

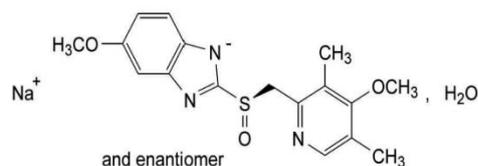
PRODUCT INFORMATION
OMEPRAZOLE SANDOZ® IV 40 mg POWDER FOR INJECTION

NAME OF THE MEDICINE

Generic name: Omeprazole sodium

Chemical name: sodium 5-methoxy-2-[(*RS*)-[(4-methoxy-3,5-dimethylpyridin-2-yl)methyl]sulphinyl]-1*H*-benzimidazole

Structural formula:



Empirical formula: C₁₇H₁₈N₃NaO₃S·H₂O MW: 385.4

CAS: [95510-70-6]

DESCRIPTION

Each vial of Omeprazole Sandoz IV powder for injection contains omeprazole sodium, which occurs as a white or almost white powder, hygroscopic, freely soluble in water and in alcohol, soluble in propylene glycol, very slightly soluble in methylene chloride. The reconstituted solution appears as a clear, colourless solution.

Omeprazole Sandoz IV powder for injection also contains disodium edetate and sodium hydroxide.

PHARMACOLOGY

Pharmacological Actions

Omeprazole reversibly reduces gastric acid secretion by specifically inhibiting the gastric enzyme H⁺/K⁺ ATPase, the proton pump, in the acid environment of the intracellular canaliculi within the parietal cell. This effect of omeprazole on the final step of the gastric acid formation process is dose dependent and effectively inhibits both basal acid secretion and stimulated acid secretion, irrespective of the stimulus to acid production.

Omeprazole has no effect on acetylcholine or histamine receptors. No clinically significant pharmacodynamic effects, other than those explained by the effect on acid secretion, have been observed.

Effect on gastric acid secretion

Oral dosing with omeprazole 20 mg once daily provides rapid and effective reduction of gastric acid secretion. After a single dose the onset of antisecretory effect occurs within one hour and

is maximal within two hours. With repeated once daily dosing the maximum effect is usually achieved within four days of commencing treatment.

A single dose of 40 mg intravenously will achieve immediate and maximal control of acid production, similar to that observed following five days continuous oral administration of omeprazole 20 mg.

A mean decrease of approximately 80% in 24-hour intragastric acidity is maintained in duodenal ulcer patients treated with an oral dose of omeprazole 20mg. Omeprazole produces a mean decrease in peak pentagastrin stimulated acid output of approximately 70% 24 hours after dosing. When the drug is discontinued, secretory activity returns to approximately 50% of maximum after 24 hours and gradually returns to normal over three to five days.

Other effects related to acid inhibition

Decreased gastric acidity due to any means including proton pump inhibitors (PPIs) increases gastric counts of bacteria normally present in the gastrointestinal tract. Treatment with acid reducing drugs may lead to slightly increased risk of gastrointestinal infections such as *Salmonella* and *Campylobacter*.

In some patients, fasting serum gastrin levels have been noted to rise two to four-fold during treatment with omeprazole. Up to 3% of patients have values exceeding 400 picogram/mL.

During treatment with antisecretory medicinal products, serum gastrin increases in response to the decreased acid secretion. Also Chromogranin A (CgA) increases due to decreased gastric acidity. The increased CgA level may interfere with investigations for neuroendocrine tumours.

Available published evidence suggests that PPIs should be discontinued between 5 days and 2 weeks prior to CgA measurements. This is to allow CgA levels that might be spuriously elevated following PPI treatment to return to reference range.

Pharmacokinetics

Distribution

The plasma protein binding of omeprazole is approximately 95%. The inhibition of acid secretion is related to the area under the plasma concentration time curve (AUC) but not to the actual plasma concentration at any given time.

