Downoprazol Capsules & Packets

Company Name: Medizen Pharmaceutical Industries for Utopia Pharmaceuticals. **Generic Name: Capsules:** Omeprazole 20 or 40 mg + Sodium bicarbonate 1100 mg. Packets: Omeprazole 20 mg + sodium bicarbonate 1680 mg. **Composition: Each Capsule Contains: Active Ingredients:** Omeprazole 20 or 40 mg Sodium bicarbonate 1100 mg **Inactive Ingredients:** Croscarmellose sodium - magnesium stearate - titanium dioxide - gelatin brilliant blue - methyl parapen - propyl paraben. **Each Packet Contains: Active Ingredients:** Omeprazole 20 mg + sodium bicarbonate 1680 mg **Inactive Ingredients:** Pregelatinized starch - aerosil 200 - Aspartame - microcrystalline cellulose -HPMC orange flavor.

Clinical Pharmacology:

Omeprazole is acid labile thus is rapidly degraded by gastric acid. Downoprazol is an immediate-release formulation that contains sodium bicarbonate which raises the gastric pH and thus protects omeprazole from acid degradation. Omeprazole belongs to a class of antisecretory compounds, the substituted benzimidazoles that do not exhibit anticholinergic or H2 histamine antagonistic properties but suppress gastric acid secretion by specific inhibition of the H+/K+ ATPase enzyme system at the secretory surface of the gastric parietal cell. Because this enzyme system is regarded as the acid (proton) pump within the gastric mucosa, omeprazole has been characterized as a gastric acid-pump inhibitor since it blocks the final step of acid production. This effect is dose related and leads to inhibition of both basal and stimulated acid secretion irrespective of the stimulus. Repeated single daily oral doses of Downoprazol 20 mg and 40 mg have produced nearly 100% inhibition of 24-hour integrated gastric acidity in some subjects.

Pharmacokinetics:

Absorption: Downoprazol is administered on an empty stomach 1 hour prior to meals. The absorption of omeprazole is rapid, time to peak is approximately 30 minutes (range 10-90 min) after a single or repeated dose administration. When Downoprazol is administered 1 hour after meals, the omeprazole AUC is reduced by approximately 24% relative to administration 1 hour prior to meals.

Distribution: Omeprazole is bound to plasma proteins. Protein binding is approximately 95%.

Metabolism: There is a significant biliary excretion of the metabolites of omeprazole. Three metabolites have been identified in plasma; the sulfide and sulfone derivatives of omeprazole and hydroxyomeprazole. These metabolites have very little or no antisecretory activity.

Excretion: Following a single oral dose of omeprazole, the majority of the dose (about 77%) is eliminated in urine as at least six metabolites. Two metabolites have

been identified as hydroxyomeprazole and the corresponding carboxylic acid. The remainder of the dose was recoverable in feces. Little, if any, of the unchanged drug is excreted in urine. The mean plasma omeprazole half-life in healthy subjects is approximately 1 hour.

Indications and Usage:

-Duodenal Ulcer: Downoprazol is indicated for the short-term treatment of active duodenal ulcer. Most patients heal within four weeks. Some patients may require an additional four weeks of therapy.

-Gastric Ulcer: Downoprazol is indicated for the short-term treatment (4-8 weeks) of active benign gastric ulcer.

-Treatment of Gastro esophageal Reflux Disease (GERD): Downoprazol is indicated for the treatment of heartburn and other symptoms associated with GERD.

-Erosive Esophagitis: Downoprazol is indicated for the short-term treatment (4-8 weeks) of erosive esophagitis which has been diagnosed by endoscopy.

The efficacy of Downoprazol used for longer than 8 weeks in these patients has not been established. In the rare instance of a patient not responding to 8 weeks of treatment, it may be helpful to give up to an additional 4 weeks of treatment. If there is recurrence of erosive esophagitis or GERD symptoms e.g. heartburn, additional 4-8 week courses of omeprazole may be considered.

-Maintenance of Healing of Erosive Esophagitis: Downoprazol is indicated to maintain healing of erosive esophagitis.

