China formulates plan to roll out vaccine before clinical trials are finished in race against Trump

By Sophia Yan, CHINA CORRESPONDENT, BEIJING
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China may deploy coronavirus vaccines as early as September to at-risk groups even if clinical trials have yet to be completed.

Health officials are drafting guidelines for administering vaccines under testing to priority groups, such as medical personnel, the latest sign Beijing is ramping up competition against the US to produce a global cure.

China has five vaccines in phase II human trials – more than any other country. Vaccines can take years to develop, though authorities are keen to pull ahead in the race to find a solution for a disease devastating the world, infecting 6.6 million people and killing nearly 400,000.

Success could help Beijing deflect global anger over its cover-up of the pandemic and buoy its coronavirus-ravaged economy. It would also be a blow to Donald Trump's "warp-speed" plans for a vaccine.

"China would have quite a cherry...[if it] manages to come out with a vaccine that becomes generally accepted around the world," said William Lee, chief economist of the Milken Institute, a think tank tracking vaccine development. "That would be a coup."

China has already sunk 4 billion yuan (£450 million) into research and development of Covid-19 vaccines and therapies, and expects to spend more than double that in total, premier Li Keqiang said this week at a global vaccine summit.

The pandemic has accelerated government plans to support growth and boost national security by investing in key sectors, including robotics and biomedicine. China is also building dozens of high-grade biosafety labs to study the most infectious pathogens.

"We need to hold technological confidence in certain fields," said Chen Wei, an army general and virologist overseeing China's most promising vaccine. "We need to depend on our own strength, instead of others, to protect the population of more than one billion people."

10 vaccine candidates are in human trials

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<th>Stage of clinical trial</th>
<th>Lead partner</th>
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<td>Phase 2</td>
<td>CanSino</td>
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Ms Wei's project, a collaboration between a military medical institute and private biotech firm CanSino, uses a live virus to carry genetic material into human cells to elicit a stronger immune response than typical vaccines. Scientists have studied this technology for decades, including for HIV, but treatment has yet to be approved for humans.

Authorities fast-tracking trials in China may soon have to look further afield for participants, with only a handful of cases emerging daily as the epidemic subsides.

China is “running out of people they can potentially test the vaccine on,” said Nicholas Thomas, a health security expert and professor at the city University of Hong Kong.

But winning is not a numbers game alone, as a “lack of quality of control in the production of vaccines has tainted China's image,” said Mr Lee.

China has suffered from years of scandals – counterfeits run rampant and expired vaccines have been tampered with and repackaged. Poor refrigeration in storage and transport have also ruined vaccines. Those who can afford it opt for imported over domestic vaccines.

More recently, China has exported faulty coronavirus tests and respirators, which means countries may be reluctant to take up Beijing on its pledge to make vaccines globally available if it does become the first to develop one.

Viruses also mutate to survive, leading to a “risk in developing vaccines, which ultimately may not be as effective or even used,” said Mr Thomas.

“The longer the outbreak goes on, the more chance there is for mutation, but whether or not it mutates to be more dangerous to us as humans, or less dangerous, is a roll of the genetic dice.”

*Coronavirus Live Tracker: latest figures for your local area, the UK and worldwide

What’s equally important is discovering effective therapies to mitigate outbreaks until enough doses are produced.

“There’s no way to immediately vaccinate everyone,” said Judith Li, a partner at Lilly Asia Ventures, a spinoff from US drugmaker Eli Lilly that has invested in China’s CanSino. “People are still going to be infected, so there absolutely needs to be both therapeutics and vaccines.”

Experts say, however, that breakthroughs are happening rapidly.

“What a lot of people forget is that this virus has only been with us for roughly seven months,” said Mr Thomas.

“At the global level, there’s been this geopolitical chest-thumping and vaccine nationalism,” he said. “But at the technical level, there’s been an incredible amount of
collaboration and sharing of data.”

Additional reporting by Yiyin Zhong