Metabolism

Omeprazole is entirely metabolised by the cytochrome P450 system (CYP), mainly in the liver. Identified metabolites in plasma are the sulfone, the sulfide and hydroxyomeprazole. These metabolites have no significant effect on acid secretion. The average half-life of the terminal phase of the plasma concentration - time curve following IV administration of omeprazole is approximately 40 minutes; the total plasma clearance is 0.3 to 0.6 L/minute. There is no change in half-life during repeated dosing.

Excretion

About 80% of the metabolites are excreted in urine and the remainder in faeces. The two main urinary metabolites are hydroxyomeprazole and the corresponding carboxylic acid.

In repeat dose pharmacokinetic studies, a 10 mg dose of omeprazole IV (intravenously) was demonstrated to be bioequivalent to omeprazole 20 mg when administered orally.

Intravenous omeprazole produces a dose dependent inhibition of pentagastrin stimulated acid secretion in humans. A single dose of 10 mg IV demonstrates a similar effect on acid secretion as that observed following a single dose of oral omeprazole 20 mg. The effect of a single IV dose of omeprazole 40 mg results in an immediate reduction of intragastric acidity and a mean decrease over 24 hours of approximately 90% in patients with duodenal ulcer disease. This is a similar response to that seen following repeated oral dosing with 20 mg once daily.

Therefore, although a dose of omeprazole 10 mg IV is pharmacokinetically and pharmacodynamically equivalent to omeprazole 20 mg orally, a dose of 40 mg IV is required to achieve rapid control of acid production. This therapeutic goal is desirable in patients for whom omeprazole IV is indicated, as they are generally severely ill and require rapid stabilisation of their symptoms.

INDICATIONS

Short-term use when omeprazole cannot be administered orally for, or during, the following conditions:

- treatment of duodenal ulcer, gastric ulcer and ulcerative oesophagitis
- treatment of Zollinger-Ellison syndrome
- long-term prevention of relapse in healed severe reflux oesophagitis (grades 3 and 4), and gastric and duodenal peptic ulceration in patients proven to be *Helicobacter pylori* negative, whose ulceration is not associated with ingestion of NSAIDs, when oral therapy is not possible.

Omeprazole Sandoz IV should be replaced with oral therapy as soon as practicable.

CONTRAINDICATIONS

- Hypersensitivity to omeprazole, substituted benzimidazoles or any other ingredients.
- Combination therapy with clarithromycin should not be used in patients with hepatic impairment.
- Omeprazole, an inhibitor of CYP2C19, is contraindicated in patients taking cilostazol.
- Omeprazole, like other proton pump inhibitors (PPIs) must not be used concomitantly with nelfinavir

PRECAUTIONS

As with all anti-secretory agents, the presence of any alarm symptom (e.g. significant unintentional weight loss, recurrent vomiting, dysphagia, haematemesis or melaena) and when gastric ulcer is suspected or present, malignancy should be excluded, as treatment with omeprazole may alleviate symptoms and delay diagnosis.

Hypomagnesaemia

Omeprazole, as all acid-blocking medicines, may reduce the absorption of vitamin B12 (cyanocobalamin) due to hypo- or achlorhydria. This should be considered in patients with reduced body stores or risk factors for reduced vitamin B12 absorption on long-term therapy. Severe hypomagnesaemia has been reported in patients treated with PPIs like omeprazole. Serious manifestations of hypomagnesaemia such as fatigue, tetany, delirium, convulsions, dizziness and ventricular arrhythmia can occur but they may begin insidiously and be overlooked. In most affected patients, hypomagnesaemia improved after magnesium replacement and discontinuation of the proton pump inhibitor.

For patients expected to be on prolonged treatment or who take PPIs with digoxin or drugs that may cause hypomagnesaemia (e.g. diuretics), health care professionals should consider measuring magnesium levels before starting PPI treatment and periodically during treatment.

PPIs, especially if used in high doses and over long durations, may modestly increase the risk of hip, wrist and spine fracture, predominantly in the elderly or in the presence of other recognised risk factors. Observational studies suggest that PPIs may increase the overall risk of fracture. Some of this increase may be due to other risk factors. Patients at risk of osteoporosis should receive care according to current clinical guidelines and they should have an adequate intake of vitamin D and calcium.

