Administration of Remdesivir for **COVID-19**



PREPARATION AND ADMINISTRATION

Remdesivir is available in a 100 mg vial and must be reconstituted and diluted using aseptic non-touch technique by a healthcare worker prior to administration.

Reconstitution

- **1.** Wash hands per protocol.
- 2. Obtain the required number of single-use remdesivir vial(s).
- 3. For each vial:
 - Use aseptic non-touch technique to reconstitute remdesivir powder by addition of 19 mL of sterile water for injection using an appropriately sized syringe and needle per vial.
 Discard the vial if a vacuum does not pull the sterile

water into the vial.

- 2. Only use sterile water for injection to reconstitute remdesivir powder.
- 3. Immediately shake the vial for 30 seconds and then allow contents to settle for 2-3 minutes. A clear solution should result. Repeat this procedure as needed until the contents of the vial are completely dissolved.
- Inspect the vial to ensure the container is free from debris and the solution is free of particulate matter. Discard the vial if the contents are not completely dissolved.
- 5. Following reconstitution, each vial contains 100 mg/20 mL (5 mg/mL) or remdesivir solution.
- 6. Dilute immediately after reconstitution.

Dilution

It is recommended to administer immediately after preparation when possible.

- 1. From the 0.9% infusion bag, withdraw and discard the appropriate volume (i.e. 20 ml for 100 mg dose, or 40 ml for 200 mg dose). Use an appropriately sized syringe and needle.
- 2. Withdraw volume of reconstituted remdesivir using an appropriate syringe (20mL for 100 mg dose). Discard any unused portion in the vial per local procedure.
- **3.** Transfer the required volume of reconstituted remdesivir to the selected infusion bag.
- 4. Gently invert the infusion bag 20 times to mix the solution in the bag. Do not shake.
- 5. After the infusion is complete, flush the line with at least 30 mL of 0.9% sodium chloride.
- 6. Dispose any unused medicinal product or waste material in accordance with local procedure.

Stability

If unable to administer immediately, the prepared solution is stable at room temperature for 24 hours at room temperature (20°C to 25°C) or 48 hours in the refrigerator (2°C to 8°C).

Table 1: Recommended dilution instructions for reconstituted remdesivir powder

Remdesivir Dose	Sodium Chloride (0.9%) infusion bag volume to be used	Volume to be withdrawn and discarded from 0.9% Sodium Chloride infusion bag	Required volume of reconstituted remdesivir
200 mg	250 mL	40 mL	2 x 20 mL
(2 vials)	100 mL	40 mL	2 x 20 mL
100 mg	250 mL	20 mL	20 mL
(1 vial)	100 mL	20 mL	20 mL

Table 2: Recommended rate of infusion for reconstituted and
diluted remdesivir powder

Infusion Bag Volume	Infusion Time	Rate of Infusion	
250 mL	30 min	8.33 mL/min	
	60 min	4.17 mL/min	
	120 min	2.08 mL/min	
100 mL	30 min	3.33 mL/min	
	60 min	1.67 mL/min	
	120 min	0.83 mL/Min	





For detailed information, see WHO Therapeutics and COVID-19: living guideline. https://www.who.int/teams/health-carereadiness-clinical-unit/covid-19/therapeutics

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