Remdigen 100

Remdesivir

Composition

Remdigen 100 Concentrated Solution for IV Infusion: Each vial contains 20 ml sterile solution of Remdesivir INN 100 mg

Pharmacology

Remdigen 100 is the preparation of Remdesivir which is a prodrug that metabolizes into its active form GS-441524. An adenosine nucleotide analog, GS-441524 interferes with the action of viral RNA-dependent RNA polymerase and evades proofreading by viral exoribonuclease (ExoN), causing a decrease in viral RNA production. It was unknown whether it terminates RNA chains or causes mutations in them.

Indications

Emergency Use of **Remdigen** 100 for the treatment of suspected or laboratory confirmed Corona Virus Disease 2019 (COVID-19) in adult and children hospitalized with severe disease. Severe disease is defined as patients with an oxygen saturation (SpO2) ≤ 94% on room air or requiring supplemental oxygen or requiring mechanical ventilation or requiring Extracorporeal Membrane Oxygenation (ECMO). Specifically, Remdesivir is only authorized for hospitalized adult and pediatric patients for whom use of an intravenous agent is clinically appropriate.

Dosage and Administration

Route of administration: **Remdigen** 100 should be taken in intravenous route.

Treatment initiation and dosing regimens:

- Empiric treatment of hospitalized patients with suspected COVID-19 can be considered pending laboratory confirmation of SARS-CoV-2 infection.
- A treatment course of 10 days is recommended for adults and pediatric patients requiring invasive mechanical ventilation and/or extracorporeal membrane oxygenation.
- A treatment course of 5 days is recommended for adults and pediatric patients not requiring invasive mechanical ventilation and/or ECMO. If a patient does not demonstrate clinical improvement, treatment may be extended for up to 5 additional days (i.e., up to a total of 10 days).
- Remdesivir can be used at any time after onset of symptoms in hospitalized patients.
- All patients must have an estimated glomerular filtration rate (eGFR) determined before dosing.
- Hepatic laboratory testing should be performed in all patients prior to starting remdesivir and daily while receiving remdesivir.

Adult patients:

- For adults requiring invasive mechanical ventilation and/or ECMO, the dosage of remdesivir is a single loading dose of 200 mg infused intravenously over 30 to 120 minutes on Day 1 followed by once daily maintenance doses of 100 mg infused intravenously over 30 to 120 minutes for 9 days (days 2 through 10).
- For adults not requiring invasive mechanical ventilation and/or ECMO, the dosage of remdesivir is a single loading dose of 200 mg infused intravenously over 30 to 120 minutes on Day 1 followed by once daily maintenance doses of 100 mg infused intravenously over 30 to 120 minutes for 4 days (days 2 through 5). If a patient does not demonstrate clinical improvement, treatment may be extended for up to 5 additional days (i.e., up to a total of 10 days).

Pediatric patients:

- For pediatric patients with body weight ≥ 40 kg requiring invasive mechanical ventilation and/or ECMO, the adult dosage regimen of one loading dose of remdesivir 200 mg IV (infused over 30 to 120 minutes) on Day 1 followed by remdesivir 100 mg IV (infused over 30 to 120 minutes) once daily for 9 days (days 2 through 10) will be administered.
- For pediatric patients with body weight ≥ 40 kg not requiring invasive mechanical ventilation and/or ECMO, the adult dosage regimen of one loading dose of remdesivir 200 mg IV (infused over 30 to 120 minutes) on Day 1 followed by remdesivir 100 mg IV (infused over 30 to 120 minutes) once daily for 4 days (days 2 through 5) will be administered. If a patient does not demonstrate clinical improvement, treatment may be extended for up to 5 additional days (i.e., up to a total of 10 days).
- Use of the adult dose in these pediatric patients is expected to maintain exposures of both remdesivir and the nucleoside analog GS-441524 generally within the expected adult steady state exposure range following administration of the adult therapeutic dosage regimen in healthy volunteers.
- For pediatric patients with body weight between 3.5 kg and < 40 kg, use remdesivir for injection, 100 mg, lyophilized powder only. Administer a body weight based dosing regimen of one loading dose of remdesivir 5 mg/kg IV (infused over 30 to 120 min) on day 1 followed by remdesivir 2.5 mg/kg IV (infused over 30 to 120 min) once daily for 9 days (for pediatric patients requiring invasive mechanical ventilation and/or ECMO, days 2 through 10) or for 4 days (for pediatric patients not requiring invasive mechanical ventilation and/or ECMO,

