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HEALTH

Antibody Drug Cuts Risk of Death for Sickest Patients

Trial results for a new Regeneron treatment have buoyed hopes that doctors could soon have a new way to tackle severe hospital cases.



By Denise Roland

An antibody treatment developed by Regeneron Pharmaceuticals Inc. has been shown to significantly cut the risk of death among certain hospitalized Covid-19 patients, raising hopes for a valuable new tool for tackling severe cases.

A large U.K. trial involving nearly 10,000 patients showed that administering REGEN-COV on top of usual care reduced the risk of dying by a fifth among hospitalized coronavirus patients who hadn't produced antibodies to the virus. The drug had no effect among patients who had already produced antibodies.

The results released Wednesday by the U.K. researchers are a boost for a drug class that

until now had only been shown to work against milder forms of the disease. Antibody therapies for Covid-19 target the spike protein on the surface of the virus with the aim of preventing it from entering cells. Earlier trials of other antibody therapies in hospitalized patients were stopped because the treatments appeared to be ineffective in these severe cases.

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"This is in some ways a first," said Martin Landray, professor of medicine and epidemiology at the University of Oxford and one of the study's leaders. "These patients are among the sickest patients, and we have a treatment we didn't have before." The study is part of the U.K's wider RECOVERY trial, which tests various drugs against Covid-19.

In the trial, REGEN-COV was used on top of dexamethasone, a steroid treatment which was shown last year to reduce the risk of dying by 17% in all hospitalized patients. "Now you're layering the effect of steroids," said George Yancopoulos, Regeneron's president and chief scientific officer. "That's what makes it exciting."

Of the 9,785 participants involved in the REGEN-COV study, around a third didn't have antibodies in their blood when they entered the trial. Some people's immune systems don't produce antibodies or are slow to do so for a variety of reasons, including underlying health conditions or as a result of treatments like chemotherapy, according to the investigators. These were the patients who benefited from treatment with REGEN-COV, a cocktail of two antibodies that each targets different parts of the spike protein.

Several drugmakers are developing these types of drugs, with mixed success. Some have been granted emergency-use authorization from the U.S. Food and Drug Administration for mild to moderate disease. But there have also been setbacks. On Tuesday, AstraZeneca PLC said its antibody therapy failed to prevent symptomatic Covid-19 in people recently exposed to the virus.

Regeneron said it would seek emergency-use authorization from the FDA for REGEN-COV among hospitalized patients. The drug has been available to treat recently diagnosed Covid-19 since November, and Regeneron has so far struck deals with the U.S. government to supply more than 1.5 million doses. In clinical trials, the drug reduced the

risk of hospitalization or death by 70% in people with mild to moderate symptoms. Write to Denise Roland at Denise. Roland@wsj.com