Ondansetron


**Drug Nomenclature** (Latest modification: 07-Feb-2011)

**Synonyms:** GR-38032; Ondansetrón; Ondansetroni; Ondansetronum

**BAN:** Ondansetron

**INN:** Ondansetron [rINN (en)]

**INN:** Ondansetrón [rINN (es)]

**INN:** Ondansétron [rINN (fr)]

**INN:** Ondansetronum [rINN (la)]

**INN:** Ондансетрон [rINN (ru)]

**INN:** أوندانسيترون [rINN (ar)]

**INN:** 昂丹司琼 [rINN (cn)]

**Chemical name:** (±)-1,2,3,9-Tetrahydro-9-methyl-3-(2-methylimidazol-1-ylmethyl)-carbazol-4(9H)-one

**Molecular formula:** C_{18}H_{19}N_{3}O =293.4

**CAS:** 99614-02-5; 116002-70-1

**ATC code:** A04AA01

**ATC code (veterinary):** QA04AA01

**UNII code:** 4AF302ESOS

**Martindale code:** 10033-c

Chemical Structure of Ondansetron

**Pharmacopoeias:**
In **US**.

**USP 33** (Ondansetron). A white to off-white powder. Sparingly soluble in water; very soluble in acid solutions. Store in airtight containers. Protect from light.

**Ondansetron Hydrochloride**


**Drug Nomenclature** (Latest modification: 07-Feb-2011)

**Synonyms:** GR-38032F; GR-C507-75; GR-C507/75; Odanserin; Ondansetron hydrochlorid; Onansétron, chlorhydrate d'; Ondansetrón, hidrocloruro de; Ondansetronhydroklorid; Ondansetroni Hydrochloridum; Ondansetronihydrokloridi; Ondanstroni hydrochloridas; Ondanstroni Hydrochloridum; Ondánszetronhidroklorid; SN-307

**BAN:** Ondansetron Hydrochloride [BANM]

**USAN:** Ondansetron Hydrochloride

**INN:** Ondansetron Hydrochloride [rINNM (en)]

**INN:** Hidrocloruro de ondansetrón [rINNM (es)]

**INN:** Ondansétron, Chlorhydrate d' [rINNM (fr)]

**INN:** Ondansetroni Hydrochloridum [rINNM (la)]

**INN:** Ондансетрона Гидрохлорид [rINNM (ru)]

**Molecular formula:** C\(_{18}\)H\(_{19}\)N\(_3\)O,HCl,2H\(_2\)O =365.9

**CAS:** 99614-01-4; 103639-04-9

**ATC code:** A04AA01

**ATC code (veterinary):** QA04AA01

**UNII code:** NMH84OZK2B

**Martindale code:** 3149-y

**Pharmacopoeias:**
In *Chin., Eur.* (see ☞), and *US.*

**Ph. Eur. 7.1** (Ondansetron Hydrochloride Dihydrate). A white or almost white powder. Sparsely soluble in water and in alcohol; slightly soluble in dichloromethane; soluble in methyl alcohol. Protect from light.

**USP 33** (Ondansetron Hydrochloride). A white to off-white powder. Sparsely soluble in water and in alcohol; very slightly soluble in acetone, in chloroform, and in ethyl acetate; slightly soluble in dichloromethane and in isopropyl alcohol; soluble in methyl alcohol. Store in airtight containers at a temperature of 25 degrees, excursions permitted between 15 degrees and 30 degrees. Protect from light.

