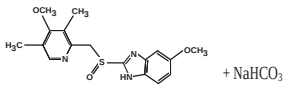
TEpH® Insta 20/40 Capsules / Sachet

(Omeprazole + Sodium Bicarbonate)

DESCRIPTION:
TEpH® Insta is a combination of omeprazole, a proton-pump inhibitor, and sodium bicarbonate, an antacid. Omeprazole is a substituted benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole, a racemic mixture of two enantiomers that inhibits gastric acid secretion. Its empirical formula is $C_{17}H_{19}N_3O_3S$, with a molecular weight of 345.42. The structural formula is:



+ $NaHCO_3$

COMPOSITION:

TEpH® Insta **20** Capsules
Each capsule contains:
Omeprazole BP 20mg
Sodium Bicarbonate BP.....1100mg

TEpH® Insta **40** Capsules
Each capsule contains:
Omeprazole BP 40mg
Sodium Bicarbonate BP.....1100mg

TEpH® Insta **20** Sachet
Each sachet contains:
Omeprazole BP 20mg
Sodium Bicarbonate BP.....1680mg (as buffer)

TEpH® Insta **40** Sachet
Each sachet contains:
Omeprazole BP 40mg
Sodium Bicarbonate BP.....1680mg (as buffer)

PHARMACOLOGY:
Mechanism of Action: Omeprazole belongs to a class of antisecretory compounds, the substituted benzimidazoles, that do not exhibit anticholinergic or H2 histamine antagonistic properties, but that 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, in that 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. Omeprazole is acid labile and thus rapidly degraded by gastric acid. Omeprazole/sodium bicarbonate capsules and sachet are immediate-release formulations that contain sodium bicarbonate which raises the gastric pH and thus protects omeprazole from acid degradation

PHARMACOKINETICS:
Absorption
- When omeprazole/sodium bicarbonate capsules and sachet are administered on an empty stomach 1 hour prior to a meal, the absorption of omeprazole is rapid
- When omeprazole/sodium bicarbonate capsules and sachet are administered 1 hour after a meal, the omeprazole AUC is reduced by approximately 24% relative to administration 1 hour prior to a meal

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

Metabolism: Following single-dose oral administration 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 faeces. This implies 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 single-dose oral administration of omeprazole, little if any, unchanged drug is excreted in urine
- The mean plasma omeprazole half-life in healthy subjects is approximately 1 hour (Range: 0.4 to 3.2 hours)

Hepatic Insufficiency: Dose reduction, particularly where maintenance of healing of erosive esophagitis is indicated, for the hepatically impaired should be considered

Renal Insufficiency: No dose reduction is necessary in patients with renal impairment

INDICATIONS:
Duodenal Ulcer: Omeprazole/sodium bicarbonate capsules and sachet are indicated for 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: Omeprazole/sodium bicarbonate capsules and sachet are indicated for short-term treatment (4-8 weeks) of active benign gastric ulcer

GI Bleeding in critically ill patients: Omeprazole/sodium bicarbonate capsules and sachet are indicated for reduction treatment of risk of upper gastrointestinal bleeding in critically ill patients

Treatment of Gastroesophageal Reflux Disease (GERD)
Symptomatic GERD: Omeprazole/sodium bicarbonate capsules and sachet are indicated for the treatment of heartburn and other symptoms associated with GERD

Erosive Esophagitis: Omeprazole/sodium bicarbonate capsules and sachet are indicated for the short-term treatment (4-8 weeks) of erosive esophagitis which has been diagnosed by endoscopy

DOSAGE AND ADMINISTRATION:
Since both the 20mg and 40mg capsules contain the same amount of sodium bicarbonate (1100mg), two capsules of 20mg are not equivalent to one capsule of **TEpH®** Insta 40mg; therefore, two 20mg capsules of **TEpH®** Insta should not be substituted for one capsule of **TEpH®** Insta 40mg

Both the 20mg and 40mg sachets contain the same amount of sodium bicarbonate (1680mg), two sachets of 20mg are not equivalent to one sachets of **TEpH®** Insta 40mg; therefore, two 20mg sachets of **TEpH®** Insta should not be substituted for one sachet of **TEpH®** Insta 40mg
TEpH® Insta should be taken on an empty stomach at least one hour before a meal

Indication	Recommended Dose	Frequency
Short-term treatment of active duodenal ulcer	20mg	Once daily for 4 weeks*
Benign gastric ulcer	40mg	Once daily for 4 to 8 weeks
Reduction of risk of upper gastrointestinal bleeding in critically ill patients (40mg oral suspension only)	40mg	40mg initally followed by 40mg 6-8 hours later and 40mg daily thereafter for 14 days
Gastroesophageal Reflux Disease (GERD)		
Symptomatic GERD (with no esophageal erosions)	20mg	Once daily for up to 4 weeks
Erosive esophagitis	20mg	Once daily for 4-8 weeks
Maintenance of healing of erosive esophagitis	20mg	Once daily

* Most patients heal within 4 weeks. Some patients may require an additional 4 weeks of therapy

OR
As directed by the physician

210 mm

120 mm

DIRECTION FOR USE (Sachet):
Pour the contents of sachet into 1 to 2 tablespoonfuls (15 to 30ml) of water. Stir well and drink immediately. Refill cup with water and drink. Do not use other liquids or foods

