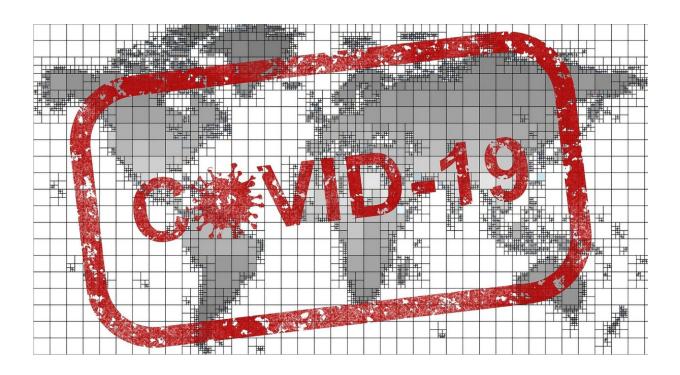


## AstraZeneca says booster jab effective against Omicron

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British pharmaceutical giant AstraZeneca said Thursday that a third, or "booster", dose of its COVID-19 vaccine Vaxzevria "significantly" lifted antibody levels against the Omicron strain in a laboratory study.

AstraZeneca also revealed in other findings that its preventative moniclonal antibody treatment, Evusheld, "retains neutralisation activity"



against Omicron.

The threat of the highly transmissible Omicron variant looms large over the festive holidays, forcing many governments to roll out new curbs and urge citizens to get vaccinated.

However, separate UK research on Thursday suggested that Omicron infections are less likely to result in hospitalisation compared to the Delta variant.

"Vaxzevria significantly boosted levels of antibodies against the Omicron SARS-CoV-2 variant (B.1.1.529) following a third dose booster," AstraZeneca said in a statement.

"The third dose booster vaccination neutralised the Omicron variant to levels that were broadly similar to those observed... after the second dose against the Delta variant."

Levels of neutralising antibodies were also higher with the booster jab than with individuals who had previously been infected and recovered naturally.

## **Boosters 'limit Omicron spread'**

The study was conducted by investigators from the University of Oxford, which is the academic institution which helped AstraZeneca develop the vaccine last year.

Researchers analysed blood samples taken from individuals infected with COVID-19; those vaccinated with two doses plus a booster; and those who had reported previous infection.

"It is very encouraging to see that current vaccines have the potential to



protect against Omicron following a third dose booster," said University of Oxford professor John Bell, one of the study investigators.

"These results support the use of third dose boosters as part of national vaccine strategies, especially to limit the spread of variants of concern, including Omicron."

Mene Pangalos, AstraZeneca's executive vice-president of biopharmaceuticals research and development, said that the study should boost confidence in the extra jab.

"Vaxzevria plays an important role in vaccination programmes around the world and these data give us confidence that the vaccine should be given as a third dose booster," said Pangalos.

"It is also important to look beyond antibodies to better understand how vaccines offer protection against Omicron.

"As we better understand Omicron, we believe we will find that T-cell response provides durable protection against severe disease and hospitalisations."

## WHO warning

On Wednesday, the World Health Organization issued a stark warning to rich countries over boosters, arguing that they divert valuable jabs away from poorer nations—and encourage the virus crisis to worsen.

"Blanket booster programmes are likely to prolong the COVID-19 pandemic, rather than ending it, by diverting supply to countries that already have high levels of vaccination coverage, giving the virus more opportunity to spread and mutate," WHO Secretary General Tedros Adhanom Ghebreyesus warned.



The latest data suggest Omicron does not cause more severe illness than previous variants, including Delta, but as soaring infection numbers threaten to overwhelm health systems, scientists warn it could cause more deaths.

Evusheld, for high-risk people who show resistance to COVID vaccines, is made from a combination of two antibodies.

The drug, formerly known as AZD7442, was authorised by US health authorities earlier this month to prevent infections in people who react badly to jabs.

**More information:** Wanwisa Dejnirattisai et al, Omicron-B.1.1.529 leads to widespread escape from neutralizing antibody responses, *bioRxiv* (2021). DOI: 10.1101/2021.12.03.471045

Laura A. VanBlargan et al, An infectious SARS-CoV-2 B.1.1.529 Omicron virus escapes neutralization by several therapeutic monoclonal antibodies, *bioRxiv* (2021). DOI: 10.1101/2021.12.15.472828

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