Remdesivir for COVID-19

Remdesivir is a intravenously available nucleotide analogue antiviral.
Remdesivir is active against SARS-CoV-2, including Alpha, Beta, Gamma, Delta and Omicron variants of concern.

CLINICAL INDICATIONS
Patients with confirmed non-severe COVID-19, >12 years of age and >40 kg, and
• at highest risk for hospitalization,
• with symptoms less than 7 days, and
• when alternative treatment options are not accessible or clinically appropriate.

Those at highest risk are typically those that lack COVID-19 vaccination, with older age and/or chronic conditions, such as: hypertension, diabetes, cardiac disease, chronic lung disease, cerebrovascular disease, dementia, mental disorders, chronic kidney disease, immunosuppression (including HIV), obesity, and cancer.

CONTRAINDICATIONS
1. Hypersensitivity to the active substance(s) or to any of the excipients.
2. The excipients include:
   a. Betadex sulfobutyl ether sodium
   b. Hydrochloric acid
   c. Sodium hydroxide

RECOMMENDATIONS FOR NOT STARTING OR CONTINUING REMDESI VIR

Children < 12 years of age
Persons < 40 kg
Renal impairment with eGFR < 30 mL/min
ALT > 5x upper limit of normal
Elevation in ALT/AST is accompanied by signs or symptoms of liver inflammation

AVAILABLE FORMULATION AND STORAGE
• Remdesivir is supplied as a single-dose 100 mg vial (5 mg/mL after reconstitution) containing a sterile, preservative-free white to off-white to yellow powder. (see reconstitution guidance below).
• Store vials below 20-30 °C until required for use.

DOSAGE AND ROUTE

Route:
• The route of administration is intravenous after reconstitution and dilution.
• It should not be administered simultaneously with other medicinal products in the same dedicated line.
• It should not be given as an intramuscular injection.

Dose and duration:
The total duration of treatment is 3 days.
• Day 1 – single loading dose of remdesivir 200 mg given by intravenous infusion
• Day 2 and 3 – 100 mg of remdesivir given once daily by intravenous infusion

Dose adjustment
Renal impairment: Do not use in patients with an eGFR < 30 mL/min. There is no dose adjustment with an eGFR > 30 mL/min.
• One of the excipients in remdesivir, betadex sulfobutyl ether sodium, is renally cleared and accumulates in patients with decreased renal function. It may potentially adversely affect renal function.

Hepatic impairment: Remdesivir has not been studied in patients with hepatic impairment. It should not be used in patients with ALT > 5x upper limit of normal or if patient has abnormal ALT/AST accompanied by signs and symptoms of liver inflammation.