# China approves world-first inhaled COVID-19 vaccine

By Ben Turner published 2 days ago

## The vaccine will be used as a booster

An illustration of several coronavirus particles (Image credit: Yuichiro Chino via Getty Images)



China has approved the world's first inhaled COVID-19 vaccine, the vaccine maker C Biologics (CanSinBIO) in Tianjin, China has announced.

The newly approved vaccine, named Convidecia Air, uses the same platform as the injectable COVID-19 vaccine by the same manufacturer — pieces of genetic material transported by a harmless adenovirus vector so the body can be trained against the virus. This vaccine, however,

The needle-free vaccine is the first approved of over 100 oral or nasal vaccines currently in development around the world, according to a World Health Organization (WHO) database. Scientists hope that administering vaccines through the nose or mouth could prepare the immune cells of the thin mucous membranes there, preventing the spread of even mild cases of the illness by killing the virus as it enters the body.

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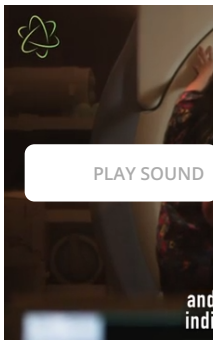
The self-administered dose "can effectively induce comprehensive immune protection in response to SARS-CoV-2 after just one breath," CanSinoBIO representatives said in a statement.

CanSinBIO already has an injected form of the same vaccine in use in China and approved in a few other countries. According to Phase III clinical trial published Dec. 23 in the journal The Lancet, the injected vaccine was 57.5% effective at preventing any COVID-19 symptoms and 91.7% effective at preventing severe disease after four weeks or longer following a single administered dose.

Another clinical trial, published Jul. 26 in The Lancet, showed the immunity levels produced by two inhalations of the vaccine 28 days apart reached the same as those produced by one intramuscular shot.

The new inhalable format is reminiscent of nasally administered influenza vaccines, such as the intranasal FluMist vaccine. As vaccines of this type target the lungs and upper airways where viruses like influenza and COVID-19 enter the body, scientists think inhaled vaccines could be much more effective at stopping the spread of infections and require much lower doses to do the same job.

For instance, in a recent study of the Convidecia Air vaccine published on a preprint s without peer review, two Sinovac shots followed by a lower dose inhaled vaccine pı detecable levels of omicron neutralizing antibodies in 92.5% of cases, whereas a hig generated detectable antibodies in 88.9% of cases. The number for both groups, hc dropped to around 70% six months later.

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