

## Who can administer

Administration RESTRICTED - see [Appendix 1](#)

## Important information

- If using 20mg vial strength for a 70kg patient: a cumulative dose of 10mg/kg is needed this will amount to approximately **35 vials**
- Beware the risk of **extravasation**

## Available preparations

Dantrium 20mg vial (pack includes a single use filter device)

Agilus 120mg vial

## Reconstitution

**Dantrium brand:** 60ml per 20mg vial (**Water for injection ONLY**)

- Vials should be shaken until the solution is clear
- Using the filter device provided, draw up the reconstituted solution into a syringe
- Use a new filter device for each vial
- Remove the filter device before attaching the syringe to an IV cannula or giving set

**Agilus brand** 20ml **per 120mg vial (Water for injection ONLY)**

- Vials should be shaken until the solution is clear (approximately one minute)

## Infusion fluids

**After reconstitution with Water for Injections, no further dilution permitted.**

## Methods of intravenous administration

### **Bolus intravenous injection**

- **Management of malignant hyperthermia crisis (licensed <sup>(ref 2,4)</sup>), or neuroleptic malignant syndrome (unlicensed <sup>(ref 1,3)</sup>)**
  - Administer rapidly (over at least one minute)<sup>(ref 2)</sup>

### **Intermittent intravenous infusion - using an electronically controlled infusion device**

- **Prophylaxis of Malignant hyperthermia crisis <sup>(ref 2,5)</sup> (unlicensed)**
  - Add required dose to an appropriate-size empty sterile IV plastic bag for administration - supplied from pharmacy
  - The required dose is administered over 60 minutes, with the infusion commencing approximately 75 minutes before anticipated anaesthesia
  - See 'dose' for details

# Dose in adults

## Management of malignant hyperthermia crisis

- **Initial dose: 2.5 mg/kg body weight**<sup>Â</sup>
- As long as the main clinical symptoms of tachycardia, hypoventilation, sustained hyperacidity (pH and pCO<sub>2</sub> monitoring required) and hyperthermia persist, **bolus injection should be repeated**
  - Suggested interval: repeat every 10 minutes <sup>(Agilus brand)</sup> <sup>Â</sup>
  - Other references suggest repeat doses of 1mg/kg every five minutes <sup>(ref 6)</sup>
- **In most cases, a total dose of 10 mg/kg body weight per 24 hours is sufficient**
- If a cumulative dose of 10mg/kg or above is considered, the diagnosis of malignant hyperthermia should be re-examined
- If doses >10mg/kg are required- contact National Poisons Information Service <sup>(ref 6)</sup>

## Prophylaxis of malignant hyperthermia crisis (unlicensed use)<sup>(ref 1,2,5)</sup>

- Used for the prevention or attenuation of malignant hyperthermia crisis in adults thought to be at risk of developing this condition
- May be given orally or IV prior to surgery (oral dose differs from IV) <sup>(ref 1,5)</sup>
- IV dose: 2.5mg/kg may be given by intravenous infusion over 60 minutes commencing about 75 minutes before anticipated anaesthesia <sup>(ref 1,2,5)</sup>
- Further doses can be given during anaesthesia and surgery if signs of malignant hyperthermia develop

## Management of neuroleptic malignant syndrome (unlicensed use)<sup>(ref 1,3)</sup>

- Give 1 to 2.5mg/kg initially
- If rapid resolution of hyperthermia and rigidity is observed, may follow with 1mg/kg every six hours up to a maximum cumulative dose of 10mg/kg/day, then switch to oral dosage

# Further information

Care must be taken to prevent extravasation of the intravenous solution into the surrounding tissues.

- **Order code numbers for empty bags are:**
  - 500ml bag (Baxter E13050LPF)
  - These bags are to be stored beside and to be dispensed along with the Dantrolene injection (available to order from PASU)

# Storage

- Store below 25°C
- Do not refrigerate or freeze

# References

Dantrium SPC 10th June 2022

Agilus SPC 29th May 2024

1: Martindale, accessed online 23/01/2025

2: Injectable medicines guide Medusa UK site downloaded 23/01/2025

3: UpToDate accessed online 23/01/2025

4: BNF accessed online 23/01/2025

5: Injectable Drugs guide- accessed via Medicinescomplete 23/01/2025

6: Toxbase- downloaded 17/04/2025

## Therapeutic classification

Direct acting skeletal muscle relaxant