

Final Call on Remdesivir Efficacy as a Treatment for Hospitalized COVID-19 Patients

Bhavani Betha*

Department of Pharmacy, AU College of Pharmaceutical Sciences, Andhra University, Visakhapatnam, India

ABOUT THE STUDY

In the wake of the global SARS-CoV-2 pandemic, several preliminary studies have shown the effectiveness of antiviral treatment. However, shortly thereafter, inconsistencies in the results of further clinical studies raise doubt on the effectiveness of these active substances. In this study, we wanted to investigate the effect of Remdesivir on the outcome of hospitalized COVID-19 patients. This study was an open single-armed clinical trial in inpatients diagnosed with COVID-19 who showed progressive respiratory symptoms despite standard care. All patients received Remdesivir and their characteristics, outcomes, time of treatment initiation, and respiratory support stages during hospitalization were registered and followed up for 14 days. 145 patients with an average age of 52.89 ± 1.12 years participated in this study, and 38 (26.2%) died 14 days later. The average time from onset of symptoms to antiviral treatment was 10.63 ± 0.56 days.

Thirty deaths (78.9%) were males with a 2.8 times higher probability of death than females (OR_{adj}=2.77; 95% CI=1.087.09). The type of ventilation support on the first day of treatment showed significantly lower mortality in patients receiving O₂ alone than in patients requiring non-invasive and/or mechanical ventilation (OR_{adj}=3.91; 95%CI=1.649.32). The initiation (early and late) and duration of antiviral treatment (less than 7 days or more than 7 days) was not statistically significantly associated with increased patient mortality or ventilation (p-value>0.05). This study showed that Remdesivir is unlikely to be effective in outcomes in hospitalized COVID-19 patients. The COVID-19 pandemic that occurred in late 2019 impacted most of the world and poses major health challenges to the world. As of February 2021, approximately 105 million confirmed cases and 2.3 million COVID-19-related deaths were reported worldwide. Last year, Iran reported more than 1.4

million confirmed COVID-19 cases. A published report from Iran's COVID-19 National Registration estimated that the mortality rate for COVID-19 inpatients was 24.4% (23,825.0, 95% CI). Numerous treatment protocols have been developed and tested around the world since the pandemic began, and so far no significant effect of COVID-19 on mortality has been demonstrated.

Remdesivir GS5734 is one of the proposed antiviral drugs to treat COVID-19 and has been shown to be first effective in preliminary clinical trials, with the World Health Organization (WHO) and the Food and Drug Administration (FDA). It was there for emergency use in the treatment of COVID-19 shortly after approval and suggestion. More evidence was needed to ensure the effectiveness of Remdesivir, but it is largely incorporated into COVID-19 treatment protocols around the world. Indications for dosage, start and duration of treatment vary worldwide. Meanwhile, the first multicenter randomized clinical trial of Remdesivir in 237 patients in China showed that it had no significant effect on clinical recovery time and severe mortality. Controversy over the results of further clinical studies has raised concerns about their effectiveness.

The latest report from the Solidarity Mega study of more than 11 million inpatients with COVID-19 measured the impact of the proposed drug on the three major outcomes of COVID-19 patients: death, need for assisted ventilation, and length of stay. The last published report found that none of the investigational drugs, including Remdesivir, significantly reduced these key outcomes. The problems and potential side effects caused by the widespread use of Remdesivir suggested the need for further clinical trials to resolve the discussion of its cost-effectiveness. To this end, this study examined the efficacy of Remdesivir in hospitalized Iranian COVID-19 patients.

Correspondence to: Bhavani Betha, Department of Pharmacy, AU College of Pharmaceutical Sciences, Andhra University, Visakhapatnam, India, E-mail: bhavanibetha036@gmail.com

Received date: December 07, 2021; **Accepted date:** December 21, 2021; **Published date:** December 28, 2021

Citation: Bhavani B (2021) Final Call on Remdesivir Efficacy as a Treatment for Hospitalized COVID-19 Patients. *J Antivir Antiretrovir*. S23:005.

Copyright: © 2021 Bhavani B. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.