ONDANSETRON amp/tab

Class: Selective 5-HT_3 Receptor Antagonist

Indications:

I.V.: Prevention of nausea and vomiting associated with initial and repeat courses of emetogenic cancer chemotherapy (including high-dose cisplatin); prevention of postoperative nausea and/or vomiting (PONV); treatment of PONV if no prophylactic dose of ondansetron received

Oral: Prevention of nausea and vomiting associated with highly emetogenic cancer chemotherapy (including high-dose cisplatin); prevention of nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy; prevention of nausea and vomiting associated with radiotherapy (either total body irradiation, single high-dose fraction to the abdomen, or daily fractions to the abdomen); prevention of PONV

Available dosage form in the hospital:

ONDANSETRON 4MG TAB, ONDANSETRON 4MG/2ML AMP, ONDANSETRON 8MG INJ, ONDANSETRON 8MG TAB

Dosage:

-Prevention of nausea and vomiting associated with emetogenic chemotherapy:

-Manufacturer's labeling:

-I.V.: 0.15 mg/kg/dose (maximum: 16 mg/dose) over 15 minutes for 3 doses, beginning 30 minutes prior to chemotherapy, followed by subsequent doses 4 and 8 hours after the first dose

-*Highly-emetogenic agents/single-day therapy:* Oral: 24 mg given as three 8 mg tablets 30 minutes prior to the start of therapy

-*Moderately-emetogenic agents:* Oral: 8 mg beginning 30 minutes before chemotherapy; repeat dose 8 hours after initial dose, then 8 mg every 12 hours for 1-2 days after chemotherapy completed

-American Society of Clinical Oncology Antiemetic Guideline recommendations (Basch, 2011): High emetic risk: Day(s) chemotherapy is administered:

-I.V.: 8 mg or 0.15 mg/kg. **Note:** Single I.V. doses >16 mg are no longer recommended by the manufacturer due to the potential for QT prolongation.

-Oral: 8 mg twice daily

-Prevention of nausea and vomiting associated with radiation therapy:

-Manufacturer's labeling:

-*Total body irradiation:* Oral: 8 mg 1-2 hours before each daily fraction of radiotherapy

-*Single high-dose fraction radiotherapy to abdomen:* Oral: 8 mg 1-2 hours before irradiation, then 8 mg every 8 hours after first dose for 1-2 days after completion of radiotherapy

-*Daily fractionated radiotherapy to abdomen:* Oral: 8 mg 1-2 hours before irradiation, then 8 mg every 8 hours after first dose for each day of radiotherapy

-American Society of Clinical Oncology Antiemetic Guideline recommendations (Basch, 2011): Give before each fraction throughout radiation therapy for high emetic risk (continue for at least 24 hours after completion) and for moderate emetic risk; for low emetic risk, may give either as prevention or rescue; for minimal emetic risk, give as rescue (if rescue used for either low or minimal emetic risk, then prophylaxis should be given until the end of radiation therapy):

-I.V. (unlabeled route/dosing): 8 mg or 0.15 mg/kg. **Note:** Single I.V. doses >16 mg are no longer recommended by the manufacturer due to the potential for QT prolongation.

-Oral: 8 mg twice daily

-Postoperative nausea and vomiting (PONV):

-Oral: 16 mg given 1 hour prior to induction of anesthesia

-I.M., I.V.: 4 mg as a single dose (over 2-5 minutes if giving I.V.) administered ~30 minutes before the end of anesthesia (see Note below) or as treatment if vomiting occurs after surgery (Gan, 2007).

Note: The manufacturer recommends administration immediately before induction of anesthesia; however, this has been shown not to be as effective as administration at the end of surgery (Sun, 1997). Repeat doses given in response to inadequate control of nausea/vomiting from preoperative doses are generally ineffective.

-Treatment of severe or refractory hyperemesis gravidum (unlabeled use):

-Oral: 8 mg every 12 hours (Levichek, 2002)

-I.V.: 8 mg administered over 15 minutes every 12 hours (ACOG, 2004)

Renal Impairment

No dosage adjustment necessary (there is no experience for oral ondansetron beyond day 1)

Hepatic Impairment

Severe impairment (Child-Pugh C):

-I.V.: Day 1: Maximum dose: 8 mg (there is no experience beyond day 1)

-Oral: Maximum daily dose: 8 mg

Common side effect:

Central nervous system: Headache (9% to 27%), malaise/fatigue (9% to 13%)

Gastrointestinal: Constipation (6% to 11%)

Pregnancy Risk Factor: B