Ondaset™

(Ondansetron)

اونڈاسیٹ

QUALITATIVE AND QUANTITATIVE COMPOSITION

Ondaset 4mg/2ml Injection IM/IV

Each ml contains:

Ondansetron (as hydrochloride) USP..... 2mg

Ondaset 8mg/4ml Injection IM/IV

Each ml contains:

Ondansetron (as hydrochloride) USP..... 2mg

Ondaset 8mg tablets

Each film-coated tablet contains:

Ondansetron as hydrochloride dihydrate (USP).... 8mg

DESCRIPTION

Ondaset (Ondansetron hydrochloride), a selective blocking agent of the serotonin 5-HT_3 receptor type.

CLINICAL INFORMATION

Indications

Ondansetron is indicated for the prevention of nausea and vomiting associated with:

- Highly emetogenic cancer chemotherapy, including cisplatin greater than or equal to 50mg/m^2
- Initial and repeat courses of moderately emetogenic cancer chemotherapy
- Radiotherapy in patients receiving either total body irradiation, single high-dose fraction to the abdomen, or daily fractions to the abdomen
- Ondansetron is also indicated for the prevention of postoperative nausea and/or vomiting.

Dosage and Administration

A. TABLETS

Adult Recommended Dosage Regimen for Prevention of Nausea and Vomiting

Indication	Dosage Regimen
Highly Emetogenic Cancer Chemotherapy	A single 24 mg dose administered 30 minutes before the start of single-day highly emetogenic chemotherapy, including cisplatin greater than or equal to 50mg/m^2
Moderately Emetogenic Cancer Chemotherapy	8mg administered 30 minutes before the start of chemotherapy, with a subsequent 8mg dose 8 hours after the first dose. Then administer 8mg twice a day (every 12 hours) for 1 to 2 days after completion of chemotherapy.
Radiotherapy	*For total body irradiation:* 8mg administered 1 to 2 hours before each fraction of radiotherapy each day. *For single high-dose fraction radiotherapy to the abdomen:* 8mg administered 1 to 2 hours before radiotherapy, with subsequent 8mg doses every 8 hours after the first dose for 1 to 2 days after completion of radiotherapy. *For daily fractionated radiotherapy to the abdomen:* 8mg administered 1 to 2 hours before radiotherapy, with subsequent 8mg doses every 8 hours after the first dose for each day radiotherapy is given.
Postoperative	16mg administered 1 hour before induction of anesthesia.

Pediatric Recommended Dosage Regimen for Prevention of Nausea and Vomiting

Indication	Dosage Regimen
Moderately Emetogenic Cancer Chemotherapy	*12 to 17 years of age:* 8mg administered 30 minutes before the start of chemotherapy, with a subsequent 8mg dose 8 hours after the first dose. Then administer 8mg twice a day (every 12 hours) for 1 to 2 days after completion of chemotherapy.
	4 to 11 years of age: 4mg administered 30 minutes before the start of chemotherapy, with a subsequent 4mg dose 4 and 8 hours after the first dose. Then administer 4mg three times a day for 1 to 2 days after completion of chemotherapy.

B. INJECTIONS

Prevention of Nausea and Vomiting Associated with Initial and Repeat Courses of Emetogenic Chemotherapy

The recommended dosage for adult and pediatric patients 6 months of age and older for prevention of nausea and vomiting associated with emetogenic chemotherapy is 0.15mg/kg per dose for 3 doses (maximum of 16mg per dose).

Caution: Dilution of Ondaset (Ondansetron) Injection is required in adult and pediatric patients prior to administration. Infuse intravenously over 15 minutes beginning 30 minutes before the start of emetogenic chemotherapy and then repeat 4 and 8 hours after the first dose.

