Omecap

(USP Specification)

Omeprazole

(Manufacturer Specification)

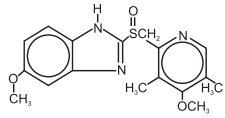
20mg & **40**mg Capsules

COMPOSITION

OMECAP 20mg Capsules: Each capsule contains enteric coated pellets:
Omeprazole 20mg
(USP Specification)
Dissolution Test 2
OMECAP 40mg Capsules: Each capsule contains enteric coated pellets:
Omeprazole 40mg
(USP Specification)
Dissolution Test 2

DESCRIPTION

OMECAP (Omeprazole) a substituted benzimidazole, is a proton pump inhibitor that inhibits gastric acid secretion. Chemically **OMECAP** (Omeprazole) is 5-methoxy-2-[[(4-methoxy-3, 5-dimethyl-2-pyridinyl) methyl] sulfinyl]-1 H benzimidazole. The molecular structure is $C_{17}H_{19}N_3O_3S$ and the structural formula is



$C_{17}H_{19}N_3O_3S$

CLINICAL PARTICULARS

Therapeutic Indications:

OMECAP (Omeprazole) is indicated for the treatment of:

- Gastro-Esophageal Reflux Disease (GERD):
  - Treatment of erosive reflux esophagitis.
  - Long-Term management of patients with healed esophagitis to prevent relapse.
  - Symptomatic treatment of gastroesophageal reflux disease (GERD)
- Gastric and duodenal ulcer.
- Treatment of prophylaxis of NSAID-associated ulceration.
- Eradication of Helicobacter pylori infection associated with peptic ulcer disease.
- Zollinger-Ellison syndrome (Pathological Hypersecretory Conditions in adults)
- Dyspepsia
- Prophylaxis of acid aspiration.
- Healing of erosive esophagitis in pediatric patients and adults.

Children over 1 year of age and ≥ 10 kg

- Treatment of reflux oesophagitis.
- Symptomatic treatment of heartburn and acid regurgitation in gastro-oesophageal reflux disease.

Children and adolescents over 4 years of age

- In combination with antibiotics in treatment of duodenal ulcer caused by Helicobacter pylori.

Dosage and administration:

OMECAP (Omeprazole) is given by mouth, which should be swallowed whole and not crushed or chewed.

Symptomatic gastro-esophageal reflux disease (GERD) without esophagitis: The recommended adult oral dose is 20mg daily for up to 4 weeks.

Erosive esophagitis: The recommended adult oral dose for the treatment of patients with erosive esophagitis and accompanying symptoms due to GERD is 20mg daily for 4 to 8 weeks.

Maintenance of healing of erosive esophagitis: The recommended adult oral dose is 20mg daily.

Dosage for children in GERD: In children, doses in the range 0.7 to 1.4mg per kg body weight daily, up to a maximum daily dose of 40mg have been given for 4 to 12 weeks.

Gastric and duodenal ulcer: A single daily dose of 20mg by mouth or 40mg in severe cases is given. Treatment is continued for 4 weeks for duodenal ulcer and 8 weeks for gastric ulcer. Where appropriate, a dose of 10 to 20 mg once daily may be given for maintenance.

NSAID-associated ulceration: Dose of 20mg daily is used in the treatment of NSAID-associated ulceration. A dose of 20mg daily may also be used for prophylaxis in patients with a previous history of gastroduodenal lesions who require continued NSAID treatment.

Helicobacter pylori eradication: For the eradication of H. pylori in peptic ulceration **OMECAP** (Omeprazole) 40mg daily may be combined with antibacterial in dual therapy or **OMECAP** (Omeprazole) 20mg twice daily may be combined with antibacterial in triple therapy. **OMECAP** (Omeprazole) alone may be continued for a further 2 to 8 weeks.

Zollinger-Ellison syndrome: The initial recommended dosage is 60mg by mouth once daily, adjusted as required. The majority of patients are effectively controlled by doses in the range 20 to 120mg daily, but doses up to 120mg three times daily have been used. Daily doses above 80mg should be administrated in divided doses.

Dyspepsia: For the relief of acid-related dyspepsia **OMECAP** (Omeprazole) is given in usual doses of 10 or 20mg daily by mouth for 2 to 4 weeks.

Prophylaxis of acid aspiration: **OMECAP** (Omeprazole) is also used for the prophylaxis of acid aspiration during general anesthesia, in a dose of 40mg the evening before surgery and a further 40mg 2 to 6 hours before the procedure.

