Regeneron says COVID antibody treatment may be less effective against Omicron

November 30 2021

A man enters the Regeneron Clinic at a monoclonal antibody treatment site in Pembroke Pines, Florida, on August 19, 2021. The manufacturers of the Covid-19 treatment are now testing its efficacy against the Omicron variant.

US biotech firm Regeneron said Tuesday that its synthetic antibody

treatment for COVID-19 may be less effective against the new variant, and it plans to conduct tests to determine by how much.

"Prior in vitro analyses and structural modeling regarding the individual mutations present in the Omicron variant indicate that there may be reduced neutralization activity of both vaccine-induced and monoclonal antibody-conveyed immunity, including the current REGEN-COV antibodies," the company said in a statement.

"Further analyses are ongoing to confirm and quantify this potential impact using the actual Omicron variant sequence."

REGEN-COV is currently authorized in the United States as a post-exposure prophylaxis in high-risk individuals, and is pending full approval.

It is based on two lab-produced monoclonal antibodies—Y-shaped proteins that bind to the spikes that dot the surface of the coronavirus, stopping the pathogen from invading human cells.

The antibodies, called casirivimab and imdevimab, are injected intravenously.

But Omicron has a high number of mutations on its spike proteins, which worries health experts.

The World Health Organization in late September recommended Regeneron for COVID-19 treatment, but only in patients with specific health profiles, such as the elderly or those with weakened immune systems.