Prevention of Postoperative Nausea and Vomiting

The recommended dose and administration instructions for adult and pediatric patients 1 month of age and older for prevention of postoperative nausea and vomiting are shown in Table

Population	Recommended Single Dose	Administration Instructions	Timing of Administration
Adults and pediatric patients older than 12 years of age	4mg	May be administered intravenously or intramuscularly: • Intravenously: infuse Undiluted syringe contents (4mg) over at least 30 seconds and preferably longer (over 2 to 5 minutes). •Intramuscularly: inject undiluted syringe contents (4mg)	Administer immediately before induction of anesthesia, or postoperatively if the patient did not receive prophylactic antiemetics and experiences nausea and/or vomiting occurring within 2 hours after surgery
Pediatric patients 1 month to 12 years and more than 40 kg	4mg	Infuse intravenously over at least 30 seconds and preferably longer (over 2 to 5 minutes).	
Pediatric patients 1 month to 12 years and 40 kg or less	0.1mg/kg	Infuse intravenously over at least 30 seconds and preferably longer (over 2 to 5 minutes).	

Dosage Adjustment

Hepatic Impairment

In patients with severe hepatic impairment (Child-Pugh scores of 10 or greater), do not exceed a total daily dose of 8mg.

Administration Requirement

For pediatric patients between 6 months and 1 year of age and/or 10 kg or less: Depending on the fluid needs of the patient, Ondansetron Injection may be diluted in 10 to 50mL of 5% Dextrose Injection or 0.9% or 0.45% Sodium Chloride Injection.

Contraindications

Ondansetron is contraindicated in patients:

- With known hypersensitivity to Ondansetron or any of the components of the formulation
- Receiving concomitant Apomorphine due to risk of profound hypotension and loss of consciousness

Warnings and Precautions

Hypersensitivity Reactions

If hypersensitivity reactions occur, discontinue use of Ondansetron; treat promptly as per standard of care and monitor until signs and symptoms resolve.

QT Prolongation

Avoid Ondansetron in patients with congenital long QT syndrome. ECG monitoring is recommended in patients with electrolyte abnormalities (e.g., hypokalemia or hypomagnesaemia), congestive heart failure, bradyarrhythmias, or patients taking other medicinal products that lead to QT prolongation.

Serotonin Syndrome

If symptoms of serotonin syndrome occur, discontinue Ondansetron and initiate supportive treatment. Patients should be informed of the increased risk of serotonin syndrome, especially if Ondansetron is used concomitantly with other serotonergic drugs.

Masking of Progressive Ileus and Gastric Distension

The use of Ondansetron in patients following abdominal surgery or in

patients with chemotherapy-induced nausea and vomiting may mask a progressive ileus and/or gastric distension.

Interactions

Serotonergic Drugs

Serotonin syndrome (including altered mental status, autonomic instability, and neuromuscular symptoms) is known to occur following the concomitant use of 5-HT_3 receptor antagonists and other serotonergic drugs, including selective serotonin reuptake inhibitors (SSRIs) and serotonin and noradrenaline reuptake inhibitors (SNRIs).

Drugs Affecting Cytochrome P-450 Enzymes

Ondansetron is metabolized by hepatic cytochrome P450 drug-metabolizing enzymes (CYP3A4, CYP2D6, CYP1A2), inducers or inhibitors of these enzymes may change the clearance and, hence, the half-life of Ondansetron. No dosage adjustment is recommended for patients on these drugs.

Tramadol

Monitor patients to ensure adequate pain control when Ondansetron is administered with tramadol.

Chemotherapy

Carmustine, etoposide, and cisplatin do not affect the pharmacokinetics of Ondansetron.

Alfentanil and Atracurium

Interactions with general or local anesthetics are not known.

Pregnancy and Breastfeeding

Category B. and should not be used during 1st trimester. Not recommended during breastfeeding.

Effects on ability to drive and use machines

In psychomotor testing Ondansetron does not impair performance nor cause sedation. No detrimental effects on such activities are predicted from the pharmacology of Ondansetron.

