

**Fomepizole, a competitive inhibitor of alcohol dehydrogenase (ADH) prevents formation of toxic metabolites of methanol and ethylene glycol (G)**

## Indications

- Ethanol and fomepizole are both effective ADH inhibitors used for the treatment of EG and methanol poisoning. Ethanol is widely available, however fomepizole has significant advantages and is the preferred antidote when available
- **In particular, fomepizole is the preferred antidote in:**
  - children
  - pregnancy
  - significant liver disease (cirrhosis)

## Contraindications:

- Isopropyl alcohol poisoning

## Adverse effects (uncommon):

- headache, nausea, dizziness
- metallic taste
- phlebitis, rash
- fever
- eosinophilia, transient elevated transaminases

## Presentation

- 1.5g / 1.5 mL vial

## Dose and Administration

- dilute in 100 mL 0.9% NaCl or 5% dextrose to avoid venous irritation
- administer all doses as slow IV infusion over 30 minutes
- diluted solutions remain stable up to 24 hours when stored refrigerated or at room temperature

### Loading dose:

- 15 mg/kg IV over 30 minutes

### Maintenance dose:

- 10 mg/kg IV every 12 hours for 48 hours (4 doses). Increase maintenance dose to 15 mg/kg IV 12 hourly if fomepizole is required beyond 48 hours (i.e. 5<sup>th</sup> dose onwards)
- Administer maintenance dose at 4 hourly intervals if patient is treated using intermittent haemodialysis (8 hourly if patient treated using CVVHD)

## Therapeutic Endpoint:

- Osmol Gap (OG) < 10 in conjunction with serum pH > 7.3, not requiring dialysis or bicarbonate infusion  
OR serum methanol or ethylene glycol concentration (if available) < 20 mg/dL

## Pregnancy:

- Category C
- The use of fomepizole should not be withheld if potential benefit outweighs any potential risk