**FLUMAZENIL**

**CLASS:** Antidote

**INDICATIONS:** Benzodiazepine antagonist; reverses sedative effects of benzodiazepines used in conscious sedation and general anesthesia; treatment of benzodiazepine overdose

**AVAILABLE DOSAGE FROM THE HOSPITAL:**

FLUMAZENIL 0.5MG/5ML AMP

**TRADE NAMES:**

**DOSAGE:**

- **Dosing: Adult**
  
  **Reversal of conscious sedation and general anesthesia: I.V.:**
  
  Initial dose: 0.2 mg over 15 seconds

  Repeat doses (maximum: 4 doses): If desired level of consciousness is not obtained, 0.2 mg may be repeated at 1-minute intervals.

  Maximum total cumulative dose: 1 mg (usual total dose: 0.6-1 mg). In the event of resedation: Repeat doses may be given at 20-minute intervals as needed at 0.2 mg per minute to a maximum of 1 mg total dose and 3 mg in 1 hour.

  Suspected benzodiazepine overdose: I.V.:

  Initial dose: 0.2 mg over 30 seconds; if the desired level of consciousness is not obtained 30 seconds after the dose, 0.3 mg can be given over 30 seconds

  Repeat doses: 0.5 mg over 30 seconds repeated at 1-minute intervals

  Maximum total cumulative dose: 3 mg (usual total dose: 1-3 mg). Patients with a partial response at 3 mg may require (rare) additional titration up to a total dose of 5 mg (although doses >3 mg do not reliably produce additional effects). If a patient has not responded 5 minutes after cumulative dose of 5 mg, the major cause of sedation is not likely due to benzodiazepines. In the event of resedation, repeat doses may be given at 20-minute intervals if needed, at 0.5 mg per minute to a maximum of 1 mg total dose and 3 mg in 1 hour.

- **Dosing: Geriatric**

  Refer to adult dosing. No differences in safety or efficacy have been reported; however, increased sensitivity may occur in some elderly patients.

- **Dosing: Renal Impairment**
No dosage adjustment provided in manufacturer’s labeling; however, pharmacokinetics are not significantly affected by renal failure (Clcr <10 mL/minute) or hemodialysis.

- **Dosing: Hepatic Impairment**
  
  Initial reversal: No dosage adjustment necessary. Repeat doses: Reduce dose or frequency.

**COMMON SIDE EFFECT:**

Sound-alike/look-alike issues:

Flumazenil may be confused with influenza virus vaccine

**PREGNANCY RISK FACTORS:** C