Dosage for Hepatic Impaired Patients:

A maximum daily dose of 20mg is recommended for patients with impaired hepatic function. Consideration should be given to reducing the dose of **OMECAP** (Omeprazole) in patients with impaired hepatic function as bioavailability and half-life can increase.

Contraindications:

OMECAP (Omeprazole) is contraindicated in patients with known hypersensitivity to any component of the formulation or to substituted benzimidazoles.

Precautions:

General: When gastric ulcer is suspected, the possibility of malignancy should be excluded as treatment may alleviate symptoms and delay diagnosis.

Prior to initiation of dual or triple therapy, the physician should consider the patient with known hypersensitivity reactions to penicillin, macrolides and other antibiotics.

Severe hypomagnesemia has been reported in patients treated with proton pump inhibitors (PPIs) like **OMECAP** (Omeprazole) for at least three months, and in most cases for a year.

Proton pump inhibitors, especially if used in high doses and over long durations of greater than one year, may modestly increase the risk of hip, wrist and spine fracture.

Drug Interactions:

Atazanavir: The plasma levels of atazanavir are decreased in case of co-administration with **OMECAP** (Omeprazole) therefore concomitant administration of **OMECAP** (Omeprazole) with Atazanavir is not recommended.

Digoxin: Concomitant treatment with **OMECAP** (Omeprazole) 20mg daily and digoxin increased the bioavailability of digoxin by 10%. Caution should be exercised when **OMECAP** (Omeprazole) is given at high doses in elderly patients. Therapeutic drug monitoring of digoxin should be then be reinforced.

Clopidogrel: **OMECAP** (Omeprazole) is a CYP2C19 inhibitor. When starting or ending treatment with **OMECAP** (Omeprazole), the potential for interactions with drugs metabolised through CYP2C19 should be considered. An interaction is observed between Clopidogrel and **OMECAP** (Omeprazole). As a precaution, concomitant use of **OMECAP** (Omeprazole) and Clopidogrel should be discouraged.

Other active substances: 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.

Saquinavir: Concomitant administration of **OMECAP** (Omeprazole) with Saquinavir resulted in increased plasma levels up to approximately 70% for Saquinavir associated with good tolerability in HIV-infected patients.

Tacrolimus: Concomitant administration of **OMECAP** (Omeprazole) has been reported to increase the serum levels of Tacrolimus. A reinforced monitoring of Tacrolimus concentrations as well as renal function (creatinine clearance) should be performed, and dosage of Tacrolimus adjusted if needed.

Methotrexate: When given together with proton-pump inhibitors, methotrexate levels have been reported to increase in some patients. In high-dose methotrexate administration a temporary withdrawal of **OMECAP** (Omeprazole) may need to be considered.

Inhibitors CYP2C19 and/or CYP3A4: Active substances known to inhibit CYP2C19 or CYP3A4 (such as clarithromycin and voriconazole) may lead to increased **OMECAP** (Omeprazole) serum levels by decreasing **OMECAP** (Omeprazole) rate of metabolism. Concomitant voriconazole treatment resulted in more than doubling of the **OMECAP** (Omeprazole) exposure. As high doses of **OMECAP** (Omeprazole) have been well-tolerated adjustment of the **OMECAP** (Omeprazole) dose is not generally required. However, dose adjustment should be considered in patients with severe hepatic impairment and if long term treatment is indicated.

Inducers of CYP2C19 and/or CYP3A4: Active substances known to induce CYP2C19 or CYP3A4 or both (such as rifampicin and St John's wort) may lead to decreased **OMECAP** (Omeprazole) serum levels by increasing **OMECAP** (Omeprazole) rate of metabolism.

Pregnancy:

Pregnancy Category C: There are no adequate or well controlled studies in pregnant women. OMECAP (Omeprazole) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Lactation:

It is not known whether **OMECAP** (Omeprazole) is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from **OMECAP** (Omeprazole), a decision should be made whether, to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use:

Available Data from children (1 year and older) suggest that the pharmacokinetics within the recommended doses are similar to those reported in adults. At steady state, lower plasma levels of **OMECAP** (Omeprazole) were seen in some children.

Geriatric Use:

The bioavailability of **OMECAP** (Omeprazole) may be increased in elderly patients.

Adverse Reactions:

OMECAP (Omeprazole) is well tolerated and the adverse reactions have generally been mild and reversible.

