

There are no useful monoclonal antibody treatments left against new COVID variants

December 5 2022, by Cara Murez



The last of six COVID monoclonal antibody treatments has lost its



federal authorization because, like the others, it no longer works against the newest Omicron subvariants.

This last monoclonal antibody was bebtelovimab, delivered as a one-hour IV infusion.

The FDA said in a <u>statement</u> announcing the authorization withdrawal that the drug was "not expected to neutralize Omicron subvariants BQ.1 and BQ.1.1."

Those subvariants are now responsible for nearly 62% of new infections in the United States, <u>according</u> to the U.S. Centers for Disease Control and Prevention.

"The big problem is that monoclonal antibodies bind to a very small piece of the virus. As the virus changes, we are now in a position in which we lost them all because they don't bind to the virus anymore," Dr. Arturo Casadevall, a professor of medicine at the Johns Hopkins School of Medicine in Baltimore, told *NBC News*.

Bebtelovimab had been recommended for certain patients taking immunosuppressants, including cancer or transplant recipients, because the antiviral pill Paxlovid can interact negatively with those drugs, *NBC News* reported.

Paxlovid is still available as a treatment for others at high risk of severe COVID. It is taken as a series of three pills twice daily for five days.

"There are still segments of the population that have probably very little protection," <u>Dr. Rodney Rohde</u>, chair of the Clinical Laboratory Science Program at Texas State University, told *NBC News*. "You worry about that last push of this virus this winter and going to the spring, if we see higher mortality or hospital beds being filled."



Immunocompromised patients can still receive another treatment known as <u>convalescent plasma</u>.

"It has thousands of different antibodies, so convalescent plasma has a lot of breadth that is not found in the monoclonals," Casadevall explained.

Convalescent plasma is derived from the donated blood of those who have previously recovered from a COVID infection, *NBC News* reported.

New monoclonal antibodies that are a better fit to new COVID subvariants may still become available over time.

"I would not give up on something like this," Casadevall said. "I think it is possible to find antibodies that will be active with the other variants."

The pharmaceutical company AstraZeneca is developing an antibody cocktail that could be ready by year's end. And an Eli Lilly spokesman said the company is searching for and evaluating potential monoclonal antibodies, *NBC News* reported.

"We remain strong in our belief that [monoclonal antibodies] have a critical role in the current fight against COVID-19, particularly in high-risk individuals," a spokesperson for Vir Biotechnology, which had a previously authorized monoclonal antibody, told *NBC News*.

More information: The U.S. Centers for Disease Control and Prevention has more on COVID-19.

Copyright © 2022 HealthDay. All rights reserved.



Citation: There are no useful monoclonal antibody treatments left against new COVID variants (2022, December 5) retrieved 4 July 2024 from https://medicalxpress.com/news/2022-12-monoclonal-antibody-treatments-left-covid.html

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.