Impaired hepatic function

Patients with impaired liver function show a markedly increased bioavailability, a reduced total plasma clearance and up to a four-fold prolongation of the elimination half-life. However, urinary recovery over 96 hours remains unchanged, indicating no accumulation of omeprazole or its metabolites. The normal dose of omeprazole 20 mg daily may be used in patients with severe liver disease (see **DOSAGE AND ADMINISTRATION**).

Antimicrobial resistance

The development of antimicrobial resistance may have an adverse effect on eradication regimens. The clinical impact on eradication regimens for *H. Pylori* has not been comprehensively studied.

Subacute cutaneous lupus erythematosus (SCLE)

PPIs are associated with very infrequent cases of SCLE. If lesions occur, especially in sun-exposed areas of the skin, and if accompanied by arthralgia, the patient should seek medical help promptly and the health care professional should consider stopping omeprazole. SCLE after previous treatment with a proton pump inhibitor may increase the risk of SCLE with other proton pump inhibitors.

CYP2C19 enzyme

Approximately 3% of the Caucasian population and 15-20% of the Asian population lack a functional CYP2C19 enzyme and are called poor metabolisers. In these individuals the metabolism of omeprazole is most likely catalysed by CYP3A4. After repeated once-daily administration of 20 mg omeprazole, the mean AUC was 5 to 10 times higher in poor metabolisers than in subjects having a functional CYP2C19 enzyme (extensive metabolisers).

Mean peak plasma concentrations were also 3 to 5 times higher. The implications of these findings need to be addressed from clinical perspective.

Effects related to acid inhibition

Decreased gastric acidity due to any means including PPIs increases gastric counts of bacteria normally present in the gastrointestinal tract. Treatment with acid-reducing drugs may lead to slightly increased risk of gastrointestinal infections such as *Salmonella* and *Campylobacter* and, in hospitalised patients, possibly also *Clostridium difficile*.

Effects on fertility

There was no evidence of an adverse effect on fertility following administration of omeprazole to male and female rats at doses up to 320 mg/kg/day orally (16-fold anticipated exposure at the clinical oral dose of 40 mg/day, based on plasma AUC) and 100 mg/kg/day intravenously (14-fold anticipated exposure at the clinical intravenous dose of 40 mg/day, based on plasma AUC). Oral administration to male rats prior to mating and to female rats prior to and throughout gestation at seven-fold clinical exposure was associated with embryofetal toxicity.

Use in pregnancy (Category B3)

Category B3: Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed. Studies in animals have shown evidence of an increased occurrence of fetal damage, the significance of which is considered uncertain in humans.

Results from three prospective epidemiological studies indicate that while there was no increase in the overall malformation rates compared with controls, the data indicated a potentially higher rate of cardiac defects in the omeprazole group.

There was no evidence of teratogenicity following administration of omeprazole to pregnant rats and rabbits during the period of organogenesis. Doses in rats were associated with systemic exposures of up to 16- and 14-fold (oral and intravenous administration, respectively) the anticipated exposure at the clinical dose of 40 mg/day (based on plasma AUC). Studies in rats did not demonstrate embryotoxicity apart from increased locomotor activity in prenatally exposed offspring at systemic exposures approximating clinical exposure, based on plasma AUC. In rabbits, oral doses were associated with systemic exposure less than clinical exposure (plasma AUC) and intravenous doses were up to 13-fold the 40 mg/day clinical dose (on a mg/m² basis). Embryofetal toxicity and maternotoxicity occurred at doses associated with less than clinical exposures.

Use in lactation

Omeprazole and its metabolites are excreted in milk in rats but it is not known if this occurs in humans. In rats, reduced offspring postpartum growth rate was observed following administration of omeprazole during late gestation and throughout lactation at oral doses of 138 mg/kg/day and above (seven-fold anticipated exposure at the clinical dose of 40 mg/day, based on plasma AUC) and intravenous doses of 3.2 mg/kg/day and above (less than clinical exposure). It is recommended that omeprazole not be used in breastfeeding mothers.

