

News analysis

Decision not to import mRNA vaccines now leaves China in a bind

Zero-Covid rollback may lead to a case surge that overwhelms the health system



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BEIJING – Early on in the pandemic, mRNA Covid-19 vaccines produced by Pfizer-BioNTech and Moderna were widely shown to be more effective than Chinese-made shots, but Beijing made the decision not to import these foreign vaccines.

China instead bet that local vaccine makers would be able to catch up and develop more effective shots, a decision that experts say was motivated by vaccine nationalism and national security concerns.

Now, three years into the pandemic, that decision could have grave consequences.

As China shifts away from its zero-Covid approach, experts say it is probably too late to import mRNA vaccines, which will take time to roll out. China could now face a massive surge in cases without vaccines that offer the best protection against severe illness or death.

Since the pandemic began, Chinese President Xi Jinping has referred to vaccines as one of the many advanced technologies that China had to develop indigenously, as a failure to do so would leave the country in a “choke-hold” by Western countries.

But China’s leading mRNA vaccine candidate, a shot named AWCorna which is being developed by Suzhou Abogen Biosciences and Walvax Biotechnology, is still in clinical trials and has not been approved for emergency use in the country.

“They did not expect the slow progress in developing their own mRNA vaccines; it was more difficult than anticipated,” said Dr Chen Gang, assistant director and senior research fellow at National



While China has high vaccine coverage of 90.28 per cent of the population, the figure drops to just 65.8 per cent for those over 80. Among this age group, only about 40 per cent have had a booster shot. PHOTO: AFP

University of Singapore’s East Asian Institute.

It means that while other developed nations are rolling out bivalent vaccines (mRNA vaccines that target both the original strain and Omicron variant), China is still largely relying on vaccines based on inactivated virus technology targeting the original strain of the virus.

Researchers from Singapore’s Health Ministry and National Centre for Infectious Diseases analysing over 800,000 Covid-19 cases over the age of 60 in Singapore found that mRNA vaccines were superior to inactivated virus vaccines.

“Our findings showed vaccination with four doses of mRNA vaccine was associated with lower rates of symptomatic SARS-CoV-2 infection, hospitalisation and severe Covid-19 compared with three mRNA vaccine doses and four

doses of inactivated whole-virus vaccines or a combination of vaccine types,” said the researchers in a study published in *The Lancet Regional Health* medical journal this month.

Senior fellow for global health Huang Yanzhong at the New York-based Council on Foreign Relations said now that Beijing was transitioning out of zero-Covid, vaccines, instead of lockdowns, would be the main policy tool to protect at-risk groups such as the elderly.

“You want to be able to use the most effective vaccines, that will not only be able to significantly reduce severe cases, but also the ability to reduce infections like the current bivalent vaccines,” he said.

The concern that epidemiologists have is that as China rolls back zero-Covid curbs, it could face a surge in cases that could overwhelm its health system, leading to a spike

in deaths.

“In Hong Kong, a city with comparable levels of prior immunity, cases rose exponentially and peaked after approximately three months,” said University of Hong Kong epidemiologist Joshua Nealon, referring to the surge in cases in the city earlier this year.

Even though mRNA vaccines have been shown to be more effective, Dr Nealon said three doses of the CoronaVac inactivated virus vaccine had comparable results in preventing death and severe illness with the Pfizer-BioNTech shot (more than 95 per cent effective), citing results from a study he did with other researchers in Hong Kong.

The caveat is that CoronaVac’s effectiveness against severe illness drops to 50 per cent 60 days after the last booster, he said, making it important for China to consider an additional shot if the last one was given

Comparative effectiveness of 3 or 4 doses of mRNA and inactivated whole-virus vaccines against COVID-19 infection, hospitalization and severe outcomes among elderly in Singapore

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The Lancet Regional Health - Western Pacific 2022;29: 100654

<https://doi.org/10.1016/j.lanwpc.2022.100654>

months ago.

“It would take time to approve, distribute and implement an mRNA vaccination campaign, and it is likely that rapidly implemented vaccination campaigns with currently approved vaccines, achieving high coverage, would provide more public health benefit at this stage of the epidemic,” he said.

But while China has high vaccine coverage, with about 90.28 per cent of the population fully vaccinated — defined as having had two shots of an inactivated virus vaccine — this figure drops to just 65.8 per cent for those over 80.

Among this age group, only about 40 per cent have had a booster shot.

Raising vaccination levels in older and vulnerable adults would lower hospitalisation rates in China, said Dr Nealon.