UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of April 2020

Commission File Number: 001-39137

AnPac Bio-Medical Science Co., Ltd.

(Translation of registrant's name into English)

801 Bixing Street, Bihu County
Lishui, Zhejiang Province 323006
The People's Republic of China
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F x Form 40-F o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b) (1): o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b) (7): o

In accordance with the Securities and Exchange Commission ("SEC") 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) (the "SEC Order"), AnPac Bio-Medical Science Co., Ltd. ("AnPac Bio" or the "Company") hereby provides notice that it intends to rely on the relief provided by the SEC Order in connection with the filing of its Annual Report on Form 20-F for the fiscal year ended December 31, 2019 (the "Annual Report").

Since December 2019, there has been an outbreak of a novel strain of coronavirus (COVID-19) in China, the United States and around the world. The Company's business has been abruptly and dramatically impacted by the COVID-19 pandemic, as the measures taken by governmental authorities in China and the United States to contain its spread have disrupted the Company's business operations. 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. As a result of the COVID-19 outbreak, the Company did not have enough time and manpower onsite, resulting in the delay in the preparation and compilation of its financial statements for the year of 2019 and in completion of its Annual Report. Consequently, the Company is unable to timely file the Annual Report. Notwithstanding the foregoing, the Company expects to file its Annual Report no later than 45 days after April 30, 2020.

The Company's business operations and financial results have been adversely affected by COVID-19. As a result, the Company's revenues in the first quarter of 2020 decreased significantly compared to the same period of 2019. Considering the limited manpower and resources that the Company has to deal with the impact of COVID-19, the Company has decided to not prepare and announce its unaudited financial statements for the first quarter of 2020. The Company will, however, prepare and announce its interim unaudited financial statements for the first six months of 2020 in due course.

The Company is supplementing the risk factors explaining the impact of COVID-19 on its business and financial performance as follows:

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 caused wide-ranging business disruptions and traffic restrictions in China and the United States in the 2020 year-to-date, 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 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 same period of 2019. 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.

About AnPac Bio

AnPac Bio is a biotechnology company focused on early cancer screening and detection, with 121 issued patents as of December 31, 2019. With two certified clinical laboratories in China and one CLIA accredited clinical laboratory in the United States, AnPac Bio performs a suite of cancer screening and detection tests, including CDA (Cancer Differentiation Analysis), bio-chemical, immunological, and genomics tests. In a recent market research report by Frost & Sullivan, AnPac Bio ranked 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, based on approximately 35,000 clinical samples as at June 30, 2019. AnPac Bio's CDA technology has been shown in retrospective validation studies to be able to detect the risk of over 20 different cancer types with high sensitivity and specificity.

For more information, please visit: https://www.anpacbio.com.

Special Note Concerning Forward Looking Statements

This filing contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements are made under the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and are relating to the Company's future financial and operating performance. The Company has attempted to identify forward-looking statements by terminologies including "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 words that convey uncertainty of future events or outcomes to identify these forward-looking statements. These statements are

based on current expectations, assumptions and uncertainties involving judgments about, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the Company's control. These statements also involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results to be materially different from those expressed or implied by any forward-looking statement. Known and unknown risks, uncertainties and other factors include, but are not limited to, 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 have our laboratories certified or accredited by authorities including the 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. Additionally, all forward-looking statements are subject to the "Risk Factors" detailed from time to time in the Company's filings with the U.S. Securities and Exchange Commission. Because of these and other risks, uncertainties and assumptions, undue reliance should not be placed on these forward-looking statements. In addition, these statements speak only as of the date of this press release and, except as may be required by law, the Company undertakes no obligation to revise or update publicly any forward-looking statements for any reason.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AnPac Bio-Medical Science Co., Ltd.
(Registrant)

Date: April 29, 2020

By: /s/ Chris Chang Yu
Name: Dr. Chris Chang Yu
Title: Chairman of the Board of Directors and Chief Executive Officer