Genotoxicity

Omeprazole has been subjected to a battery of *in vitro* and *in vivo* genotoxicity tests to examine the mutagenic, clastogenic and DNA damaging potential of the drug. The *in vitro* assays include the Ames test, mouse lymphoma TK locus forward mutation assay and a chromosome aberration test in human lymphocytes. The *in vivo* tests were a chromosome aberration test in mouse bone marrow, an alkaline elution/rat liver DNA damage assay and two mouse micronucleus tests. No evidence of significant genotoxicity was seen in the tests.

Carcinogenicity

In a two year carcinogenicity study in rats, omeprazole at daily doses of 13.8, 44.0 and 140.8 mg/kg/day produced gastric enterochromaffin-like (ECL) cell hyperplasia and carcinoid tumours in a dose related manner in both male and female rats. The incidence of these effects was markedly higher in female rats.

The same effects were seen in an additional two year study in female rats at daily doses of 1.7, 3.4 and 13.8 mg/kg/day. A no effect dose was not established in female rats in the dose ranges studied.

In mice, a 78 week carcinogenicity study was performed according to relevant regulatory and scientific standards. No gastric ECL cell carcinoids were seen. However, longer term studies have not been performed in this species.

Hypergastrinaemia, ECL cell hyperplasia and gastric carcinoids have also been produced in the rat by other treatments or procedures not related to omeprazole. These include the following:

- (a) *Exogenous gastrin infusion*. Subcutaneous infusion of gastrin-17 has resulted in a significant hyperplasia of ECL cells following treatment for one month.
- (b) *H₂-receptor antagonists*. In rats administered 2g/kg/day of ranitidine in their diet over 106 weeks, argyrophilic cell hyperplasia was observed in 37% of the animals and gastric carcinoids were found in 19% of the treated group.
- (c) *Surgical resection of the acid producing oxyntic mucosa*. In rats in which 75% of the stomach corpus was surgically removed, 26 of 75 animals developed ECL cell carcinoids during the 124 week study.

These findings show that the development of ECL cell carcinoids in the rat is directly related to hypergastrinaemia rather than a direct effect of omeprazole on the ECL cell.

Omeprazole may also affect other cells in the gastrointestinal tract (for example, G cells) either directly or by inducing sustained hypochlorhydria but this possibility has not been extensively studied.

Effects on laboratory tests

Increased CgA level may interfere with investigations for neuroendocrine tumours. To avoid this interference, omeprazole treatment should be stopped for at least 5 days before CgA measurements (see **PHARMACOLOGY**).

If CgA and gastrin levels have not returned to reference range after initial measurement, measurements, should be repeated 14 days after cessation of proton pump inhibitor treatment.

Effect on ability to drive or operate machinery

No effects have been observed. Adverse drug reactions such as somnolence, dizziness and visual disturbances may occur. If affected, patients should not drive or operate machinery.

INTERACTIONS WITH OTHER MEDICINES

Absorption

The decreased intragastric acidity during treatment with omeprazole and other PPIs might increase or decrease the absorption of drugs if the mechanism of absorption is influenced by gastric acidity.

Omeprazole produces a profound and sustained inhibition of gastric acid secretion. The absorption of compounds whose absorption depends on gastric pH may decrease during treatment with omeprazole. The absorption of posaconazole, erlotinib, ketoconazole and itraconazole is significantly reduced and thus clinical efficacy may be impaired. For posaconazole and erlotinib concomitant use should be avoided.

Metabolism

Cytochrome P450 effects

Omeprazole is mainly metabolised via the hepatic cytochrome P450 system (CYP2C19) and may be expected to interact with the metabolism of other drugs metabolised by this enzyme.

