Short Communication

Efficacy and safety of remdesivir for patients with severe acute respiratory syndrome coronavirus 2 infection: A systematic review of randomized controlled trials

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Abstract:

In view of the pandemic of coronavirus disease 2019 (COVID-19), there is a need to identify a specific antiviral therapy. We performed this systematic review to assess the efficacy of remdesivir in the treatment of COVID-19. We searched three electronic databases for clinical trials investigating remdesivir for COVID-19 and included this systematic review. Five trials evaluating 13,558 participants were eligible for this study. Remdesivir, as compared to standard care, increases the rate of clinical improvement at 2 weeks (risk ratio: 1.10; 95% confidence interval: 1.04–1.18). Time to clinical recovery was shorter in the remdesivir group than the standard care group. The mortality rate was lower at 2 weeks in the remdesivir group, but no difference was observed at 4 weeks postrandomization. Extending the duration of remdesivir from 5 days to 10 days did not improve efficacy but increased the risk of adverse events. Findings from this systematic review suggested that remdesivir may slightly improve recovery time and rate of clinical improvement.

Keywords:

Antiviral therapy, coronavirus disease 2019, remdesivir