

Dose: Stat dose
(if required) 250mgs/kg
over 90 minutes
Maintenance dose: 250
- 500 mgs/kg/day

Sodium Phenylbutyrate administration (IV)

(Each ampoule of Sodium Phenylbutyrate concentrate for injection contains 1g in 5mls or 2g in 10mls)

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Use maximum concentration only:
50mg/ml preparation
(i.e. 50mg in 1ml = 5000mg in 100ml = 5g in 100ml = 5% solution
Note: % = g / 100mls. (e.g. 1% = 1g in 100ml / 10% = 10g in 100ml)

A.
If dose is ≤ 3g / day, the following method of administration is used

B.
If dose is >3g <20g / day, the following method of administration is used

C.
If dose is > 20g / day, the following method of administration is used

- Using a 50 ml syringe, withdraw 37.5mls from a 500ml bag of 10% dextrose
- Add 12.5 mls of Sodium Phenylbutyrate concentrate for injection
- Syringe contains a solution of 2.5g in 50ml.
(i.e. 2.5g in 50ml = 5g in 100ml = 5% solution = 50mg in 1ml)
(note: if 2.5 – 3g required the syringe will last < 24 hours)

- Remove 220mls from a 500 ml bag of Dextrose 10%
- Add 100mls of Sodium phenylbutyrate concentrate for injection (100mls = 20g)
- As 100 mls of Sodium Phenylbutyrate concentrate for injection has been added to the solution there is now 20 grams of Sodium Phenylbutyrate in a volume of 400mls*
(i.e. 20g in 400ml = 5g in 100ml (5% solution) = 50mg in 1ml.

- Remove 145 ml from 500 ml bag of Dextrose 10%
- Add 125mls of Sodium phenylbutyrate concentrate for injection (125mls = 25g)
- As 125 mls of Sodium Phenylbutyrate concentrate for injection has been added to the solution there is now 25 grams of Sodium phenylbutyrate in a volume of 500 mls*
(i.e. 25g in 500ml = 5g in 100ml (5% solution) = 50mg in 1ml.

May be prescribed as a stat / bolus infusion (over 1.5-2 hours) or continuous. (Always a continuous infusion in PICU)

*500ml bags do not contain exactly 500ml – average contents is 520- 540ml. This calculation is based on a volume of 520mls in bag.

- Prescription includes:**
- Infusion fluid – 10% dextrose
 - Volume & Drug dose to be added
 - drug name (grams in final volume)
 - solution percentage concentration
 - dose in mgs/kg/day
 - calculated dose in g/day
 - Rate ml/hr
 - Doctors signature & date

Prescription example

- 300 mg / kg / day prescribed for 70kg child.
- 70 kg x 300mg = 21,000mgs = 21g /day
- As dose >20g /day, option C is used
- 21,000 ÷ 50 x 1 = 420 mls/day = 17.5mls/hr

Intravenous infusions

Infusion Fluid or → Base solution	Dextrose 10%	Final Volume (ml)	Date prescribed	Prescriber's Signature	Prep. Check	date/ time	Pump check	Date / Time
Medication or → Electrolyte to be added	Name Sodium Phenylbutyrate 5% Quantity 21g	420ml	1 01/01/16	<i>Joe Bloggs</i>				
Rate →	17.5mls/hr 250mg/Kg/day		2					
			3					
Additional instructions →	Refer to Sodium Phenylbutyrate administration (IV) instruction	Batch no./EXP (if applicable)	4					
			Date cancelled		← CANCELLED (complete with full prescriber details)			