

## Who can administer

May be administered by registered competent doctor or nurse/midwife

## Important information

- Valproate is **contraindicated in women of childbearing potential**, unless the conditions of the pregnancy prevention programme are fulfilled- see SPC for details
- Co-administration with carbapenem agents (**e.g. meropenem**) may result in a 60-100% decrease in valproic acid levels within two days- therefore concurrent use is not recommended

## Available preparations

Epilim 400mg vial

## Reconstitution

**Water for Injection (provided) (Draw up using a 5 micron filter needle)**

4ml per 400mg vial

## Infusion fluids

Sodium chloride 0.9% or Glucose 5%

## Methods of intravenous administration

### Slow intravenous injection

- Administer over a minimum of 3 to 5 minutes <sup>(ref 1)</sup> (but see below for rate of administration for **status epilepticus**)
- **Peripheral administration.** Dilute with at least 20mL Sodium chloride 0.9% or Glucose 5%
- **Central line administration.** May be used diluted or undiluted

### Intermittent intravenous infusion (Status epilepticus <sup>(ref 2)</sup>)

- Add required dose to 100mL infusion fluid
- Administer over 10 minutes
- High doses via peripheral route may cause extravasation- monitor closely <sup>(ref 1)</sup>

### Intermittent intravenous infusion (Do not use for INITIATION of treatment - can be used for MAINTENANCE doses)

- Volume of infusion not critical (but should be at least 50mL) <sup>(ref 1)</sup>
- If a 50ml infusion volume is used the residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing
- Administer as a 60 minute infusion <sup>(ref 1)</sup>
- Maximum rate of administration 20mg per minute

### Continuous intravenous infusion (Do not use for INITIATION of treatment - can be used for

## MAINTENANCE doses)

- Volume of infusion not critical (but should be at least 50mL) <sup>(ref 1)</sup>
- Administer required daily dose over 24 hours

## Dose in adults

**Status epilepticus** <sup>(ref 2)</sup> - see table 1 below

<b>Table 1: Status epilepticus: Valproate dosing</b> (unlicensed)	
<b>Body weight (kg)</b>	<b>Loading dose 40mg/kg (to a maximum dose of 3000mg)</b>
40	1600mg
50	2000mg
60	2400mg
70	2800mg
75kg or more	3000mg (max dose)
Flush giving set with 25mL infusion fluid at the same rate to ensure full dose is administered	

### Continuation of valproate treatment when oral therapy is not possible

- Use the same IV dose as is currently being given orally

### Initiation of valproate therapy (when oral therapy not possible)

- Initially give 10mg/kg (usually 400 to 800mg), by slow intravenous injection....
- Followed by further doses, as deemed clinically necessary, by either intermittent intravenous infusion or continuous intravenous infusion, up to a maximum dose of 2500mg per 24 hours
- The daily dose should be divided into at least two doses

## Monitoring

**Liver function tests, U&Es and full blood counts** are recommended prior to initiation of therapy, and then periodically during treatment.

### Serum level monitoring

- Serum valproate **levels are of little use** in patient management except in the investigation of non-compliance/adverse reactions - routine monitoring is discouraged
- Optimum dosage is mainly determined by seizure control.
- **If levels are to be taken, please take pre-dose levels, at a consistent time of day**
- Therapeutic range: 40 to 100 microgram/ml (mg/L). This reported range may depend on time of sampling and presence of co-medication.
- An increased incidence of adverse effects may occur with plasma levels above the effective therapeutic range.
- The pharmacological (or therapeutic) effects of valproate may not be clearly correlated with levels

## Storage

Store below 25°C

# References

SPC January 2024

1. Medusa Injectable medicines guide downloaded 7th March 2024
2. Status epilepticus: [GUH treatment algorithm for adults, March 2023](#)

# Therapeutic classification

Anti-epileptic