversion and distribution is lawful and practical.

- Distribute the foreign currency to holders for whom the distribution is lawful and practical.

- Hold the foreign currency (without liability for interest) for the applicable holders.

Governing Law/Waiver of Jury Trial

The deposit agreement, the ADRs and the ADSs will be interpreted in accordance with the laws of the State of New York. The rights of holders of Class A ordinary shares (including Class A ordinary shares represented by ADSs) is governed by the laws of the British Virgin Islands.

As an owner of ADSs, you irrevocably agree that any legal action arising out of the Deposit Agreement, the ADSs or the ADRs, involving the Company or the Depositary, may only be instituted in a state or federal court in the city of New York.

Supplemental Convertible Loan Agreement

Party A: Jiaxing Zhijun Investment Management Co., Ltd.
Unified Social Credit Code: [ ]
Legal or Authorized Representative: Feng Guo

Party B: AnPac Bio-Medical Science Co., Ltd.
Director/Authorized Representative: Chris Chang YU

Party C: Chris Chang YU
Passport No.: [ ]

Party A, Party B and Party C are individually referred to as a "Party" and collectively as the "Parties".

WHEREAS,

1. Party A is a limited company incorporated and validly existing under the laws of the People's Republic of China. Party B is a limited liability company incorporated and validly existing under the laws of the British Virgin Islands. Party A has granted to Party B a loan that is convertible to equity interest in Party B upon satisfaction of the conditions specified herein.

2. Party C, a U.S. citizen and a co-founder of Party B, intends to provide guaranty to Party A for the repayment of the said loan by Party B.

3. The Parties entered into a Framework Agreement on Convertible Loan (the "Original Agreement") in 2018, and Party A or the natural person designated by and acting in concert with Party A has provided the said loan.

THEREFORE, the Parties hereby enter into the following agreement on the loan of USD750,000 provided to Party B by the natural person designated by and acting in concert with Party A:

Article 1 Borrowing

1.1 The term of the offshore loan of USD750,000 made available by Party A to Party B (the "Loan") shall commence from the date when Party A advanced the Loan to Party B (being the arrival time of the Loan at the account designated by Party B) and mature on May 31, 2020.

1.2 The Parties acknowledge that the Loan will be used for Party B's daily operation, team building and technological research and development. Without Party A's consent, Party B shall not change the purposes of the Loan agreed hereunder.

1.3 During the term of the Loan, the interest accrued on the Loan shall be calculated at an annual rate of 9% from the date of advancement by Party A (calculated on a simple interest basis).

Article 2 Repayment Arrangement

2.1 At any time from the advancement date of the Loan to May 31, 2020, upon Party B's completion of the next round of financing (namely, the round of financing provided by institutional investors, which is completed after the date of this Agreement and before the date of conversion and amounts to USD5,000,000 or more, or a round of financing jointly confirmed by the Parties in writing, hereinafter referred to as the "Next Round of Financing"), Party A shall be entitled to require Party B to, and Party B is obliged to, convert the Loan principal into equity interest in Party B according to Article 3 hereof. See Article 3 for details of the conversion procedures. Provided that the conversion under this Article 2.1 and Article 3 is completed, Party B will no longer be obliged to repay to Party A the Loan principal and any interest accrued thereon as at the actual conversion date.

2.2 If Party A fails to complete the conversion under Article 2.1 and Article 3 during the period from the advancement date of the Loan to May 31, 2020 and it, within five (5) working days from the expiry of the term of the Loan, expresses its intention not to make such conversion, Party B shall, within six (6) months thereafter, repay the Loan principal and any interest accrued thereon as at the actual repayment date, or the Parties may negotiate to extend the term of the Loan.

2.3 With consent of Party A, Party B may prepay the Loan principal and any interest accrued thereon as at the actual prepayment date.

2.4 The Parties may through consultation agree on any other repayment arrangement.

Article 3 Conversion of Loan into Equity Interest

3.1 The Parties agree that, subject to satisfaction of the conditions set out in Article 2.1 or with consent of Party A, Party A has the right to convert the Loan principal as at the actual conversion date into Party B's equity interest on the basis of Party B's pre-investment assumed value of RMB488,000,000.

3.2 For the purposes of Articles 3.1 and 3.2 hereof, Party A shall complete filing, registration and any other legal procedures required for the conversion in accordance with relevant laws and regulations.

3.3 Party A may exercise its conversion right hereunder by a ten (10) working days' prior written conversion notice to Party B and Party C.

3.4 Party B shall cooperate with Party A in completing the said procedures for conversion within fifteen (15) working days from receipt of the conversion notice specified in Article 3.3.

Article 4 Guaranty

4.1 Party C agrees to, with his disposable personal property within the territory of the People's Republic of China, provide unlimited joint and several guaranty for the Loan, conversion of the Loan into Party B's equity interest, representations and warranties of Party C and all other duties and obligations hereunder, as well as Party B's liabilities, obligations, representations and warranties, and Party C shall perform its obligations as a guarantor in compliance with applicable domestic and overseas laws.

4.2 In the event that Party A opts not to make the conversion under Article 2.2, and if Party B becomes unable to repay the Loan principal and interest accrued thereon when due and the Parties fail to agree on extending the term of the Loan, Party C shall be liable to make the repayment for Party B. Party A will accept repayment by Party C in cash or such other assets as otherwise agreed by the Parties.

Article 5 Other Agreements, Warranties and Undertakings

5.1 The Parties agree that Party A will designate relevant fund(s) under its actual management or control and relevant individual(s) who will follow and perform Party A's directions and act in concert with Party A to perform this Agreement. The Parties will otherwise agree upon matters such as the lender of the Loan, the holder of equity interest in the case of conversion, or the recipient of principal and interest in the event that the right of conversion is not exercised.