**Physicochemical Characteristics** *(Latest modification: 29-Apr-2004)*

Incompatibility

Ondansetron hydrochloride and dexamethasone sodium phosphate were not compatible when high concentrations were combined in polypropylene syringes.¹ Lower concentrations (up to 640 micrograms/mL of ondansetron and 400 micrograms/mL of dexamethasone phosphate) were stable in 50 mL containers of infusion fluid for 30 days under refrigeration. Compatibility has been reported for 24 hours in plastic syringes at 4 degrees or 23 degrees with a variety of other drugs,² and with several antineoplastics (cytarabine, dacarbazine, doxorubicin, etoposide, or methotrexate) in PVC infusion bags for 48 hours at room temperature.³


**Adverse Effects and Precautions** *(Latest modification: 11-Jul-2008)*
Ondansetron and other 5-HT₃ antagonists may cause headache, a sensation of flushing or warmth, hiccups, and constipation. A transient rise in liver enzymes has occasionally occurred. There have been rare reports of immediate hypersensitivity reactions, including anaphylaxis. Chest pain, arrhythmias, hypotension, tachycardia, and bradycardia have been reported rarely. Dizziness and transient visual disturbances such as blurred vision (or very rarely, transient blindness) have been reported during rapid intravenous injection. Transient ECG changes including QT interval prolongation have occurred very rarely, mainly with intravenous ondansetron. Seizures and movement disorders, including extrapyramidal reactions such as dystonia, dyskinesia, and oculogyric crisis have been reported. Rashes and urticaria have also occurred. Injection site reactions may develop, and local burning sensations are common after insertion of suppositories.

5-HT₃ antagonists should generally not be used in patients who have had a hypersensitivity reaction to a member of this drug class. They should be used with care in patients with signs of subacute intestinal obstruction or ileus. Ondansetron should be given in reduced doses to patients with moderate to severe hepatic impairment.

**Effects on the cardiovascular system**

In 1992 chest pain and/or cardiac arrhythmias that might have been associated with ondansetron were reported in 4 patients, 2 of whom died. In 3 subsequent patients who developed severe chest or anginal pain, treatment with ondansetron was stopped.

The manufacturers (Glaxo) had at that time no evidence of a causal relationship between ondansetron and episodes of chest pain and cardiac abnormalities. Giving ondansetron or granisetron intravenously produced no clinically important cardiovascular changes in a study in 12 healthy subjects. Since then, however, hypotension, coronary vasospasm, and atrial fibrillation have been reported with ondansetron, and myocardial ischaemia has been reported with both ondansetron and dolasetron; in the latter case this led to an acute myocardial infarction. Supraventricular tachycardia reported with dolasetron was attributed to an interaction with sevoflurane. Dolasetron-induced torsade de pointes has also occurred, and overdose of dolasetron has produced
prolongation of the QTc interval and hypotension. Another study in healthy subjects found that dolasetron mainly altered ECG parameters indicative of ventricular depolarisation, whereas ondansetron affected mainly ventricular repolarisation. However, ECG changes were transient and asymptomatic. Studies of high-dose intravenous granisetron found no significant adverse effects on pulse, blood pressure, or ECG measurements. A review of the electrocardiographic and cardiovascular effects of the 5-HT3 antagonists concluded that although this class of drugs may cause small, transient ECG changes, the clinical benefits of the drugs outweighed the small theoretical risk of any clinically significant cardiovascular events. Nonetheless, the use of dolasetron in children has been contra-indicated in some countries (see Administration in Children).


**Effects on the eyes**

Blurring followed by transient loss of vision has been reported after rapid intravenous injection of ondansetron.¹ Oculogyric crisis may occur as part of extrapyramidal reactions seen with ondansetron, see Effects on the Nervous System, ↩️.


**Effects on the liver**

Although disturbances in liver enzyme values have been reported in patients given ondansetron,¹ more severe symptoms of liver disorder appear to be very rare; however, there is a report of severe jaundice associated with ondansetron as an antiemetic for chemotherapy.² Symptoms did not recur when the patient received granisetron.


