Propofol 1% Intravenous for Adults

Who can administer

Administration RESTRICTED - see Appendix 1

Important information

- May only be initiated by Intensivists/Anaesthetists
- Facilities for maintenance of airways, artificial ventilation and other resuscitation facilities should be immediately available at all times
- The decision by the hospital to only stock the 1% formulation is a deliberate decision

Available preparations

Propofol - Lipuro 1% 200mg per 20mL ampoule (Braun)

Propofol 1% 500mg in 50mL vial (Fresenius)

Other strengths and volumes are not stocked at this time

Reconstitution

- Already in solution
- **Draw up using a 5 micron filter needle (ampoules)**
- Shake before use
- **Replace infusion and infusion set after 12 hours**
- **For single administration in an individual patient**

Infusion fluids

Dilution not advised in GUH at this time (consult pharmacy if considering)

Methods of intravenous administration

Sedation in patients in the intensive care unit

Continuous intravenous infusion (administer using an electronically controlled infusion device)

- Administration via **central line or a large peripheral vein** (ref 1)
- Draw up required volume (50mL) and administer using a syringe driver

Bolus Intravenous Injection

- Administer required dose as a bolus intravenous injection

Dose in adults

Sedation in the intensive care unit:

- The dose should be adjusted according to the depth of sedation required
- Usual administration rates are in the range of 0.3 to 4mg/kg/hour.
- Titrate every 5 to 10 minutes in increments of 0.3 to 0.6mg/kg/hour [ref 1)]
- Rates of infusion in excess of 4mg/kg/hour are NOT recommended

Status Epilepticus (unlicensed use)[ref 1,2)]

- **Loading dose**
    - Give 1 to 2mg/kg followed by 0.5 to 2mg/kg every three to five minutes until seizures stop
    - **Maximum total loading dose** is 10mg/kg
- **Continuous intravenous infusion**
    - Initial rate of 1.2mg/kg/hour titrated over next 20 to 60minutes to cessation of electrographic seizures or burst suppression
- **Usual dose range:** 1.8mg to 3.6 mg/kg/hour
- **Maximum dose:**Â Doses in excess of 5mg/kg/hour require written instructions by anaesthetist or neurologist due to the risk of propofol infusion syndrome. In the short-term doses up to 12mg/kg/hour have been used in clinical practice. Use beyond 48 hours is NOT advised in the ED-resus setting.Â

Monitoring

- Monitor blood pressure, ECG and monitor for respiratory depression (pulse oximetry)
- Propofol-related infusion syndrome (PRIS) is a rare complication of propofol. It is generally associated with doses of greater than 4mg/kg/hour and prolonged use greater than 48 hours
- Characteristics of PRIS include metabolic acidosis, rhabdomyolysis, hyperkalaemia, hepatomegaly, renal failure, hyperlipidaemia, cardiac arrhythmia and cardiac failure
- May cause local pain, swelling and/or tissue necrosis
- Monitor for hypertriglyceridaemia- discolouration of urine [ref 2)]

Storage

- Store below 25^{0}C
- Do not freeze

References

Propofol Injection 1% (Fresofol) SPC Fresenius Kabi March 2022
1.UptoDate accessed online 15/01/2025
2.Medusa NHS Injectable Medicines Guide assessed online 15/01/2025

Therapeutic classification

Short acting general anaesthesic agent