

Evidence-Based Medicine for Treating COVID-19

Remdesivir (Veklury®)

Brought to you by the CSHP-AB Research Committee

**Authorized for use**

by Health Canada on July 26, 2020

**Indications**

Treatment of coronavirus disease 2019 (COVID-19) in adults and adolescents (aged 12 years and older with body weight at least 40 kg) with pneumonia requiring supplemental oxygen.

**Mechanism of action**

Inhibits RNA-dependent RNA polymerase (RdRp) involved in the replication and transcription of SARS-CoV-2, inhibiting viral replication.

**Efficacy**

At the time of Health Canada's assessment, a total of 24 clinical trials were ongoing worldwide with 2 trials in Canada. The evidence was reviewed by CADTH and last updated on October 22, 2020. (See

<https://covid.cadth.ca/treatment/remdesivir-evidence-review-and-appraisal/>). The evidence for efficacy is difficult to summarize succinctly.

The studies vary in methodology, statistical analysis and were even adapted with changes to the primary outcomes during the trial. Of the four RCTs assessed by CADTH, only the ACTT-1 trial demonstrated a statistically significant reduced time to recovery compared to placebo of 11 (9-12) days vs 15 (7-13) days. On November 20, 2020, the WHO issued a conditional recommendation against the use of remdesivir in hospitalized patients, regardless of disease severity, stating that there is currently no evidence that remdesivir improves survival in these patients.

**Use**

Recommended dosage of remdesivir in patients who are ≥ 12 years of age and older and ≥ 40 kilograms:

- Day 1 – single loading dose of remdesivir 200 mg given by intravenous infusion
- Day 2 onwards – 100 mg remdesivir given once daily by intravenous infusion

The total duration of treatment should be at least 5 days and not more than 10 days.

Want more information on COVID-19 Treatments?

An interactive summary of current evidence on COVID-19 treatments is available via an excellent resource at the BMJ (BMJ 2020;370;m2980):

<https://www.bmj.com/content/370/bmj.m2980>