**Effects on the nervous system**
Tonic-clonic movements and frothing at the mouth occurred in a patient 90 minutes after an infusion of ondansetron;¹ the patient responded to diazepam intravenously. The manufacturers had seen 10 patients who developed seizures during initial clinical studies, but considered that, unlike this case, all these patients had predisposing factors. Hypotension and generalised tonic-clonic seizures were reported in a patient with metastatic breast cancer given ondansetron as an intravenous bolus.² Although seizures might have been due to brain metastases, the authors concluded that ondansetron had been the likely cause, since the patient had no further problems when antiemetic therapy was changed to metoclopramide. A seizure associated with palonosetron therapy has also been reported.³ Extrapyramidal reactions in patients given ondansetron as part of a chemotherapy regimen⁴ and for postoperative nausea and vomiting⁵-⁸ have also been reported. In one case,⁸ transient multifocal encephalopathy developed. Clinical manifestations such as clonus, oculogyric crisis, and oromandibular and limb dystonia resembled those of structural brain injury, and response to diphenhydramine was poor; despite this, the patient made a full neurological recovery over the course of 12 hours. Ondansetron and related drugs can induce headache; it has sometimes been confused with post-dural puncture headache.⁹

Hypersensitivity

Anaphylactoid reactions have been reported in patients given ondansetron injections. The FDA stated in October 1993 that it had received 24 reports of such reactions, mostly occurring after the first ondansetron dose of the second or third chemotherapy cycle, and characterised by urticaria, angioedema, hypotension, bronchospasm, and dyspnoea. Similar effects have been reported in a patient with no prior exposure to ondansetron. A protocol for skin testing has been documented.

Cross-sensitivity between 5-HT₃ antagonists has been reported; 2 patients who had had a mild hypersensitivity reaction to one 5-HT₃ antagonist developed a more severe reaction after exposure to another. In the first case severe acute asthma, cyanosis, and loss of consciousness developed after ondansetron in a patient who had previously had an asthmatic reaction after tropisetron. The second patient had developed pruritus after a tropisetron injection and urticaria after ondansetron, and subsequently developed anaphylactic shock 5 minutes after a further dose of tropisetron. It was recommended that another 5-HT₃ antagonist should not be given as a replacement to patients who developed a hypersensitivity reaction to a drug of this class. However, there are reports of the successful use of granisetron in patients sensitive to ondansetron and vice versa.

Interactions (Latest modification: 05-Aug-2010)

Ondansetron does not appear to induce or inhibit the cytochrome P450 isoenzyme system, but it is itself metabolised by multiple hepatic isoenzymes, including CYP3A4, CYP2D6, and CYP1A2. US licensed product information states that inducers or inhibitors of these isoenzymes may change the clearance and half-life of ondansetron, but that on the basis of available data, no dose adjustments are recommended. UK licensed product information states that enzyme inhibition of one isoenzyme is usually compensated for by other enzymes and should result in little or no significant change in overall ondansetron clearance or dose requirement. Potent inducers of CYP3A4, such as phenytoin, carbamazepine, and rifampicin, have been reported to increase ondansetron clearance and reduce ondansetron plasma concentrations.

Because of the reports of transient ECG changes in some patients taking 5-HT₃ antagonists (see ), there is a theoretical need for caution if given with drugs that prolong QT-interval or cardiotoxic drugs such as anthracyclines; however, clinical evidence of a significant interaction seems to be mostly lacking.

Analgesics

For evidence of reduced analgesic efficacy of tramadol in patients also given 5-HT₃-receptor antagonists, such as ondansetron, see .

Antibacterials

Rifampicin pretreatment reduced the area under the plasma concentration-time curve of oral ondansetron by 65% and of intravenous ondansetron by 48% in healthy subjects. Use of rifampicin, or other potent inducers of cytochrome P450 isoenzyme CYP3A4, with ondansetron may reduce antiemetic efficacy.

**Antineoplastics**

For mention of retrospective studies suggesting a change of pharmacokinetic parameters of high-dose cyclophosphamide and cisplatin when given with an ondansetron-containing antiemetic regimen, see Gastrointestinal Drugs, [↩](https://www.martindale.com/contents?drug=ondansetron).