5.2 The offshore fund lent by Party A to Party B derives from legal sources and can be legally applied towards the granting of the Loan.

5.3 Party A will provide full support to Party B with respect to the Next Round of Financing to the extent that the valuation of Party B thereunder is reasonable.

5.4 Representations and Warranties of Party B

5.4.1 Party B shall use the Loan for the purposes agreed hereunder and shall not change the purposes of Loan without consents of Party A and Party B.

5.4.2 Party B has full and independent legal status and capacity to execute, deliver and perform this Agreement and has obtained all the necessary internal authorizations and approvals. The execution of, and the performance of the obligations under, this Agreement by Party B will not violate any laws, regulations or government orders, or conflict with any contract or agreement to which Party B is a party, or require any prior consent of any third party except for the filing and registration required for the conversion requested by Party A.

5.4.3 Party C warrants that all information and materials provided by it to Party A are true, accurate and complete and are free of any fraudulent records, misstatements or misrepresentations or material omissions.

Article 6 Miscellaneous

6.1 The Parties agree that from the completion date of conversion registration under Article 3 hereof, Party A is entitled to any accumulated but undistributed profits of Party B.

6.2 The Parties agree that all terms of this Agreement and all information obtained from the other Parties hereunder are confidential and that each Party is obliged to keep such information confidential. No confidential information may be disclosed to third party unless otherwise agreed by the Parties, required by relevant regulator according to applicable laws or disclosed to the employees or intermediaries engaged by each Party.

6.3 Upon the effectiveness of this Agreement, each Party shall perform its obligations hereunder. In the event of non-performance or partial performance by any Party of its obligations hereunder that thereby causes any economic losses of the non-defaulting Party, the non-defaulting Party may hold the defaulting Party liable for any actual economic losses caused.

6.4 This Agreement shall come into force upon being signed and affixed with official seals by the Parties and their legal or authorized representatives.

6.5 Unless otherwise agreed, no Party shall assign, transfer or allege to assign all or any of its rights, interests, liabilities or obligations hereunder without written consent of the other Parties.

6.6 Any dispute arising from or in relation to this Agreement shall be settled through friendly consultation, failing which will allow any Party to submit the dispute to the International Chamber of Commerce (“ICC”) for arbitration in Shanghai in accordance with the then prevailing arbitration rules of the ICC. The arbitration award shall be final and binding upon the Parties.

6.7 No change, amendment or supplement may be made to this Agreement unless a written agreement is executed by the Parties. Such written agreement shall form an integral part hereof and have the same legal effect as this Agreement. In the event of any conflict between the said written agreement and this Agreement, the written agreement shall prevail.

6.8 This Agreement is made in three (3) originals of equal legal effect, with each of Party A, Party B and Party C holding one.

(The remainder of this page is intentionally left blank)

Party A: Jiaxing Zhijun Investment Management Co., Ltd.
Legal or Authorized Representative

Signature: /s/ Feng Guo

Party B: AnPac Bio-Medical Science Co., Ltd
Authorized Representative

Signature: /s/ Chris Chang Yu

Party C: Chris Chang YU

Signature: /s/ Chris Chang Yu

April 29, 2020

Exhibit 8.1

List of Principal Subsidiaries of the Registrant

Name	Percentage	Place of Incorporation
Subsidiaries		
AnPac Technology USA Co., Ltd.	100%	United States of America
Changwei System Technology (Shanghai) Co., Ltd.	100%	People's Republic of China
AnPac Bio-Medical Technology (Lishui) Co., Ltd.	100%	People's Republic of China
Changhe Bio-Medical Technology (Yangzhou) Co., Ltd.	100%	People's Republic of China
AnPac Bio-Medical Technology (Shanghai) Co., Ltd.	100%	People's Republic of China
Shanghai Xinshenpai Technology Co., Ltd.	100%	People's Republic of China
Lishui AnPac Medical Laboratory Co., Ltd.	100%	People's Republic of China
Penghui Health Management (Shanghai) Co., Ltd.	100%	People's Republic of China
Shiji (Hainan) Medical Technology Limited	100%	People's Republic of China

Exhibit 12.1

Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Chris Chang Yu, certify that:

1. I have reviewed this annual report on Form 20-F of AnPac Bio-Medical Science Co., Ltd..;

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) [intentionally 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 (or persons performing the equivalent functions):

(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: May 15, 2020

By: /s/ Chris Chang Yu
Name: Chris Chang Yu
Title: Chief Executive Officer

Exhibit 12.2

Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Rain Yu Zhang, certify that:

1. I have reviewed this annual report on Form 20-F of AnPac Bio-Medical Science Co., Ltd.;

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) [intentionally 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 (or persons performing the equivalent functions):

(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: May 15, 2020

By: /s/ Rain Yu Zhang
Name: Rain Yu Zhang
Title: Chief Financial Officer

Exhibit 13.1

Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of AnPac Bio-Medical Science Co., Ltd. (the "Company") on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Chris Chang Yu, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2020

By: /s/ Chris Yu Chang
Name: Chris Yu Chang
Title: Chief Executive Officer

[*CEO's Section 906 Certification*]

Exhibit 13.2

Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of AnPac Bio-Medical Science Co., Ltd. (the "Company") on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Rain Yu Zhang, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2020

By: /s/ Rain Yu Zhang
Name: Rain Yu Zhang
Title: Chief Financial Officer

[*CFO's Section 906 Certification*]