

Drug Administration Guide

Phenobarbital

Indication	Seizures Adjunct in cholestasis
Dose	<u>Seizures:</u> 20mg/kg loading dose Followed by 2.5-5mg/kg once or twice daily, adjusted according to response <u>Cholestasis:</u> 5mg/kg once daily
Route of administration	Intravenous infusion over 20 minutes (no faster than 1mg/kg/minute) Administer via central line due to extreme pH and osmolality. If this is not possible, administer with extreme caution via a large peripheral vein.
To prepare	15mg/mL, 30mg/mL, 60mg/mL and 200mg/mL vials Preferred diluent: water for injection To make 20mg/mL: <u>If using 200mg/mL vial:</u> Add 1mL (200mg) phenobarbital to 9mL water for injection and administer required dose <u>If using 60mg/mL vial:</u> Add 1mL (60mg) phenobarbital to 2mL water for injection and administer required dose <u>If using 30mg/mL vial:</u> Add 2mL (60mg) phenobarbital to 1mL water for injection and administer required dose
Compatibilities	Glucose 5%, glucose 10%, sodium chloride 0.9%, sodium chloride 0.45%, aminophylline, caffeine citrate, calcium chloride, calcium gluconate, fentanyl, heparin, meropenem, morphine, propofol
Known incompatibilities	Amphotericin B, hydralazine, hydrocortisone, ranitidine, parenteral nutrition
Notes	Dosing differs to that stated in the BNFC. An additional partial loading dose of 10mg/kg can be given 1-2 hours after the initial loading dose if seizures persist. Trough levels can be taken before a dose to detect toxicity. Trough levels should be 15-40mg/L, although the therapeutic dose is generally taken to be that which controls symptoms. Levels >40mg/L suggest toxicity. If there is no compatibility information for specific drugs, do not assume compatibility. For incompatible drugs or those with no compatibility information use a separate line or, for short infusions, flush well between drugs. For side-effects see the BNFC - Phenobarbital BNFC
References	Leeds Teaching Hospitals neonatal prescribing and administration monograph, Bradford Teaching Hospitals neonatal formulary, Handbook on Injectable Drugs, Medusa, BNFC, King's College & University Lewisham Hospitals Paediatric Formulary, 9th Edition (revised December 2012), Dosage Recommendations for Anticonvulsants Employed in Neonatal Seizures Iowa Neonatology Handbook.

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Clinicians must accept individual responsibility for using this information and prescribing safely.