

**VANCOUVER GENERAL HOSPITAL
CSU PHARMACEUTICAL SCIENCES
INVESTIGATIONAL DRUG DATA SHEET**

DRUG NAME pentobarbital	ALTERNATE NAME Nembutal®
MANUFACTURER Lundbeck Inc.	
STRENGTH 50mg/mL (20 or 50mL multi-dose vial)	DOSAGE FORM Injectable

INDICATIONS

- To induce a barbiturate coma in patients in ICU only:
 - o with status epilepticus refractory to conventional agents
 - o with persistently elevated intracranial pressure (ICP) post traumatic brain injury

DOSAGE

- 10mg/kg IV x 1 dose over 15-30 minutes (max 50 mg/min)
Then 5mg/kg/hr IV x 3 hours
Then 1mg/kg/hr IV maintenance infusion x 5- 7 days
Maintenance rate can be titrated in increments of 1-2 mg/kg/hr to achieve burst suppression on EEG for status epilepticus or to attain ICP < 20 mmHg in traumatic brain injury

ADMINISTRATION

- IV direct
 - Do not mix with any other medication or solution
 - Slow IV injection is essential.
 - Cardiac and respiratory status should be monitored during administration.
 - Rate of IV injections should not exceed 50mg/min
- IV infusion (Must be infused using automated infusion device)
 - Mix in NS or D5W
 - Dilute to a concentration not greater than 8 mg/mL (stable for 24 hours)
 - e.g. 20mL (1000 mg) in 250 mL – concentration 4 mg/mL
 - 50 mL (2500 mg) in 500 mL – concentration 5 mg/mL
 - Do not use if there is evidence of precipitation or discoloration

KNOWN SIDE EFFECTS*

- Somnolence, agitation, confusion, ataxia, CNS depression, psychiatric disturbance, hallucinations, insomnia, anxiety, dizziness, hypoventilation, apnea, bradycardia, hypotension, syncope, nausea, vomiting, constipation, ileus, injection site reactions, hypersensitivity reactions (angioedema, skin rash, exfoliative dermatitis), fever, liver damage, megaloblastic anemia following chronic use
- Too rapid administration may cause respiratory depression, apnea, laryngospasm or vasodilation with fall in blood pressure

SPECIAL PRECAUTIONS

- Contraindicated in patients with known barbiturate sensitivity or with a history of manifest or latent porphyria, pregnancy
- Patients should have a protected airway with resuscitation and ventilation equipment readily available when pentobarbital is used.
- Administer with caution using reduced doses in patients with hepatic impairment. Barbiturates should not be administered to patients with hepatic encephalopathy.
- Avoid perivascular extravastion or intra-arterial injection as tissue damage with subsequent necrosis may occur
- Pentobarbital is a potent hepatic enzyme inducer. Drug interactions may occur with warfarin, corticosteroids, doxycycline, phenytoin, sodium valproate/valproic acid, monoamine oxidase inhibitors, estrogen derivatives, progesterone and other hormonal agents
- Pentobarbital injection is NOT available on the Canadian Market and is only available through the Health Canada Special Access Programme

The use of pentobarbital is experimental. Knowledge of its side effects is incomplete and

may involve risks that are unknown and currently unforeseen. MAY2011
***REPORT ANY ADVERSE DRUG REACTIONS TO CSU PHARMACEUTICAL SCIENCES**