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 hours

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^{0}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