

## CoV-IN-SIGHTS: Evidence-Based Answers to FAQs Director General Medical Services (Navy)



### FAQ # 09 (24 May 2021) USE OF REMDESIVIR IN COVID-19 TREATMENT

#### 1. What is Remdesivir and how does it work?

Remdesivir is an anti-viral drug which was developed in 2014 by Gilead Sciences Ltd for targeting Hepatitis C. It is deemed to reduce the SARS-CoV-2 replication in the COVID-19 infected person. It has been permitted by Govt of India as **Emergency Use Authorisation (EUA)/ Off Label Use** in treatment against COVID-19.

#### 2. Is Remdesivir useful in treatment of COVID-19?

Two large clinical trials have been conducted to ascertain the efficacy of the drug. The **Solidarity Drug Trial** results released in Oct 20 showed that there was little or no effect of Remdesivir on decrease of mortality, need for ventilator and duration of hospital stay. Thereafter, the **World Health Organisation** had issued guidelines against use of Remdesivir.

Meanwhile, the National Institute of Health (USA) **Adaptive COVID-19 Treatment Trial (ACTT)** results published in New England Journal of Medicine in Oct 20 found that hospitalized patients with advanced COVID-19 and lung involvement who received Remdesivir had **faster recovery time** (11 vs 15 days) than those who received placebo. It however did not reduce overall mortality. But patients requiring oxygen supplementation (not on ventilator) had a **mortality benefit** (4% mortality in Remdesivir group compared to 13% in group without Remdesivir).

Based on the above scientific evidence, it is concluded that Remdesivir is not a magic drug which cures COVID-19 infection. MoH&FW/ ICMR guidelines have acknowledged its limited role in treatment by reducing days of hospitalisation. In addition, Remdesivir should be administered with other drugs like steroids, blood thinner, oxygen and vitamin supplements.

#### 3. Who should be treated with Remdesivir?

As per present evidence and considering the recommendations from CDC and MoH&FW/ ICMR, Remdesivir should **only be used for treatment of COVID-19 patients who are hospitalized and on Oxygen support (Moderate and Severe disease)**.

#### 4. Who should not be treated with Remdesivir?

The drug should **not** be used in **asymptomatic, and mild symptomatic** cases that is persons who are not hospitalized or not on Oxygen support. The drug is **contraindicated in pregnancy, breastfeeding** mothers and in **children below the age of 12 years**. The drug is also not recommended for use in patients with severe renal impairment and high level of liver enzymes.

## 5. When should Remdesivir be used in treatment of COVID-19?

An important protocol in use of Remdesivir is the timing of the drug. It should be ***used early in the illness (less than 10 days) in person who require supplemental oxygen.***

## 6. For how long is treatment with Remdesivir given?

As per the latest guidelines by MoH&FW, the drug is given by the intravenous route for a duration of five days.

### References.

1. Solidarity clinical trial for COVID-19 treatment. World Health Organisation. Available at <https://Who.Int/Home/Diseases/Covid-19/GlobalResearchonCOVID-19>
2. Dyer O. COVID-19: Remdesivir has little or no impact on survival, WHO trial show. BMJ 2020;371:m4057.
3. Beigel JH et al. Remdesivir for treatment of COVID-19 – Final Report. N Engl J Med 2020; 383:1813-1826.
4. Young B et al. The place of Remdesivir in COVID-19 treatment. Lancet. S1473-3099(20)30911-7.
5. AIIMS/ ICMR COVID-19 National Task Force/ Joint Monitoring Group (Dte GHS), MoH&FW guidelines on Clinical Guidelines for management of adult COVID-19 patients, 22 Apr 21.

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