# Glucagon intravenous for adults



### Who can administer

May be administered by registered competent doctor or nurse/midwife

### Important information

- Usually given by the **subcutaneous or intramuscular** route for the treatment of **severe hypoglycaemia reactions**
- Please ensure **additional supplies are ordered by pharmacy** if large doses by infusion are being administered
- Protect the airway in case of vomiting (ref 2)
- Equivalencies: a 1mg dose is the same as 1 unit

### Available preparations

Glucagen Hypokit 1mg

### Reconstitution

- Add 1.1mL water for injection (provided) to the vial containing the powder to produce a 1mg/1mL solution
- Shake gently until completely dissolved
- A syringe with a thinner needle and a finer graduation may be more suitable in diagnostic procedures

# Infusion fluids

Glucose 5% or Sodium chloride 0.9%  $^{\rm (ref\,1)}$ 

### Methods of intravenous administration

#### Bolus intravenous injection (doses of 1mg or less) (ref 1)

- Administer over one minute
- Rapid injection may be associated with increased nausea and vomiting (ref 2)

#### Slow intravenous injection (doses greater than 1mg) (ref 1)

- Administer over 3 to 5 minutes
- Rapid injection may be associated with increased nausea and vomiting (ref 2)

#### Intermittent intravenous infusion (unlicensed) (ref 1)

• There is no recommended final volume/concentration for dilution. It is usually convenient to dilute in 50 or 100mL, but larger or smaller volumes can be used if necessary

### Dose in adults

### Severe hypoglycaemia

• Usually 1mg, given by the subcutaneous or intramuscular route

#### Diagnostic indication (inhibition of gastrointestinal motility)

- Relaxation of stomach, duodenal bulb, duodenum and small bowel: 0.2 to 0.5mg as intravenous injection
- Relaxation of colon: 0.5 to 0.75mg as intravenous injection
- Higher doses may be given for these indications if by subcutaneous or intramuscular route- see SPC

### Beta-blocker/calcium channel blocker toxicity (unlicensed) (ref 2)

- Consult poisons centre
- Give 3 to 10mg (0.05 to 0.15mg/kg) as a slow intravenous injection over 2 to 5 minutes, followed by an infusion of 3 to 5mg/hour (0.05 to 0.1mg/kg/**hour**)
- Titrate the infusion to achieve an adequate clinical response

### Anaphylactic reaction (refractory) in patients on beta-blocker therapy (unlicensed) (ref 2)

- Give 1 to 5mg as a slow intravenous injection over 5 minutes, followed by an infusion of 5 to 15 micrograms/minute
- Titrate the infusion to achieve an adequate clinical response

### **Renal or hepatic impairment**

• No dosage adjustment is required

### Storage

- Store in a refrigerator between 2 and  $8^{\circ}C$  for full shelf life of product
- May be stored at room temperature for up to 18 months (providing the expiry date is not exceeded)

# References

SPC December 2019

1: Injectable medicines guide - Medusa, downloaded 24th November 2021

2: Uptodate- downloaded 24th November 2021

# Therapeutic classification

Glycogenolytic hormone