**Pharmacokinetics** *(Latest modification: 11-Jul-2008)*

Peak plasma concentrations of ondansetron occur about 1.5 hours after an oral dose of 8 mg, and about 6 hours after a rectal dose. The absolute bioavailability is about 60%, mainly because of hepatic first-pass metabolism. In elderly subjects, bioavailability may be somewhat higher (65%) and clearance lower, presumably due to reduced hepatic first-pass metabolism.

Ondansetron is extensively distributed in the body; about 70 to 75% of the drug in plasma is protein bound. It is metabolised in the liver through multiple enzymatic pathways; ondansetron is a substrate for cytochrome P450 isoenzymes, primarily CYP3A4, but also CYP1A2 and CYP2D6. Less than 5% of a dose is excreted unchanged in the urine.

The terminal elimination half-life is about 3 hours after oral or parenteral doses, and about 6 hours after rectal use. The terminal elimination half-life is prolonged to about 5 hours in the elderly and in those with renal impairment. These differences are not considered sufficient to warrant dosage adjustment. However, in patients with severe hepatic impairment, bioavailability may approach 100% and clearance is markedly reduced, with elimination half-lives of 15 to 32 hours; dosage restriction is advisable (see Administration in Hepatic Impairment, [↩](https://www.martindale.com/contents?drug=ondansetron)). In general, children have a higher clearance than adults, although age-related reductions in clearance have also been reported, with younger children having lower clearances. Use of weight-based doses compensates for these changes and normalises exposure in paediatric patients.
References.


**Uses and Administration** (Latest modification: 16-Aug-2010)

Ondansetron is a 5-HT₃ antagonist (5-HT₃-receptor antagonist) with antiemetic activity. It is used in the management of **nausea and vomiting** induced by cytotoxic chemotherapy and radiotherapy. It is also used for the prevention and treatment of postoperative nausea and vomiting. For the management of nausea and vomiting, and the important role of 5-HT₃ antagonists, see [PubMed](https://pubmed.ncbi.nlm.nih.gov/).

Ondansetron is given by intramuscular or slow intravenous injection or infusion as the hydrochloride, orally as the hydrochloride or base, or rectally as the base. Doses are expressed in terms of the base. Ondansetron hydrochloride 4.99 mg is equivalent to about 4 mg of ondansetron base.

Numerous dosing schedules of ondansetron have been used; some typical examples are cited below.

For **highly emetogenic chemotherapy** the following dose schedules appear to be equally effective in **preventing** acute emesis:

- a single dose of 8 mg by slow intravenous or intramuscular injection immediately before treatment

  or


8 mg by slow intravenous or intramuscular injection immediately before treatment, either followed by a continuous intravenous infusion of 1 mg/hour for up to 24 hours, or by a further two doses of 8 mg two to four hours apart

     or

a single dose of 32 mg given by intravenous infusion over at least 15 minutes immediately before treatment

     or

150 micrograms/kg by intravenous infusion over 15 minutes, beginning 30 minutes before chemotherapy, and repeated 4 and 8 hours after the first dose

     or

a 16-mg suppository rectally, given 1 to 2 hours before treatment

     or

a single oral dose of 24 mg taken 30 minutes before the start of single-day chemotherapy

The efficacy of ondansetron in highly emetogenic chemotherapy may be enhanced by giving intravenous dexamethasone sodium phosphate 20 mg before chemotherapy.

Similar regimens to those given above are used for preventing acute emesis with less emetogenic chemotherapy and/or radiotherapy and also include:

     8 mg can be given orally up to 2 hours before treatment followed by 8 mg 8 to 12 hours later

To protect against delayed emesis these regimens are followed by oral ondansetron 8 mg twice daily, or 16 mg rectally once daily, for up to 5 days after the end of a course of chemotherapy.
To prevent postoperative nausea and vomiting the following doses may be given:

16 mg orally an hour before anaesthesia

or

8 mg orally an hour before anaesthesia followed by 2 further doses of 8 mg at 8-hour intervals

or

a single dose of 4 mg by intramuscular injection or a single dose of 4 to 8 mg by slow intravenous injection at induction of anaesthesia

For the treatment of postoperative nausea and vomiting a single dose of 4 to 8 mg by intramuscular or slow intravenous injection is recommended.