Potential interactions

Clopidogrel

Clopidogrel is metabolised to its active metabolite by CYP2C19. Inhibition of CYP2C19 by omeprazole would be expected to result in reduced drug levels of the active metabolite of clopidogrel and a reduction in its antiplatelet activity and therefore its clinical efficacy. Concomitant use of omeprazole with clopidogrel should be discouraged.

Potential interactions that have been excluded

Results from a range of *in vivo* interaction studies with omeprazole versus other drugs indicate that omeprazole 20 to 40 mg, given repeatedly, has no influence on any other relevant isoforms of CYP, as shown by the lack of metabolic interaction with substrates for CYP1A2 (caffeine, phenacetin, theophylline), CYP2C9 (S-warfarin, piroxicam, diclofenac, and naproxen), CYP2D6 (metoprolol, propranolol), CYP2E1 (ethanol) and CYP3A (cyclosporin, lignocaine, quinidine and oestradiol).

Effects of omeprazole on other medicines

Demonstrated interactions

Diazepam

Following dosing with omeprazole 40 mg once daily, the clearance of diazepam was decreased by 54% and the mean elimination half-life of diazepam was increased by 130%, with a consequent significant increase in plasma diazepam concentrations. For omeprazole 20 mg, the clearance of diazepam was decreased by approximately 25% in the majority of the population,

while no change was detected in poor metabolisers. Consideration should be given to a reduction in diazepam dosage when Omeprazole Sandoz IV is co-prescribed.

Phenytoin

Omeprazole 40 mg daily for seven days reduced plasma clearance of IV (intravenous) phenytoin by 15 to 20% and increased the elimination half-life by 27%. Monitoring of patients receiving phenytoin is recommended and a reduction of the phenytoin dose may be necessary. In a study that administered omeprazole 20 mg to patients with epilepsy, steady-state plasma levels of phenytoin were unchanged during omeprazole treatment.

Warfarin

Concomitant administration of oral omeprazole 20 mg to patients on continuous treatment with warfarin caused a slight though statistically significant increase in the plasma concentration of the R-enantiomer of warfarin. Plasma concentrations of the more potent S-enantiomer were not affected and no change in warfarin's anticoagulant activity was observed.

It is recommended that coagulation tests be monitored closely when initiating or ceasing Omeprazole Sandoz IV in patients co-prescribed warfarin.

Cilostazol

Omeprazole given in doses of 40 mg daily to healthy subjects in a cross over study for 7 days increased C_{max} and AUC for cilostazol by 18% and 26% respectively, and one of its active metabolites by 29% and 69%, respectively (see **CONTRAINDICATIONS**).

Methotrexate

When given together with PPIs, methotrexate levels have been reported to increase in some patients. In high-dose methotrexate administration, a temporary withdrawal of omeprazole may need to be considered.

Antiretroviral drugs

Omeprazole has been reported to interact with some antiretroviral drugs. The clinical importance and the mechanisms behind these interactions are not always known. Increased gastric pH during omeprazole treatment may change the absorption of the antiretroviral drug. Other possible interaction mechanisms are via CYP2C19.

For some antiretroviral drugs, such as atazanavir and nelfinavir, decreased serum levels have been reported when given together with omeprazole. Concomitant administration of omeprazole and drugs such as atazanavir is not recommended. Concomitant administration with nelfinavir is contraindicated (see **CONTRAINDICATIONS**). For other antiretroviral drugs, such as saquinavir, elevated serum levels have been reported. There are also some antiretroviral drugs of which unchanged serum levels have been reported when given with omeprazole.

Tacrolimus

Concomitant administration of omeprazole and tacrolimus may increase the serum levels of tacrolimus.

St. John's Wort

Because of potential clinically significant interaction, St. John's Wort should not be used concomitantly with omeprazole.

Digoxin

Concomitant treatment with omeprazole (20 mg daily) and digoxin in healthy subjects increased the bioavailability of digoxin by 10% (up to 30% in two out of ten subjects). Digoxin toxicity has been rarely reported. However caution should be exercised when omeprazole is given at high doses in elderly patients. Therapeutic drug monitoring of digoxin should then be reinforced.

