

# Lorazepam

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## Sources:

- Sandoz Canada is the sole supplier of Lorazepam 4mg/ml (DIN: 02243278)
  - Expected resupply mid December 2013

## Indications and Clinical uses in Canada (1):

- Treatment of excessive anxiety when oral therapy not feasible
- Used pre-operatively to reduce sedation and anxiety, and provide anterograde amnesia
- Treatment of status epilepticus
- Antiemetic adjunct in chemotherapy
- Palliative care adjunct (eg. for agitation, sedation)

## Treatment alternatives:

\*Assuming oral route not feasible

- Anxiety or agitation:
  - Diazepam 10-20mg IV equally effective to lorazepam 2-4mg IV in several studies (2,3,4)
  - Haloperidol 5mg IM equally effective as lorazepam 2mg IM for acute agitation in psychotic patients (5)
  - Olanzapine 10mg IM x2 equally effective as lorazepam 2mg IM x2 for acute agitation in bipolar disorder (6)
- Pre-operative use
  - Diazepam 10-20mg IV produced same reduction in pre-operative anxiety and sedation. The amnesia effect occurred sooner with diazepam, but considered of similar magnitude with lorazepam (7)
  - Midazolam IV equally efficacious compared to lorazepam IV to achieve sedation, however has higher dose requirements (14.4mg midazolam vs. 1.6mg lorazepam for similar sedation) due to rapid elimination, and thus higher cost. (8)
- Status epilepticus
  - Fosphenytoin 20mg/kg IV (phenytoin equivalents) at 150mg/min
  - Diazepam 0.15mg/kg IV followed by phenytoin 18mg/kg IV equally effective; however, lorazepam IV has a much longer duration of anti-seizure effect (12-24 hours lorazepam, vs. 15-30 minutes diazepam) (9)

- Midazolam 0.2mg/kg bolus followed by 0.05 mg – 0.4 mg/kg/h continuous IV equally effective compared to lorazepam; however, rapid elimination necessitates more frequent dosing (10)
  - Phenobarbital 15mg/kg alone equally effective vs. lorazepam IV 0.1mg/kg alone, but slow administration, prolonged sedation, and higher risk of hypoventilation and hypotension are drawbacks (10)
- Antiemetic in chemotherapy
    - Many options; refer to [NHS Clinical Knowledge Summaries](#)

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December 2013

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