

China Must Stop Hiding Its Vaccine Data

Beijing Is Undermining Confidence in a Vaccine the World Desperately Needs

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Developing a COVID-19 vaccine in Beijing, China, September 2020

Thomas Peter / TPX Images of the Day / Reuters

In a parable in the Han dynasty philosophical text *The Huainanzi*, a fool goes to the market to buy a pair of shoes. Finding the shoes too small, he cuts off his toes rather than admit that the shoes don't fit. China is doing a similar thing with its COVID-19 vaccines, which reportedly did not perform as well in clinical trials as their Western

competitors. Fearing embarrassment, Chinese vaccine makers are cherry-picking the data rather than publishing the results in full.

Holding back clinical data is a scientific and political mistake. Much of the developing world has only limited access to Western-made vaccines and will depend heavily on those produced in China. The country's vaccine makers must not undermine confidence in their products at a time when so much of the world desperately needs them.

SMOKE AND MIRRORS

Chinese vaccine makers are hiding their clinical data from the world. They published their Phase 1 and Phase 2 data in reputable, peer-reviewed journals such as *JAMA* and *The Lancet* and their preclinical data in *Science*. But they have not published data on their crucial large-cohort Phase 3 trials. In contrast, Pfizer-BioNTech, Moderna, AstraZeneca, and Russia's Gamaleya Institute have all published their Phase 3 data in respected, peer-reviewed journals.

China's Sinovac has been the worst offender. The company has reported only bits and pieces of efficacy data from its various overseas trials to suggest that its CoronaVac vaccine is highly effective. Based on these reports, Chinese state-linked media claimed that CoronaVac was 100 percent effective at preventing severe COVID-19. But subsequent reports suggested 91 percent efficacy in Turkey, 78 percent in Brazil, and 65 percent in Indonesia. The company's Brazilian research partners reported just 50.4 percent efficacy—barely above the World Health Organization's minimum threshold of 50.0 percent for recommending a vaccine at all. Even now, Sinovac's Brazilian partners are withholding their full data “at the company's request.” Sinopharm, the other leading

Chinese vaccine maker, is also holding back its full results. The company has not yet published any results from its Phase 3 efficacy trials.

Despite all the opacity, countries are lining up for Chinese vaccines. Sinopharm and Sinovac are delivering millions of doses per month to governments around the world. Chile has made Chinese vaccines central to its national vaccination strategy, ordering over ten million doses from Sinovac. In Indonesia, President Joko Widodo received his first CoronaVac injection on live television. Regulators in these countries need much more than inconsistent efficacy figures. They need to know what antibody responses the Chinese vaccines generate, how these responses vary across demographic groups, how they change over time, and what adverse reactions people have had to the vaccine. Otherwise, they cannot make informed public health decisions, such as whether or not to approve Chinese vaccines for vulnerable groups, such as HIV-positive and elderly populations.

PRIVATE DATA KILLS PUBLIC TRUST

Sinovac's obfuscation is not just bad science—it is also bad politics for Beijing. By becoming a leading vaccine supplier, China hoped to show off its high-tech capabilities and burnish its international reputation after a damaging 2020. But its approach to vaccine data has hardly helped Beijing put the past behind. If China learned nothing else in Wuhan last January, the obvious lesson would seem to be that evading uncomfortable truths can do more damage than confronting them. And yet Chinese vaccine companies have taken an approach to data that is at best sloppy and at worst misleading.

It is not an accident that public trust in China's vaccines has plummeted. Media coverage in many countries has seized on the inconsistent Sinovac data to cast doubt on the entire Chinese vaccine effort. One recent survey found that just 37 percent of Hong Kongers were willing to take any Chinese vaccine. Another found that residents of 13 out of the 15 countries studied were less likely to take a vaccine if they learned it was Chinese made.