Effects of other medicines on omeprazole

Demonstrated interactions

Drugs known to induce CYP2C19 or CYP3A4 or both (such as rifampicin) may lead to decreased omeprazole serum levels by increasing the rate of metabolism of omeprazole.

Drugs known to inhibit CYP2C19 or CYP3A4 or both (such as clarithromycin or voriconazole) may lead to increased omeprazole serum levels by decreasing the rate of metabolism of omeprazole. Concomitant administration of omeprazole and voriconazole, a CYP2C19 and CYP3A4 inhibitor, resulted in more than doubling of the omeprazole exposure. Plasma concentrations of omeprazole are increased during concomitant administration with clarithromycin.

ADVERSE EFFECTS

Omeprazole IV is well tolerated. Most adverse reactions have been mild and transient and there has been no consistent relationship with treatment.

The most common side effects (1-10% of patients) are headache, abdominal pain, constipation, diarrhoea, flatulence and nausea/vomiting.

The types of adverse events reported with omeprazole IV have been of a similar spectrum to oral omeprazole.

Doses of up to 200 mg omeprazole IV have not been associated with any dose related increase in adverse events.

The following adverse drug reactions have been identified or suspected in the clinical trials programme for omeprazole and post-marketing.

Adverse reactions within each body system are listed in descending order of frequency: very common: $\geq 10\%$; common: $\geq 1\%$ and $< 10\%$; uncommon: $\geq 0.1\%$ and $< 1\%$; rare: $\geq 0.01\%$ and $< 0.1\%$; very rare: $< 0.01\%$). These include the following:

Gastrointestinal disorders

Common: diarrhoea, constipation, abdominal pain, nausea/vomiting, flatulence, fundic gland polyps (benign)

Rare: stomatitis, gastrointestinal candidiasis, microscopic colitis, dry mouth

Very rare: dyspepsia, haemorrhagic necrotic gastritis (reported in children)

Psychiatric disorders

Common: insomnia

Rare: reversible mental confusion, agitation, aggression, light headedness, depression and hallucinations, predominantly in severely ill patients or elderly patients

Nervous system disorders

Common: headache, drowsiness, somnolence,

Uncommon: dizziness, paraesthesia, taste disturbances

Hepatobiliary disorders

Uncommon: increased liver enzymes

Rare: encephalopathy in patients with pre-existing severe liver disease, hepatitis with or without jaundice, hepatic failure

Skin and subcutaneous tissue disorders

Uncommon: rash, skin eruptions, urticaria and/or pruritus, alopecia, erythema multiforme, dermatitis

Rare: photosensitivity, Stevens-Johnson syndrome, toxic epidermal necrolysis (TEN)

Not known: subacute cutaneous lupus erythematosus (see **PRECAUTIONS**)

Immune system disorders

Rare: hypersensitivity reactions, e.g. angioedema, fever, bronchospasm, interstitial nephritis, anaphylactic reaction/shock, allergic vasculitis

Respiratory, thoracic and mediastinal disorders

Rare: bronchospasm

Very rare: dyspnoea

Renal and urinary disorders

Rare: interstitial nephritis

Very rare: impaired renal function, including nephrosis

Metabolism and nutrition disorders

Rare: hyponatraemia

Very rare: weight increase, hypomagnesaemia and hypokalaemia (reported in children)

Severe hypomagnesaemia may result in hypocalcaemia.

Hypomagnesaemia may also result in hypokalaemia.

General disorders and administration site conditions

Uncommon: peripheral oedema, malaise

Rare: increased sweating

Reproductive system and breast disorders

Rare: gynaecomastia
Very rare: impotence (although causality has not been established)

Blood and lymphatic system disorders

Rare: leucopenia, thrombocytopenia, agranulocytosis, pancytopenia

Musculoskeletal and connective tissue disorders

Uncommon: fracture of the hip, wrist or spine
Rare: arthralgia, muscular weakness, joint pain, myalgia

Eye disorders

Rare: blurred vision
Loss of vision has been reported in isolated cases in association with the use of intravenous omeprazole. These cases involved critically ill patients who received high doses of omeprazole as an intravenous bolus injection. A causal relationship has not been established.

