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

- See GUH guidelineTreatment Algorithm for Management of Adults with Convulsive Status Epilepticus in GUH, March 2023

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)
    - Swirl syringe to mix - do not shake vigorously as air bubbles will form
- 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 1)]

Infusion

- Not recommended, see further information.

Dose in adults

Premedication

- Administer 44 micrograms/kg (0.044mg/kg) (to a maximum dose of 2mg) given 15 to 20 minutes before procedure
- Patients aged 50 years or less- may give 50 micrograms/kg (0.05mg/kg) (to a maximum dose of 4mg)

Convulsive status epilepticus

- Administer 4mg
- Wait 5 minutes to assess its effect before deciding whether additional doses are necessary (ref 2)
- **Elderly and debilitated patients** may respond to lower doses

Acute anxiety

- Initial dose: 2 to 4mg (0.05mg/kg)
- If necessary, the dose may be repeated after two hours

Elderly and debilitated patients

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

Renal and hepatic impairment

- Contraindicated in severe hepatic impairment
- Start with **small** doses in severe **renal** impairment - not more than 2mg is recommended
- Monitor frequently and adjust dose carefully according to patient response in **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^{0}C

References

SPC Lorazepam (Macure) 23rd May 2024

1: Injectable Medicines Guide Medusa, downloaded 15/04/2025

2: Treatment Algorithm for Management of Adults with Convulsive Status Epilepticus in GUH, March 2023

Therapeutic classification

Benzodiazepine