SIDE EFFECTS:
Body as a Whole
Hypersensitivity reactions, including anaphylaxis, anaphylactic shock, angioedema, bronchospasm, interstitial nephritis, urticaria, fever, pain, fatigue and malaise
Cardiovascular
Chest pain or angina, tachycardia, bradycardia, palpitation, elevated blood pressure, and peripheral edema
Gastrointestinal
Pancreatitis (sometimes fatal), anorexia, irritable colon, flatulence, fecal discoloration, esophageal candidiasis, mucosal atrophy of the tongue, dry mouth, stomatitis
Hepatic
Rarely overt liver disease has occurred, including hepatocellular, cholestatic, or mixed hepatitis, liver necrosis (sometimes fatal), hepatic failure (sometimes fatal), and hepatic encephalopathy
Metabolic/Nutritional
Hyponatremia, hypoglycemia, and weight gain
Musculoskeletal
Muscle cramps, myalgia, muscle weakness, joint pain, bone fracture, and leg pain
Nervous System/Psychiatric
Psychic disturbances including depression, agitation, aggression, hallucinations, confusion, insomnia, nervousness, tremors, apathy, somnolence, anxiety, dream abnormalities, vertigo, paresthesia, and hemifacial dysesthesia
Respiratory
Epistaxis, pharyngeal pain
Skin
Rash and rarely, cases of severe generalized skin reactions including toxic epidermal necrolysis, purpura and/or petechiae (sometimes with rechallenge); skin inflammation, urticaria, angioedema, pruritus, photosensitivity, alopecia, dry skin, and hyperhidrosis
Special Senses
Tinnitus, taste perversion
Ocular
Blurred vision, ocular irritation, dry eye syndrome, optic atrophy, anterior ischemic optic neuropathy, optic neuritis and double vision
Urogenital
Interstitial nephritis (sometimes with positive rechallenge), urinary tract infection, microscopic pyuria, urinary frequency, elevated serum creatinine, proteinuria, hematuria, glycosuria, testicular pain, and gynecomastia
Hematologic
Rare instances of pancytopenia, agranulocytosis (sometimes fatal), thrombocytopenia, neutropenia, leukopenia, anemia, leukocytosis, and hemolytic anemia have been reported

DRUG INTERACTIONS:
Omeprazole can prolong the elimination of diazepam, warfarin and phenytoin drugs that are metabolized by oxidation in the liver. There have been reports of increased INR and prothrombin time in patients receiving proton pump inhibitors, including omeprazole, and warfarin concomitantly

WARNINGS AND PRECAUTIONS:
- Gastric Malignancy: In adults, symptomatic response does not preclude the presence of gastric malignancy. Consider additional follow-up and diagnostic testing
- Acute interstitial nephritis has been observed in patients taking PPIs
- Buffer Content: Contains sodium bicarbonate
- PPI therapy may be associated with increased risk of Clostridium difficile-associated diarrhoea
- Bone Fracture: Long-term and multiple daily dose PPI therapy may be associated with an increased risk for osteoporosis-related fractures of the hip, wrist, or spine
- Cutaneous and Systemic Lupus Erythematosus: Mostly cutaneous; new onset or exacerbation of existing disease; discontinue medicine and refer to specialist for evaluation

Pregnancy
Pregnancy Category C: There are no adequate and well-controlled studies in pregnant women. Because animal studies and studies in humans can not rule out the possibility of harm. Omeprazole should be used during pregnancy only if the potential benefit to pregnant women justifies the potential risk to the fetus

Nursing Mothers
Omeprazole is excreted in human milk, in addition sodium bicarbonate should be used with caution in nursing mothers
Paediatric Use
Safety and effectiveness of omeprazole and sodium bicarbonate have not been established in paediatric patients
Geriatric Use
Pharmacokinetic studies with buffered omeprazole have shown the elimination rate was somewhat decreased in the elderly and bioavailability was increased. The plasma half-life averaged one hour, about the same as that in nonelderly, healthy subjects taking omeprazole and sodium bicarbonate. However no dose adjustment is necessary in the elderly

OVERDOSE:
Reports have been received of overdosage with omeprazole in humans. Doses ranged up to 2400mg (120 times the usual recommended clinical dose). Manifestations were variable, but included confusion, drowsiness, blurred vision, tachycardia, nausea, vomiting, diaphoresis, flushing, headache, dry mouth, and other adverse reactions similar to those seen in normal clinical experience. In the event of overdosage, treatment should be symptomatic & supportive

CONTRAINDICATIONS:
Omeprazole and sodium bicarbonate is contraindicated in patients with known hypersensitivity to any components of the formulation

PRESENTATION:
TEpH® Insta **20** capsules in a pack of 14's
TEpH® Insta **40** capsules in a pack of 14's
TEpH® Insta **20** sachet in a pack of 10's
TEpH® Insta **40** sachet in a pack of 10's

INSTRUCTIONS:
Keep out of reach of children
Avoid exposure to heat, light and humidity
Store between 15 to 30°C
Improper storage may deteriorate the medicine

ٹیف اِنسٹا ۲۰/۴۰ کیپسول / ساشے

(اومی پرازول+سوڈیم بائی کاربونیٹ)

خوراک: ڈاکٹر کی ہدایت کے مطابق استعمال کریں

طریقہ استعمال: ساشے کے پاؤڈر کو ۱ سے ۲ کھانے کے چمچے (۱۵ سے ۳۰ ملی لیٹر) پانی میں حل کریں اور فوراً استعمال کر لیں

کپ میں دوبارہ پانی بھریں اور پی لیں

پانی کے علاوہ کسی اور شے کے ساتھ استعمال نہ کریں

ہدایات: بچوں کی پہنچ سے دور رکھیں

دوا کو دھوپ، گرمی اور نمی سے محفوظ ۱۵ سے ۳۰ ڈگری سینٹی گریڈ کے درمیان میں رکھیں ورنہ دوا خراب ہو جائیگی

Manufactured by:
SAMI Pharmaceuticals (Pvt.) Ltd.
F-95, S.I.T.E., Karachi-Pakistan
www.samipharmapk.com

R.N-03/HA/03/18

210 mm

120 mm