For doses in children, see Martindale.

In patients with moderate or severe hepatic impairment it is recommended that the total daily dose of ondansetron should not exceed 8 mg (see Martindale).

Reviews.


Administration

Ondansetron has been successfully used by continuous subcutaneous infusion to control intractable nausea and vomiting.1 Despite concern about the low pH of ondansetron injection there was no problem with the skin at the infusion site. An oral protocol for chemotherapy-induced emesis in children has been described;2 efficacy was similar to intravenous use.


Administration in children

Ondansetron is used in children for the management of nausea and vomiting induced by cytotoxic chemotherapy and radiotherapy. It is also used for the prevention and treatment of postoperative nausea and vomiting. Ondansetron is given by slow intravenous injection or infusion as the hydrochloride, or orally as the hydrochloride or base. Doses are expressed in terms of the base.

In the USA a licensed regimen for chemotherapy-induced nausea and vomiting in children over 6 months of age is ondansetron 150 micrograms/kg by intravenous infusion 30 minutes before moderately to highly emetogenic chemotherapy, repeated 4 and 8 hours after the first dose. Alternatively, for children aged 4 to 11 years, an oral dose of 4 mg may be given 30 minutes before the start of moderately emetogenic chemotherapy, with subsequent 4-mg doses given 4 and 8 hours thereafter. An oral
dose of 4 mg three times daily may be given for 1 to 2 days after the end of chemotherapy.

In the UK, ondansetron can be given to children aged from 6 months and doses are calculated using body-weight or body-surface; weight-based dosing results in higher daily doses compared with those based on body-surface. In a typical regimen based on body-surface, an intravenous dose of ondansetron 5 mg/m² (maximum 8 mg) is given immediately before chemotherapy and followed after 12 hours by oral dosing for up to 5 days:

- children aged from 6 months and less than 0.6 m² body-surface: 2 mg every 12 hours
- from 6 months and 0.6 m² and over: 4 mg every 12 hours
- from 2 years and 0.6 to 1.2 m²: 4 mg every 8 or 12 hours
- from 2 years and over 1.2 m²: 8 mg every 8 or 12 hours

When using body-weight, an intravenous dose of ondansetron 150 micrograms/kg (maximum 8 mg) is given immediately before chemotherapy and repeated every 4 hours for up to 3 doses. This is followed after 12 hours by oral dosing for up to 5 days:

- body-weight 10 kg and less: 2 mg every 12 hours
- over 10 kg: 4 mg every 12 hours

The daily dose of ondansetron by any route should not exceed 32 mg.

The **BNFC 2009** suggests a dose regimen for chemotherapy- or radiotherapy-induced nausea and vomiting in children, according to age:

- 1 to 12 years: an initial intravenous dose of ondansetron 5 mg/m² (maximum 8 mg) immediately before treatment, is then either repeated every 8 to 12 hours during
therapy and for at least 24 hours afterwards, or ondansetron is continued orally in a
dose of 4 mg every 8 to 12 hours for up to 5 days.

12 to 18 years: an initial intravenous dose of ondansetron 8 mg immediately before
treatment, is then either repeated every 8 to 12 hours during therapy and for at
least 24 hours afterwards, or ondansetron is continued orally in a dose of 8 mg
every 8 to 12 hours for up to 5 days.

A protocol for oral ondansetron dosage, with similar efficacy to intravenous use, has also
been described, see Administration, http://.

For the prevention and treatment of postoperative nausea and vomiting in children
aged from 1 month, 100 micrograms/kg may be given by slow intravenous injection, up
to a maximum dose of 4 mg.