Ear and labyrinth disorders

Uncommon: vertigo

DOSAGE AND ADMINISTRATION

Omeprazole Sandoz IV should only be used where oral medication is inappropriate, e.g. in severely ill patients. Omeprazole Sandoz IV should be replaced with oral therapy as soon as practicable. If intravenous therapy is necessary for more than five days, consideration should be given to reducing the daily dose.

The product is for single use in one patient only.

Reconstitution

Omeprazole Sandoz IV should be reconstituted with 100 mL of sodium chloride 0.9% or glucose 5% and infused over a period of 20 to 30 minutes.

Omeprazole Sandoz IV should be administered within 6 hours after reconstitution to reduce microbiological hazard. Omeprazole Sandoz IV is for one dose in one patient only. Discard any remaining contents. Omeprazole Sandoz IV may be added to plastic giving sets.

Duodenal ulcer, gastric ulcer and ulcerative reflux oesophagitis

Omeprazole Sandoz IV 40 mg given intravenously once daily is recommended. This produces an immediate decrease in intragastric acidity and a mean decrease over 24 hours of approximately 90%.

Zollinger-Ellison syndrome

The recommended initial dose of Omeprazole Sandoz IV given intravenously is 60 mg daily. Higher daily doses, up to 240 mg daily, may be required. The dose should be adjusted according to individual response. When the dose exceeds 120 mg intravenously daily, it should be administered twice daily in equally divided amounts.

Paediatric use

There is no experience with Omeprazole Sandoz IV in children.

Use in the elderly

No dosage adjustment of Omeprazole Sandoz IV is necessary in the elderly.

Hepatic insufficiency

The rate of plasma elimination of omeprazole and its metabolites is decreased in patients with liver cirrhosis. However, no accumulation has been observed during the use of the recommended oral dose of omeprazole 20 mg daily and no adjustment to the normal dosage regimen is required (see **PRECAUTIONS**).

Renal insufficiency

The systemic bioavailability of omeprazole is not significantly altered in patients with reduced renal function and no dosage adjustment is required.

OVERDOSAGE

Contact the Poisons Information Centre on 13 11 26 for advice on management of overdose.

Rare reports have been received of overdose with omeprazole. In the literature doses of up to 560 mg have been described and occasional reports have been received when single oral doses have reached up to 2,400 mg omeprazole (120 times the usual recommended clinical dose). Nausea, vomiting, dizziness, abdominal pain, diarrhoea and headache have been reported from overdose with omeprazole. Also apathy, depression and confusion have been described in single cases. The symptoms described in connection to omeprazole overdose have been transient, and no serious clinical outcome due to omeprazole has been reported.

There is no information at present regarding poisoning or overdose and no specific recommendations for treatment can be given. In suspected cases of overdose, treatment should be supportive and symptomatic.

PRESENTATION AND STORAGE CONDITIONS

Presentation

Each 10mL glass vial with rubber stopper and aluminium cap contains 42.56 mg omeprazole sodium equivalent to 40 mg omeprazole. Pack size of 5 vials.

Storage conditions

Powder

Store below 25°C. Protect from light.

Reconstituted Solution

Store below 25°C. Protect from light. Use within 6 hours after reconstitution.

NAME AND ADDRESS OF THE SPONSOR

Sandoz Pty Ltd
ABN 60 075 449 553
54 Waterloo Road
Macquarie Park
NSW 2113
Australia
Tel: 1800 726 369

POISON SCHEDULE OF THE MEDICINE

Schedule 4 - Prescription Only Medicine

DATE OF FIRST INCLUSION IN THE AUSTRALIAN REGISTER OF THERAPEUTIC GOODS (THE ARTG)

15/02/2008

DATE OF MOST RECENT AMENDMENT

6/11/2017