## Ondansetron Intravenous for Adults



#### Who can administer

May be administered by registered competent doctor or nurse/midwife

## Important information

- Ondansetron prolongs the QT interval in a dose-dependent manner
- Hypokalaemia and hypomagnesemia should be corrected prior to administration of ondansetron
- Cases of myocardial ischaemia have been reported following intravenous administration

# Available preparations

Ondansetron 4mg per 2mL ampoule

Ondansetron 8mg per 4mL ampoule

### Reconstitution

Already in solution

Draw up using a 5 micron filter needle

## Infusion fluids

Sodium chloride 0.9% or Glucose 5%

## Methods of intravenous administration

**Note:** Must use Intravenous infusion as the method of administration for patients older than 65 years, for chemotherapy or radiotherapy induced nausea and vomiting

#### Slow intravenous injectionÂ

- Post op nausea and vomiting: all patients
- Chemotherapy/radiotherapy induced nausea and vomiting: patients less than 65 years of age
  - Administer over at least 30 seconds
  - May be diluted to a convenient volume with Sodium Chloride 0.9% to aid slow administration (ref 1)

# Intermittent intravenous infusion (for chemotherapy or radiotherapy induced nausea and vomiting, for adult patients of all ages)

- · Add required dose to 100mL of infusion fluid
- Administer over at least 15 minutes
- A 50ml infusion may be used if required (eg fluid restriction) but the residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing

# Continuous intravenous infusion (for chemotherapy or radiotherapy induced nausea and vomiting in patients less than 65 years of age only) (ref 1)

• Add required dose to 50 or 100mL infusion fluid, and administer at a rate of 1mg per hour for up to 24

## Dose in adults

#### **Emetogenic Chemotherapy and Radiotherapy**

- Give 8mg before treatment
- Continue oral treatment thereafter, as per SPC

#### Highly emetogenic chemotherapy

- Dose range **per day**: 8 to 32mg (max 32mg per twenty-four hours)
- Maximum single initial dose is 16mg (or 8mg if age 75 or older) (due to risk of QT prolongation)
- Usually: 8mg before chemotherapy. If required, follow with two further IV doses of 8mg, at **least four hours apart**, or by a continuous infusion (1mg per hour) for up to twenty-four hours
- The efficacy of ondansetron in highly emetogenic chemotherapy may be enhanced by the addition of a single dose of dexamethasone sodium phosphate 20mg administered prior to chemotherapy

#### Post-operative nausea and vomiting (treatment or prevention)

- Give 4mg by slow IV injection at induction of anaesthesia for prevention of post-operative nausea and vomiting
- Give 4mg by slow IV injection for treatment of post-operative nausea and vomiting

#### **Renal impairment**

• In patients with renal impairment, no alteration of dose is required

#### **Hepatic impairment**

- In patients with moderate or severe hepatic impairment, the clearance of ondansetron is significantly reduced.
- A total of 8mg per twenty-four hours should not be exceeded in these patients

## Monitoring

• Monitor blood pressure and heart rate (ref 1)

## **Further information**

• Specific guidelines are recommended for all chemotherapy regimens within GUH

# Storage

• Store below 25°C

## References

Ondansetron SPC November 28th, 2024

1: Injectable Medicines Administration Guide Medusa, accessed online December 12th, 2024

## Therapeutic classification

Anti-emetic (5HT3 receptor antagonist)

Search synonym: Zofran