

Advisory for Rational use of Remdesivir for COVID-19 Treatment

MOHFW, AIIMS and ICMR have jointly issued treatment guidelines for management of Covid-19 patients in the form of a guidance/ algorithm^[AM1] on 23.4.2021 available at: <https://www.mohfw.gov.in/pdf/COVID19ManagementAlgorithm22042021v1.pdf>. This guidance/ algorithm is easy to understand, practice and is widely followed. But this guidance/ algorithm does not prevent misuse/ overuse of Remdesivir.

The purpose of this document is to stop to irrational use/ over prescription of this reserve/ experimental/ emergency use authorisation drug Remdesivir. For this reason, Joint Monitoring Group under Chairmanship of DGHS took into consideration findings of the following studies to issue this advisory:

- A. The 'Adaptive Covid – 19 Treatment ^[GM1] Trial' found that Remdesivir is useful in cases of Covid – 19 with $SpO_2 \leq 94\%$ on room air (moderate to severe cases) if it is administered within 7 to 10 days of illness. Remdesivir led to a shorter median time from randomization to recovery (10 days, vs. 15 days with placebo) and may have reduced the time to hospital discharge (12 days vs. 17 days) but did not show a mortality benefit.¹
- B. The 'Solidarity Trial' conducted by WHO in 30 countries from March 2020 at 405 hospitals; 11330 adults underwent randomization; 2750 were assigned to receive Remdesivir. The interim results of the 'WHO Solidarity trial' published on December .2020 showed that Remdesivir had little or no effect on hospitalized patients with COVID-19, as indicated by overall mortality, initiation of ventilation, and duration of hospital stay.²

In view of the above:

1. Remdesivir is to be used only in select moderate/ severe hospitalised Covid - 19 patients on supplemental oxygen as **it is a reserve drug approved under Emergency Use Authorization** only based on limited scientific evidence globally.
2. It is not indicated in mild Covid – 19 patients who are in home care/ Covid Care Centres.
3. Physicians/ Doctors are advised to exercise extreme caution in using this reserve/ experimental/ emergency use authorisation drug Remdesivir to stop it's misuse as this is only an experimental drug with potential to harm, has relatively high cost and has limited availability.

Further, following additional steps are recommended to stop misuse of Remdesivir:

- Remdesivir must be advised by senior faculty members/ specialists ^[GM1] directly involved in patient's care.
- If Remdesivir has to be advised/ ordered during odd hours, it should be done by the duty doctor after telephonic consultation with a senior faculty member/ specialist/ unit in - charge.
- Advise/ order for Remdesivir must be written and bear the name, signature and stamp of the concerned doctor.

- **Every hospital needs to set up Special Drug Committee (SDC)** which must review use of Remdesivir in their hospital periodically. [GM2] It would be preferable to have a Pharmacology Professor/ faculty as a member of the SDC[AM3] wherever available.
- The Special Drug Committee should share their findings with the clinicians periodically to ensure rational and judicious use of Remdesivir.
 - Remdesivir should be procured and provided by the hospitals only; the patient's attendants/ relatives should not be asked to procure Remdesivir from retail market.

References:

1. Beigel JH, Tomashek KM, Dodd LE, et al. Remdesivir for the treatment of Covid-19 — final report. *N Engl J Med* 2020; 383: 1813-26.
2. WHO Solidarity Trial Consortium. Repurposed antiviral drugs for Covid-19 — interim WHO Solidarity trial results. *N Engl J Med*. DOI: 10.1056/NEJMoa2023184.