

## Lorazepam (Ativan) – EMSAC November 2023

**Lorazepam may substitute midazolam during midazolam shortages**

### **ACTION: Sedative, Anti-Seizure**

- Lorazepam is a potent, short-acting benzodiazepine with sedative effects. It has no effect on pain.

### **INDICATIONS:**

- Premedication before cardioversion, external pacing and other painful procedures.
- Seizures (status epilepticus).
- Agitated patient who may be a danger to self or others.

### **CONTRAINDICATIONS:**

- Hypersensitivity • Shock, with depressed vital signs
- Narrow-angle glaucoma • Alcoholic coma

### **POTENTIAL SIDE EFFECTS:**

- Laryngospasm • AMS
- Bronchospasm • Bradycardia
- Dyspnea
- Respiratory depression and arrest
- Drowsiness
- Amnesia • Vomiting

### **ADULT DOSE/ROUTE:**

⇒ Sedation/Agitation: 2mg slow push IV/IO or IM.

⇒ Seizure: 4 mg IM x1 or intranasally (2mg each nostril) or 4mg slow push IV/IO. Maximum total dose 4 mg IM/IV/IO.

### **PEDIATRIC DOSE/ROUTE:**

⇒ Sedation/Agitation: 0.05 mg/kg IM/IV/IO slow push. Maximum total dose 2 mg IM/IV/IO.

⇒ Seizure: 0.1 mg/kg IM/IV/IO x1 (Max 4mg) or intranasally (half in each nostril. Maximum total dose 4mg).

### **NOTES:**

- Contact Base Hospital if seizure activity or agitation continues after maximum dose is reached and additional doses may be required.
- Do not use intranasal route in agitation because amount of absorption in an actively resisting, agitated patients is unknown.
- Effects of lorazepam may be potentiated if administered with opiate pain medications. Contact Base Hospital if considering administering both medications.
- Lorazepam clinical effects may take 20-30 minutes when given IM. Use caution to prevent medication stacking and wait 20 minutes between doses.
- Lorazepam is more viscous (thicker) than other medications and may require more effort to draw up and administer, especially intranasally.

- Lorazepam needs to be refrigerated during storage. Once removed from refrigeration, it has a shelf life of 60 days in temperature stable environments (including vehicles). Vials should not be re-refrigerated after being removed.
- Always be prepared to protect airway and ventilate patients who are given benzodiazepines. Continuous monitoring of vital signs before and after administration is required. End-tidal CO<sub>2</sub> should be monitored after administration to monitor for respiratory depression.

Effective: 09/22/2023 (Immediate Release)

DRAFT