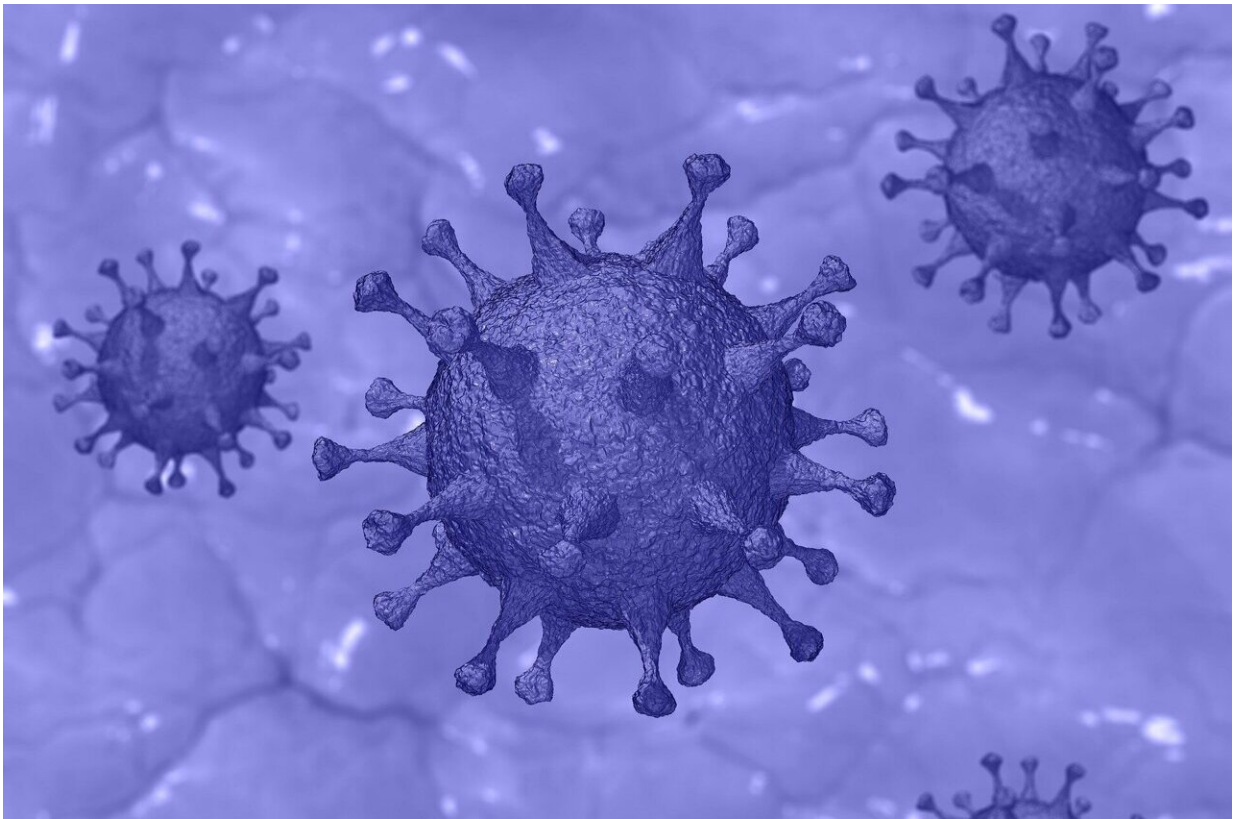


Pfizer booster spurs immune response to new omicron subtypes

November 18 2022, by Luran Neergaard



Credit: Pixabay/CC0 Public Domain

Pfizer said Friday that its updated COVID-19 booster may offer some protection against newly emerging omicron mutants even though it's not an exact match.

Americans have been reluctant to get the updated boosters rolled out by Pfizer and rival Moderna, doses tweaked to target the BA.5 omicron strain that until recently was the most common type. With relatives of BA.5 now on the rise, a question is how the new boosters will hold up.

Pfizer and its partner BioNTech said their updated booster generated virus-fighting antibodies that can target four additional omicron subtypes, including the particularly worrisome BQ.1.1.

The immune response wasn't as strong against this alphabet soup of newer mutants as it is against the BA.5 strain. But adults 55 and older experienced a nearly 9-fold jump in antibodies against BQ.1.1 a month after receiving the updated booster, according to a study from the University of Texas Medical Branch in Galveston and the companies. That's compared to a 2-fold rise in people who got another dose of the original vaccine.

The preliminary data was released online and hasn't yet been vetted by independent experts.

It's not the only hint that the updated boosters may broaden protection against the still mutating virus. Moderna recently announced early evidence that its updated booster induced BQ.1.1-neutralizing antibodies.

It's too soon to know how much real-world protection such antibody boosts translate into, or how long it will last. Antibodies are only one type of immune defense, and they naturally wane with time.

The BA.5 [variant](#) was responsible for about 30% of new cases in the U.S. as of Nov. 12, according to the Centers for Disease Control and Prevention, but two new variants have been crowding out the once-dominant strain in recent weeks. The BQ.1.1. variant now accounts for

24% of cases, up from 2% in early October and the close cousin BQ.1 accounts for 20% of cases.

The original COVID-19 vaccines have offered strong protection against [severe disease](#) and death no matter the variant.

That's a good reason to stay up-to-date on boosters, Dr. Kathryn Stephenson of Beth Israel Deaconess Medical Center said earlier this week, ahead of Pfizer's data.

"Any kind of boost really reduces your chances of getting very sick from COVID," she said.

Updated boosters are available for anyone 5 or older, but only about 35 million Americans have gotten one so far, according to the CDC. Nearly 30% of seniors are up-to-date with the newest [booster](#) but only about 13% of all adults.

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Pfizer booster spurs immune response to new omicron subtypes (2022, November 18) retrieved 11 February 2023 from <https://medicalxpress.com/news/2022-11-pfizer-booster-spurs-immune-response.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--