Adverse Reactions

Cardiovascular

Arrhythmias, bradycardia, electrocardiographic alterations & palpitations, and syncope.

Rarely IV Ondansetron, cause transient ECG changes including QT interval prolongation.

General

Rare cases of hypersensitivity reactions, sometimes severe (e.g., anaphylactic reactions, angioedema, bronchospasm, shortness of breath, hypotension). Laryngospasm, shock, and cardiopulmonary arrest are known to occur during allergic reactions in patients receiving injectable Ondansetron.

Hepatobiliary

Liver enzyme abnormalities

Lower Respiratory

Hiccups

Neurology

Oculogyric crisis, appearing alone, as well as with other dystonic reactions

Skin

Urticaria, Stevens-Johnson syndrome, and toxic epidermal necrolysis

Eye Disorders

Cases of transient blindness, predominantly during IV administration, are known to occur, and these resolve within a few minutes up to 48 hours.

Overdose

No specific antidote for overdose. Management involve appropriate supportive therapy.

PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Serotonin (5HT_3) antagonist

Mechanism of Action

Ondansetron is a selective 5-HT_3 receptor antagonist. Serotonin receptors of the 5-HT_3 type are present both peripherally on vagal nerve terminals and centrally in the chemoreceptor trigger zone of the area pastrami. For Ondansetron, It is not certain whether the antiemetic action is mediated centrally, peripherally, or in both sites. In humans, urinary 5-hydroxyindoleacetic acid (5-HIAA) excretion increases after cisplatin administration in parallel with the onset of emesis. The released serotonin may stimulate the vagal afferents through the 5-HT_3 receptors and initiate the vomiting reflex.

Pharmacokinetic Properties

Absorption

Ondansetron is absorbed from gut and undergoes some first-pass metabolism, with mean bioavailability of 56% after a single tablet of 8mg. *Food Effects:* Bioavailability is also slightly enhanced by the presence of food.

Distribution

Plasma protein binding may be 70% to 76% over the concentration range of 10 to 500 ng/mL. Circulating drug also distributes into erythrocytes.

Elimination

Ondansetron is extensively metabolized (~95%) and metabolites are excreted in urine. In adults mean half-life is 4 hours.

PHARMACEUTICAL INFORMATION

Shelf life

2 years

Special Precautions for Storage

Do not store above 30°C.
Protect from light and moisture.
Keep out of the reach of children.
Do not freeze.

Caution: Injection should not be used if container is leaking, solution is cloudy or it contains un-dissolved particles.

ہدایات:
۳۰ڈگری سینٹی گریڈ سے زیادہ درجہ حرارت پر نہ رکھیں۔
دوا کو روشنی اور نمی سے محفوظ رکھیں ۔ بچوں کی پہنچ سے دور رکھیں۔
دوا کو جمنے سے بچائیں۔
تنبیہ: انجکشن کے لیک ہونے، دھندلا ہونے یا اس میں کوئی غیر حل پذیر شے نظر آنے کی صورت میں ہرگز استعمال نہ کریں۔

Nature and contents of container

Ondaset (Ondansetron) 4mg/2ml injections are available in a pack of 5's
Ondaset (Ondansetron) 8mg/4ml injection is available in a pack of 1's
Ondaset (Ondansetron) 8mg tablets are available in a blister of 10's (1 x 10's)

MANUFACTURED BY:

INJECTION:

Liven Pharmaceuticals (Pvt) Ltd.
49-Km Lahore Multan Road, Pakistan.

TABLET:

Aspin Pharma (Pvt.) Ltd.
Plot No. 10 & 25, Sector No. 20,
Korangi Industrial Area,
Karachi - 74900, Pakistan.
www.aspin.com.pk

MARKETED BY:

ASPIN
An OBS Group Company

Aspin Pharma (Pvt.) Ltd.
Plot No. 10 & 25, Sector No. 20,
Korangi Industrial Area,
Karachi - 74900, Pakistan.
www.aspin.com.pk

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