Subcutaneous mAb may benefit high-risk outpatients with COVID-19

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For high-risk outpatients with mild-to-moderate COVID-19,

subcutaneously administered monoclonal antibody (mAb) treatment with casirivimab and imdevimab is associated with reduced risk for 28-day hospitalization or death compared with no mAb treatment, according to a study published online April 12 in *JAMA Network Open*.

Erin K. McCreary, Pharm.D., from the University of Pittsburgh School of Medicine, and colleagues examined whether subcutaneous casirivimab and imdevimab treatment is associated with reduced 28-day hospitalization and death compared with nontreatment among mAb-eligible high-risk outpatients with mild-to-moderate COVID-19 symptoms from July 14 to Oct. 26, 2021. The 28-day adjusted risk ratio or adjusted risk difference for hospitalization or death was assessed as the primary outcome.

The researchers found that the 28-day rate of hospitalization or death was 3.4 percent among patients who received casirivimab and imdevimab subcutaneously compared with 7.0 percent among nontreated controls (22 of 653 and 92 of 1,306 patients, respectively; risk ratio, 0.48; 95 percent confidence interval, 0.30 to 0.80; P = 0.002). The 28-day rate of hospitalization or death was 2.8 versus 1.7 percent among patients treated with subcutaneous (969 patients) or intravenous (1,216 patients) casirivimab and imdevimab (risk difference, 1.5 percent; 95 percent confidence interval, −0.6 to 3.5 percent; P = 0.16). No significant difference was seen in intensive care unit admission or need for mechanical ventilation among all infusion patients.

"Collectively, these results provide preliminary evidence of potential expanded use of subcutaneous mAb treatment, particularly in areas facing treatment capacity and/or staffing shortages," the authors write.

More information: Erin K. McCreary et al, Association of Subcutaneous or Intravenous Administration of Casirivimab and Imdevimab Monoclonal Antibodies With Clinical Outcomes in Adults

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One author disclosed ties to Merck.