Common: Central and peripheral nervous system: Headache.

Gastrointestinal: Diarrhea, constipation, abdominal pain, nausea/vomiting and flatulence.

Uncommon: Central and peripheral nervous system: Dizziness, paraesthesia, somnolence, insomnia and vertigo.

Hepatic: Increased liver enzymes

Skin: Rash and/or pruritis, urticaria

Other: Malaise

Rare: Central and peripheral nervous system: Reversible mental confusion, agitation, aggression, depression and hallucinations, predominantly in severely ill patients.

Endocrine: Gynecomastia

Gastrointestinal: Dry mouth, stomatitis and gastrointestinal candidiasis.

Hematological: Leukopenia, thrombocytopenia, agranulocytosis and pancytopenia.

Gastro-duodenal carcinoids have been reported in patients with Zollinger-Ellison syndrome on long-term treatment with **OMECAP** (Omeprazole).

CLINICAL PHARMACOLOGY

Mechanism of Action

OMECAP (Omeprazole) reduces gastric acid secretion through a unique mechanism of action. **OMECAP** (Omeprazole) belongs to a new class of anti-secretory compounds, the substituted benzimidazoles that do not exhibits anti-cholinergic or histamine antagonistic properties. It inhibits secretion of gastric acid by irreversibly blocking the enzyme system of hydrogen/potassium adenosine triphosphatase (H^+/K^+ATPase), the proton pump of the gastric parietal cell. This effect is dose-related and leads to inhibition of both basal and stimulated acid secretion irrespective of the stimulus.

Pharmacokinetics:

Absorption: Omeprazole is acid-labile and is administered orally as enteric-coated pellets in capsules.

Omeprazole is rapidly but variably absorbed following oral administration, with peak plasma levels of Omeprazole occurring within 0.5 to 3.5 hours. Absorption of Omeprazole is not affected by food and also appears to be dose dependent. Increasing the dosage above 40mg has been reported to increase the plasma concentrations in a non-linear fashion because of saturable first pass metabolism. Absorption is higher after long-term administration. The systemic bioavailability of Omeprazole is approximately 35%. After repeated once daily administration, the bioavailability increased to about 60%.

Distribution: After oral dosing, Omeprazole is widely distributed throughout the body. The binding of Omeprazole to plasma protein is approximately 95%.

Metabolism: Following absorption Omeprazole is almost completely metabolized in the liver, primarily by the cytochrome P450 isoenzyme CYP2C19 to form hydroxy-omeprazole and to a small extent by CYP3A to form Omeprazole sulfone. These metabolites are inactive and excreted mostly in the urine and to a lesser extent in the bile.

Elimination: The majority of the dose (about 77%) is eliminated in the urine and the remainder, recoverable in the feces. The elimination half-life from plasma is reported to be about 0.5 to 3 hours.

Special Population:

Renal Insufficiency: The systemic bioavailability of **OMECAP** (Omeprazole) is not significantly altered in patients with reduced renal function. Therefore dose adjustment is not required.

Hepatic Insufficiency: The area under the plasma concentration-time curve is increased in patients with impaired liver function, but no tendency to accumulation of **OMECAP** (Omeprazole) has been found.

OVERDOSAGE

Nausea, vomiting, dizziness, abdominal pain, diarrhea and headache have been reported. Also apathy, depression and confusion have been described in single cases. The symptoms described have been transient and no serious outcome has been reported.

STORAGE:

Store between15°C-30°C. Protect from light and moisture.

HOW SUPPLIED

OMECAP 20mg Capsules: Pack of 14 capsules.
OMECAP 40mg Capsules: Pack of 14 capsules.

TO BE SOLD ON THE PRESCRIPTION OF A REGISTERED MEDICAL PRACTITIONER ONLY.

KEEP ALL MEDICINES OUT OF THE REACH OF CHILDREN.

Lactose & Gluten Free

اومیکیپ

(اومیپرازول)

20ملی گرام اور 40ملی گرام

کیپسولز

خوراک وہدایات:

ڈاکٹر کی ہدایات کے مطابق استعمال کریں۔

صرف مستند ڈاکٹر کے نسخہ کے مطابق ہی دوا فروخت کی جائے۔

تمام ادویات بچوں کی پہنچ سے دور رکھیں۔

دوا کو 15°C-30°C کے درمیان درجہ حرارت پر نمی اور روشنی سے محفوظ رکھیں۔

NEXT PHARMACEUTICAL
Manufactured by:
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