Lorazepam Intravenous for Adults



Who can administer

Status epilepticus: may be administered by registered competent doctor or nurse/midwife.

Other indications: Restricted administration: see appendix 1

Important information

• Generalised convulsive status epilepticus may be defined as" **5 or more minutes of continuous** seizure activity, OR **more than one seizure without recovery** in between" (ref 1)

Available preparations

Ativan 4mg per 1mL ampoule (currently in short supply)

Lorazepam 4mg per 1mL ampoule (Macure)

Reconstitution

Already in solution

- Draw up using a 5 micron filter needle
- Dilute further prior to administration

Methods of intravenous administration

Slow intravenous injection

- Dilute with an equal volume of either Sodium chloride 0.9% or Water for Injections immediately before administration (example add 1mL injection solution to 1mL diluent)
- Inject into a **large vein** at a rate no faster than 2mg/minute, except in the control of status epilepticus where rapid injection is required (ref 2)

Infusion

• Not recommended, see further information.

Dose in adults

Premedication

Administer 50 micrograms/kg (0.05mg/kg) given 30 to 45 minutes before surgery (ref 3)

Convulsive status epilepticus (see important information for definition)

- Administer 4mg
- Allow a few minutes (e.g.three to five minutes) to assess its effect before deciding whether additional
 doses are necessary (ref 1)
- Elderly and debilitated patients may respond to lower doses

Acute anxiety (ref 3)

- Administer 25 to 30 micrograms per kg (0.025 to 0.03mg/kg) (1.8 to 2.1mg for 70kg patient)
- Can repeat if required after six hours

Elderly and debilitated

• May respond to lower doses - half dose may be sufficient

Renal and hepatic impairment

- Contraindicated in severe hepatic impairment
- Patients with renal impairment have increased cerebral sensitivity to lorazepam (ref 3)
- Start with **small** doses in severe **renal** impairment
- Monitor frequently and adjust dose carefully according to patient response in both renal and hepatic impairment

Further information

• Administration by infusion is an unlicensed method of administration and is **NOT** recommended at GUH, as precipitation has been reported, **particularly with the 4mg per 1mL formulation.**

Storage

• Store between 2 to 8°C

References

SPC Lorazepam (Macure) 26th Nov 2021

- 1: Convulsive status epilepticus in adults: Classification, clinical features and diagnosis UpToDate monograph. downloaded 16th Feb 2022
- 2: Injectable Medicines Guide Medusa, downloaded 16th Feb 2022
- 3: BNF, accessed online 16th Feb 2022

Therapeutic classification

Benzodiazepine