Dosage and Administration:

Downoprazol should be taken on an empty stomach at least one hour before a meal. Recommended Doses of Downoprazol by Indication for Adults 18 Years and Older are as follows:

Indication	Recommended Dose	Frequency
Short-Term Treatment of Active Duodenal Ulcer	20 mg	Once daily for 4 weeks
Benign Gastric Ulcer	40 mg	Once daily for 4-8 weeks
Symptomatic GERD (with no esophageal erosions)	20 mg	Once daily for up to4 weeks
Erosive Esophagitis	20 mg	Once daily for up to 4-8 weeks
Maintenance of Healing of Erosive Esophagitis	20 mg	Once daily

Administration of Capsules:

Downoprazol Capsules should be swallowed intact with water. Do not use other liquids. Do not open capsule and sprinkle the content on food.

Preparation and Administration of Suspension:

Directions for use: Empty packet contents into a small cup containing 1-2 tablespoons of water. DO NOT USE OTHER LIQUIDS OR FOODS. Stir well and drink immediately. Refill cup with water and drink.

If Downoprazol is to be administered through a nasogastric or orogastric tube, the

suspension should be constituted with approximately 20 mL of water. DO NOT USE OTHER LIQUIDS OR FOODS. Stir well and administer immediately. An appropriately-sized syringe should be used to instill the suspension in the tube. The suspension should be washed through the tube with 20 mL of water.

Contraindications:

Downoprazol is contraindicated in patients with known hypersensitivity to any components of the formulation.

Adverse Reactions:

Rarely: Fever, pain, fatigue, malaise, abdominal swelling, tachycardia, bradycardia, palpitation, pancreatitis, anorexia, irritable colon, dry mouth, stomatitis, marked elevations of liver function tests, muscle cramps, myalgia, muscle weakness, depression, hallucinations, confusion, insomnia, nervousness, tremors, somnolence, anxiety, vertigo, tinnitus, taste perversion and blurred vision.

Drug Interactions:

Omeprazole can prolong the elimination of diazepam, warfarin, phenytoin or other drugs that are metabolized by oxidation in the liver. There have been reports of increased prothrombin time in patients receiving proton pump inhibitors, including omeprazole, and warfarin concomitantly. Administration of omeprazole and atazanavir has been reported to reduce the plasma levels of atazanavir. Administration of omeprazole and tacrolimus may increase the serum levels of tacrolimus. Co-administration of omeprazole and clarithromycin have resulted in increases of plasma levels of omeprazole, clarithromycin and 14-hydroxy-clarithromycin.

Pregnancy & Nursing Mothers:

There are no adequate and well-controlled studies on the use of omeprazole in pregnant women. A decision should be taken to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. In addition, sodium bicarbonate should be used with caution in nursing mothers.

Precautions:

Chronic use of sodium bicarbonate may lead to systemic alkalosis and increased sodium intake can produce edema and weight increase. Omeprazole concentrations have been measured in breast milk of a woman. Symptomatic response to therapy with omeprazole does not preclude the presence of gastric malignancy. The sodium content of Downoprazol products should be taken into consideration when administering to patients on a sodium restricted diet. Sodium bicarbonate is contraindicated in patients with metabolic alkalosis and hypocalcemia. Sodium bicarbonate should be used with caution in patients with Bartter's syndrome, hypokalemia, respiratory alkalosis, and problems with acid-base balance. Long-term administration of bicarbonate with calcium or milk can cause milk-alkali syndrome. **Package:**

Carton box containing 7 packets + the insert leaflet.

Carton box containing 1 (Pvdc/ Aluminum) strip of 14 capsules + the insert leaflet. **Storage:**

Keep out of reach of children.

Keep at a temperature below 30°C in a dry place.

Instructions for Patients:

- Keep this leaflet. You may need to read it again.

- If you have any further questions, please refer to your doctor or pharmacist.
- **Downoprazol** Capsules should be swallowed intact with water. Do not use other liquids. Do not open the capsule and sprinkle its content on food.

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