# Nimodipine Intravenous for Adults

## Who can administer

Administration RESTRICTED - see Appendix 1

## Important information

- Monitoring requirements - see under 'Monitoring'
- **If** changing to **oral** therapy, the dose is **60mg every four** hours

## Available preparations

Nimotop solution 10mg per 50mL vial

## Reconstitution

Already in solution

## Infusion fluids

- Nimodipine should not be diluted. However, **a co-infusion fluid** such as Sodium chloride 0.9% or Glucose 5% **MUST be run alongside the nimodipine** (see method below)

## Methods of intravenous administration

**Important:** Nimodipine should be infused using a **non-PVC syringe and giving set**

**Continuous intravenous infusion via CENTRAL line (administer using an electronically controlled infusion pump)**

- Nimodipine solution must be drawn up into a 50mL syringe - **use neat - do not dilute further**
- Connect to a three-way stopcock using the non-PVC infusion line provided in pack
- The stopcock must allow for concomitant flow of the nimodipine solution and a co-infusion solution
- Nimodipine solution **MUST** be administered with a co-infusion of either of the above infusion solutions
- The co-infusion fluid should run at a rate of four times that of the nimodipine infusion (see table below)
- Connect the co-infusion to the second port of the three-way stopcock prior to its connection with the central line catheter

**Rate to run co-infusion fluid at**

| Nimodipine rate | Rate of administration of co-infusion fluid |
|---|---|
| 1mg per hour (5mL per hour) | 20mL per hour |
| 2mg per hour (10mL per hour) | 40mL per hour |

## Dose in adults

| Prevention and treatment of aneurysmal subarachnoid haemorrhage | | |
|---|---|---|
| **Patient weight** | **Time** | **Dose** |
| **70kg and over** | First two hours | 1mg (5mL) per hour |
| | After two hours | Increase to 2mg (10mL) per hour if tolerated |
| **Less than 70kg or blood pressure unstable**[(BNF)] | First two hours | 0.5mg (2.5mL) per hour or less |
| | After 2 hours | Increased to 2mg (10mL) per hour if tolerated |

- Use a central line
- **Duration**: 5 to 14 days for the parenteral product, followed up with oral nimodipine treatment, to complete a 21 day course
- The **oral dose** is 60mg every four hours- i.e. **six doses per day**
- If surgical intervention is necessary during treatment with nimodipine, continue intravenous therapy for at least 5 days post surgery

**Liver disease**

- Decreased drug clearance may occur in cirrhotic patients receiving intravenous nimodipine and therefore close monitoring of blood pressure is recommended in these patients

# Monitoring

- Those with known renal disease and/or receiving nephrotoxic drugs should have renal function monitored closely during intravenous nimodipine treatment
- Monitor liver function
- Monitor renal function, especially if on other nephrotoxic agents, or pre-existing renal impairment

# Further information

- Other compatible co-infusions include: Ringer's lactate solution, dextran 40, human albumin 5% or mannitol 10%
- Each 10mg (50mL) bottle of Nimotop solution contains approximately **10g of ethanol**

# Storage

- Store below $25^{0}$C
- Protect from **direct sunlight** during administration (the infusion is stable in a syringe for 10 hours if only exposed to diffuse daylight and/or artificial light)

# References

SPC November 2024

# Therapeutic classification

Calcium channel blocker