**Administration in hepatic impairment**

Licensed drug information recommends that the dose of ondansetron should not exceed
8 mg daily in patients with moderate or severe hepatic impairment. When this dose was
given intravenously to patients with hepatic impairment, those with severe impairment
showed an increase in the area under the plasma concentration/time curve and in the
terminal plasma half-life, and a decrease in plasma clearance.¹ The authors of this study,
some of whom worked for the manufacturers (Glaxo), considered that ondansetron
should be restricted to once daily dosage in severe hepatic impairment.

1. Blake JC, *et al.* The pharmacokinetics of intravenous ondansetron in patients with

**Bulimia nervosa**

A combination of counselling, support, psychotherapy, and antidepressants is the usual
treatment of bulimia nervosa. Preliminary reports have indicated that ondansetron may
be of benefit in the treatment of this disorder.¹²

**Fatigue**

Preliminary results indicated that treatment with 5-HT₃ antagonists such as ondansetron and tropisetron may be of benefit in patients with chronic fatigue. Oral ondansetron 4 mg twice daily was reported to resolve fatigue in a woman with chronic hepatitis C. In a randomised study in 36 patients with chronic hepatitis C, this dose of ondansetron given for 1 month significantly improved fatigue scores at day 15 and day 60 (beyond the treatment period) when compared with placebo. The authors noted that patient awareness that constipation was a possible effect of active treatment may have potentially unblinded the study. Further confirmation by larger studies is needed.


**Gastroenteritis**

Antiemetics such as ondansetron have been tried to reduce vomiting during acute gastroenteritis in children. One systematic review found that ondansetron reduced the risk of persistent vomiting, the need for intravenous fluids, and hospital admissions; however, another similar review found only weak evidence to support the use of ondansetron or metoclopramide to reduce vomiting compared with placebo. An increased incidence of diarrhoea was also noted, and was considered to be a result of fluids and toxins which would otherwise have been eliminated through vomiting.
Pain

Preliminary results from a small crossover study indicated that oral ondansetron was more effective than paracetamol in relieving the pain of fibromyalgia, a chronic disorder that responds poorly to conventional analgesics. A single bolus of ondansetron given to patients with chronic neuropathic pain significantly reduced pain scores 2 hours after injection in a placebo-controlled study; this effect may be due to an action on 5-HT receptors in the spinal cord.

Other 5-HT antagonists such as granisetron and tropisetron have also been investigated in various painful syndromes.

Pruritus

There are several case reports\(^1\)\(^-\)\(^2\) of cholestatic pruritus (\(\text{\textsuperscript{14}HT3}\)) responding to intravenous or oral ondansetron, including one in pregnancy.\(^1\) However, results from controlled studies\(^4\)\(^-\)\(^6\) have been mixed. It is similarly unclear if ondansetron is of benefit in pruritus due to renal failure,\(^7\)\(^-\)\(^9\) and results have been conflicting from controlled studies evaluating its use in opioid-induced pruritus.\(^10\)\(^-\)\(^15\) There are reports of ondansetron ameliorating the pruritus associated with some skin disorders.\(^16\) Other 5-HT\(_3\) antagonists such as tropisetron\(^9\) and dolasetron\(^14\) have also been investigated.


**Psychiatric disorders**

Ondansetron has been tried experimentally in several psychiatric disorders including schizophrenia, and psychosis in patients with parkinsonism, and may be of value in moderating tardive dyskinesia. A reduction in tic severity in Tourette's syndrome (see Tics) has been reported, and preliminary results have suggested benefit in obsessive-compulsive disorder, and bulimia nervosa (see ). It is also reported to be under investigation in the management of panic attacks. For the more conventional management of schizophrenia, parkinsonism, and obsessive-compulsive disorder see , , and , respectively.


**Substance dependence**

Ondansetron is being studied in the management of alcohol dependence (���). However, in one study a significant reduction in alcohol consumption was found only in lighter drinkers after subgroup analysis. Another study found a reduction in alcohol consumption by patients with early-onset alcoholism (onset before age 25) who took ondansetron compared with placebo. No such effect was seen, however, in patients with late-onset alcoholism. Further study found that ondansetron also effectively ameliorated mood disturbances including symptoms of depression, anxiety, and hostility, in early-onset alcoholics. Self-reported alcohol consumption also reduced in adolescents (between ages 14 and 20) with alcohol dependence who were given ondansetron in an open study.