days 2 through 5). If a patient does not demonstrate clinical improvement, treatment may be extended for up to 5 additional days (i.e., up to a total of 10 days). Use of this height based dosing regimen is expected to maintain remdesivir exposure that is comparable to that observed in adults while limiting the exposure of the nucleoside analog GS-441524 in very young children.

Method of administration

Concentrated solution for IV infusion 100 mg:

- Dilute concentrated solution in intravenous fluids up to 250 ml prior to intravenous administration.
- Diluents as intravenous fluid may be used 0.9% (9 mg/ml) sodium chloride in water for injection (normal saline).
- The diluted solution should be used immediately.

Contraindications

- Remdesivir is contraindicated with known hypersensitivity to remdesivir or any components of this product.
- It is also contraindicated in patients with evidence of multi-organ failure.
- The use of more than one pressor for septic shock (use of 1 pressor at low/medium doses for inotropic support due to the use of sedation and paralytics while on the ventilator is allowed).
- ALT > 5 x upper limit of normal (ULN) by local laboratory measure.
- Renal failure (eGFR < 30 ml/min) or dialysis or continuous veno-venous hemofiltration.

Warning and precautions

In clinical studies, transient elevations in ALT and AST have been observed with single doses of remdesivir up to 225 mg and multiple once daily doses of remdesivir 150 mg for up to 14 days, with mild reversible prothrombin time prolongation in some subjects but without any clinically relevant change in INR or other evidence of hepatic effect. The mechanism of these elevations is currently unknown. In nonclinical animal studies, toxicity findings were consistent with dose dependent and reversible kidney injury & dysfunction. In clinical studies, no evidence of nephro toxicity has been observed with single doses of remdesivir up to 225 mg or multiple once daily doses of remdesivir 150 mg for up to 14 days.

Side Effects

In Ebola trial, researchers noted side effects of remdesivir that included: Increased liver enzyme levels that may indicate possible liver damage. Typical antiviral drug side effects include nausea and vomiting.

Use in pregnancy and lactation

Pregnancy: It is unknown whether remdesivir will affect a fetus or impact on pregnancy. In rats and monkeys, remdesivir affected kidney development in fetus.

Lactation: It is unknown whether or not remdesivir passes into breast milk. Consult with physician before breastfeeding.

Use in children and adolescents

The safety and efficacy of remdesivir in children below 12 years have not been established. No data available.

Drug interactions

Drug interaction with medication: Remdesivir itself is not believed to affect other medications, however, other medications may affect remdesivir. Some medications will boost the remdesivir level in the bloodstream and some will reduce it. Some antibiotics that may do this include; clarithromycin and rifampicin.

Drug interaction with food and others: Not applicable.

Overdose

There is no known antidote for remdesivir, in the case of overdose the subject should receive standard treatment for overdose and supportive therapy based on the subject's signs and symptoms.

Storage

Store in a refrigerator at 2°C to 8°C, protected from light. Do not keep in deep fridge. Keep out of the reach of children.

Packing

Remdigen 100 Concentrated Solution for IV Infusion: Each box contains 1 vial filled with Remdesivir INN 100 mg concentrated solution for IV infusion.

Manufactured by:
general GENERAL Pharmaceuticals Ltd.
Unit-2, Karol Surichala, Kaliakair, Gazipur, Bangladesh

22067098/Rev.:00

The information given here is limited. For further information consult your doctor or pharmacist.