This distrust spells trouble for countries around the world, not just for China. In densely populated parts of the world, roughly 70 to 80 percent of the population must be immunized, either by natural infection or vaccination, to curb the spread of the virus. This figure is inching higher as the virus evolves to become more transmissible and gains the ability to reinfect recovered patients. The less effective a vaccine is, the larger the share of the population that must be vaccinated to reach herd immunity. Developing countries relying on Chinese vaccines therefore have little room for public distrust. Unless nearly all their citizens take the vaccine, the virus will continue to spread and evolve. COVID-19 will become endemic like the flu, causing new deaths and economic dislocation every year.

AN IMPOSSIBLE CHOICE

In early November, we argued in *Foreign Affairs* that “Beijing is poised to dominate the distribution of vaccines to the developing world—and to reap the strategic benefits of doing so.” We predicted that if wealthy countries kept hoarding Western vaccines, poor countries would eventually be forced to buy Chinese alternatives.

The inequities we foresaw are growing starker. Rich countries are hoarding doses as an insurance policy against dangerous new strains. European Health Commissioner Stella Kyriakides recently tried to stop AstraZeneca from exporting doses from its European factories, even to fulfill preexisting orders. “We reject the logic of first come, first served,” she said, suggesting that Europe will make sure its own population is vaccinated before others. The Biden administration has made an important gesture by joining COVAX, the World Health Organization’s program to pool vaccine doses for the world’s poorest countries. U.S. leadership is a positive development and may influence other wealthy countries to follow suit. But for the moment, Biden’s move is only symbolic, since his administration is prioritizing doses for Americans. Many poor countries will not achieve full vaccination until the fall of 2021, and some will have to wait until 2022.

Poor countries are therefore more dependent on Chinese vaccines than ever. Public officials and regulators across Africa, Latin America, the Middle East, and Southeast Asia don’t really have a choice: a mediocre vaccine that works even 50 percent of the time could save lives and reduce pressure on hospitals. And it is better than no vaccine at all.

DEMAND WON’T DIE

China is not the only non-Western producer making viable COVID-19 vaccines. The Russian vaccine seems extremely effective, and Russia has signed deals to export hundreds of millions of doses this year. India also has its own vaccine diplomacy initiative, exporting doses produced by the Serum Institute of India, a partner of AstraZeneca. In February alone, India plans to export two million doses.

For the foreseeable future, however, the demand for vaccines in the developing world will vastly exceed supply, so China will have no trouble finding buyers. Most of India's vaccine exports are going to neighbors, such as Bangladesh, Myanmar, and Nepal, and island nations in the Indian Ocean, such as Mauritius, Seychelles, and Sri Lanka. This scheme is part of Prime Minister Narendra Modi's "neighborhood first" strategy to keep India's periphery free of Chinese influence. Russia has export deals with a longer list of countries than India, but it faces formidable manufacturing hurdles that will make it hard for it to meet its production targets. With Moscow unable to keep pace with demand, Brazil, Egypt, Indonesia, Turkey, and others have ordered about 380 million doses from Sinovac alone.

Because so much of the world is dependent on Chinese vaccines, transparency is of the essence. Particularly if, as seems to be the case, vaccines such as that produced by Sinovac have lower efficacy than some of their Western counterparts, Chinese vaccine makers will need to make up for that shortfall in public trust, as widespread adoption will be essential. Publishing full clinical data and replicating the Chinese trials abroad would help build public confidence. Journalists and public officials should push for disclosure, but they should not sow doubt unnecessarily or publicly root for the Chinese vaccines to fail.

Some shoes don't fit. Some vaccines don't work as well as others. But like it or not, the world needs Chinese vaccines. If the vaccines developed by Sinopharm, Sinovac, and other Chinese vaccine makers are even moderately safe and effective, they could save lives in the world's poorest countries and reduce the risk of dangerous new variants in the developed world. Their success would contribute to public health and boost China's

image. Their failure would prolong the pandemic and further blacken China's reputation in the whole affair. For these reasons, among others, Chinese vaccine makers must embrace transparency and publish their data, warts and all.