



HEALTH AND SCIENCE

Pfizer and BioNTech say booster dose provides high level of protection against omicron variant in initial lab study

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A booster shot of the vaccine increases antibody protection 25-fold compared with the initial two-dose series, according to a preliminary lab study.

A third shot shows virus-fighting abilities comparable with the protection provided by two doses against the original strain of the virus.

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Three doses of [Pfizer](#) and [BioNTech](#)'s vaccine provide a high level of protection against the omicron variant of the virus that causes [Covid-19](#), the companies announced Wednesday.

A booster shot of the vaccine increases antibody protection 25-fold compared with the initial two-dose series, according to a preliminary lab study. A third shot shows virus-fighting abilities comparable with the 95% protection provided by two doses against the original strain of the virus.

The companies said two doses of the vaccine showed a significant reduction in the ability of antibodies to target and neutralize omicron, though they may still protect against severe disease.

“Although two doses of the vaccine may still offer protection against severe disease caused by the Omicron strain, it’s clear from these preliminary data that protection is improved with a third dose of our vaccine,” Pfizer CEO Albert Bourla said in a joint statement with BioNTech.

“Ensuring as many people as possible are fully vaccinated with the first two dose series and a booster remains the best course of action to prevent the spread of COVID-19,” Bourla said.

Bourla, in an interview Wednesday on CNBC’s “[Squawk Box](#),” said the lab test was against a synthetic, lab-produced copy of the virus. He said Pfizer and BioNTech are working to reproduce the same results with the real virus in a week or two. Those results would be more accurate, he said.

“The ultimate proof is coming from real-world data,” Bourla told CNBC. He said the companies need to know how many breakthrough infections occur and the severity of the cases in people who have received boosters compared with those who have had the



against omicron. At a certain point I think we will need a fourth dose," he told CNBC.

VIDEO 04:46

Pfizer CEO: Three Covid shots against omicron variant equivalent to two targeting original strains

Pfizer and BioNTech will have enough data by the end of the month to determine whether a booster dose is enough to fight omicron or if a new vaccine is needed, Bourla said. The companies expect to have a vaccine that specifically targets omicron available by March 2022.

Ugur Sahin, co-founder and CEO of BioNTech, said booster campaigns around the world could give people better protection against omicron as winter approaches. Public health officials are concerned Covid infections will spike as people gather more indoors to escape the cold

“Our preliminary, first dataset indicate that a third dose could still offer a sufficient level of protection from disease of any severity caused by the Omicron variant,” Sahin said in the joint statement.

The data comes after a small, preliminary lab study by South African scientists found

Bourla said on Tuesday that omicron appears to cause milder symptoms, but seems to spread faster and could lead to more mutations in the future.

“I don’t think it’s good news to have something that spreads fast,” Bourla told The Wall Street Journal during an interview at the paper’s CEO Council Summit. “Spreads fast means it will be in billions of people and another mutation may come. You don’t want that.”

While scientists believe that omicron spreads faster, they have said that more data is needed to determine the severity of disease caused by the variant.

“We will have a good understanding let’s say before the year-end as to what exactly it means for clinical manifestation,” Bourla said Tuesday in reference to the omicron variant.

Pfizer and BioNTech have been preparing to adjust their vaccine if needed as new variants arrive, he said.

“My estimate is that we will be having regular the appearance of different variants, and that’s why we are preparing for that for months,” Bourla told CNBC. “So every time that you have any variant, and there will be more I’m certain, or it’s very highly like, we will be monitoring to see if there’s something that we need to do.”

CNBC Health & Science

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