**Preparations** (Latest modification: 07-Feb-2011)

**Single-ingredient Preparations**

The symbol × denotes a preparation which is discontinued or no longer actively marketed.

*Argentina*: Cetron; Dantenk; Dismolan; Emivoxx; Espasevit; Finaber; Finoxix; Tiosalis; Zofran; *Australia*: Ondaz; Onsetron; Zofran; *Austria*: Glaxosetronx; Ondanoglaxx; Ondensan; Zofran; Zotrix; *Belgium*: Avessax; Avessaron; Zofran; *Brazil*: Ansentrone; Injectrax; Modifical; Nausedron; Ontrax; Vonau; Zofran; *Canada*: Zofran; *Chile*: Amilene; Gardoton; Izofox; Onanex; Oncoemetx; Trorixx; *Czech Republic*: Danemet; Emetronx; Novetron; Ondemet; Setronx; Setronon; Zofran; *Denmark*: Hexatronx; Setofilm; Setrogen; Zofran; Zotrix; *Finland*: Ondanavarrax; Ondanthoursx; Setronox; Zofran; *France*: Zophren; *Germany*: Axisetron; cellondan; Zofran; *Greece*: Biosetron; Cruzafen; Dentron; Fedral; Nofail; Odasen; Odnatron; Onda; Ondameton; Ondaren; Ondasepox; Ondeton; Otredil; Setrodon; Trondamet; Vefron; Zetron; Zodatron; Zofran; Zophralen; *Hong Kong*: Zofox; *Hungary*: Antivom; Emetron; Onlagen; Zofran; *India*: Emeset; Periset; Vomiof; *Indonesia*: Cedantron; Dantroxal; Entron; Frazon; Invomit; Kliran; Lametic; Narfoz; Odnostin; Ondavell; Onetic 4; Trovensis; Vomceran; Vometraz; Vometron; Zantron; Zofran; *Ireland*: Emital; Emizof; Zofran; *Israel*: Zofran; *Italy*: Zofran; *Malaysia*: Osetron; Zofran; *Mexico*: Danac; Dosatron; Modifical; Nalisen; Nodanton; Onancen; Ondal; Precirux; Vosrym; Zofran; *Netherlands*: Setofilm; Zofran; *Norway*: Zofran; *New Zealand*: Onsetron; Zofran; *Philippines*: Emistop; Emodan; Onset; Vometron; Zofran; *Poland*: Atossa; Emetron; OndaLEK; Setronon; Zofran; *Portugal*: Emetron; Morpar; Nausiend; Olmar; Otobrol; Zofran; *Russia*: Emetron (Эметрон); Latran (Латран); Osetron
(Осетрон); Setronon (Сетронон); Zofran (Зофран); **South Africa**: Danset; Dantron; Nausetron; Vomiz; Zofr; Zofran; **Singapore**: Osetron; Setronax; Zofran; **Spain**: Carvyx; Datron; Fixca; Helminex; Yatrox; Zofran; **Sweden**: Zofran; Zotrix; **Switzerland**: Zofran; **Thailand**: Dantron; Emeset; Onsia; Vomitron; Zetron; Zofran; **Turkey**: Zofr; Zofran; Zoltem; Zontron; Zophralen; **United Kingdom**: Ondemet; Zofran; **Ukraine**: Osetron (Осетрон); Setronon (Сетронон); **United States**: Zofran; Zuplenz; **Venezuela**: Dismolan; Emeset; Tructum; Zofran;

**Pharmacopoeial Preparations**

**BP 2011**: Ondansetron Injection; Ondansetron Tablets; **USP 33**: Ondansetron Hydrochloride Oral Suspension; Ondansetron Injection; Ondansetron Oral Solution; Ondansetron Orally Disintegrating Tablets; Ondansetron Tablets