**1.4.1.1 Name of the medicinal Product**

Esomeprazole Tablets 40 mg

**1.4.1.1.1 Strength**

40 mg/tablet

**1.4.1.1.2 Pharmaceutical Form**

Oral Solid dosage form

**1.4.1.2 Qualitative and Quantitative Composition**

**1.4.1.2.1 Qualitative declaration**

Esomeprazole Magnesium Trihydrate BP

**1.4.1.2.2 Quantitative declaration**

| Sr. No. | Ingredients Chemical Name | Specification | Standard Quantity/Tablet (mg) | Reason for Inclusion |
|---|---|---|---|---|
| **MIXING** | | | | |
| 01 | Esomeprazole Magnesium Trihydrate e.q to Esomeprazole (A) | BP | 44.42 Eq. to 40.00 | proton pump inhibitor |
| 02 | Microcrystalline Cellulose (C) | USP-NF | 64.73 | Diluent |
| 03 | Anhydrous Sodium Carbonate | BP | 7.500 | Buffering agent |
| 04 | Crospovidone (Polyplasdone) | USP-NF | 3.000 | Disintegrant |
| **BINDING** | | | | |
| 05 | Povidone (PVPK-30) | BP | 3.000 | Binding Agent |
| 06 | Isopropyl alcohol (IPA) | BP | 40.00 | Binding Solvent |
| **LUBRICATION** | | | | |
| 07 | Calcium Stearate | BP | 1.350 | Lubricant |
| 08 | Crospovidone (Polyplasdone) | USP-NF | 7.000 | Disintegrant |
| **Theoretical Average Weight (core) 131.0 mg** | | | | |
| **SEAL COATING** | | | | |

| Sr. No. | Ingredients Chemical Name | Specification | Standard Quantity/Tablet (mg) | Reason for Inclusion |
|---|---|---|---|---|
| 09 | Film coat MB | IN-HOUSE | 3.000 | Coating Agent |
| 10 | Dichloromethane (Methylene chloride) | BP | 54.00 | Coating Solvent |
| 11 | Isopropyl Alcohol (IPA) (#) | BP | 27.00 | Coating Solvent |
| **ENTERIC COATING** | | | | |
| 12 | Aqua Eze (iron oxide red) | IN-HOUSE | 12.00 | Colouring agent |
| 13 | Purified Water | BP | 150.0 | Coating Solvent |
| **Theoretical Average Weight (Coated) 146.0 mg** | | | | |

### 1.4.1.3 Pharmaceutical Form

Oral Tablet

Brick red coloured, round shaped, biconvex, enteric coated tablets, plain on both side.

### 1.4.1.4 Clinical Particulars

#### 1.4.1.4.1 Therapeutic Indications

Esomeprazole magnesium trihydrate tablets are indicated for treatment of conditions where a reduction of gastric acid secretion is required such as: reflux esophagitis, maintenance treatment of patients with reflux esophagitis, symptomatic gastroesophageal reflux disease (i.e. heartburn and regurgitation), and H. pylori eradication.

Esomeprazole, in combination with clarithromycin and amoxicillin, is indicated for the treatment of patients with duodenal ulcer disease associated with Helicobacter pylori infection to eradicate the H. pylori and heal ulcers. Eradication of H. pylori has been shown to reduce the risk of duodenal ulcer recurrence.

#### 1.4.1.4.2 Posology and Method of Administration

The tablets should be swallowed whole with liquid. The tablets should not be chewed or crushed.

Gastroesophageal Reflux Disease(GERD)

Treatment of erosive reflux esophagitis 40 mg once daily for 4 weeks.

An additional 4 weeks treatment is recommended for patients in whom esophagitis has not healed or who have persistent symptoms.

Long-term management of patients with healed esophagitis to prevent relapse 20 mg once daily.

Symptomatic treatment of gastroesophageal reflux disease (GERD) 20 mg once daily in patients without esophagitis. If symptom control has not been achieved after 4 weeks, the patient should be further investigated. Once symptoms have resolved, subsequent symptom control can be achieved using an on demand regimen taking 20 mg once daily, when needed.

Patients requiring continued NSAID therapy.

Treatment of upper gastrointestinal symptoms associated with NSAID therapy 20 mg once daily in patients requiring NSAID therapy. lf symptom control has not been achieved after 4 weeks, the patient should be further investigated.

*Healing of gastric ulcers associated with NSAID therapy:* 20 mg or 40 mg once daily for4 to 8 weeks. Prevention of gastric and duodenal ulcers associated with NSAID therapy in patients at risk: 20 mg or 40 mg once daily.

In combination with an appropriate antibacterial therapeutic regimen for the eradication of Helicobacter pylori and healing of Helicobacter pylori associated duodenal ulcer and prevention of relapse of peptic ulcers in patients with Helicobacter pylori associated ulcers 20 mg Esomeprazole with 1 g amoxicillin and 500 mg clarithromycin, all twice daily for 7 days.

*Children:* Esomeprazole should not be used in children since no data is available.

*Impaired renal function*: Dose adjustment is not required in patients with impaired renal function. Due to limited

experience in patients with severe renal insufficiency, such patients should be treated with caution.

*Impaired hepatic function:* Dose adjustment is not required in patients with mild to moderate liver impairment. For patients with severe liver impairment, a maximum daily dose of 20 mg Esomeprazole Tablets should not be exceeded.

*Elderly:* Dose adjustment is not required in the elderly.

#### 1.4.1.4.3 Contraindications

Hypersensitivity to esomeprazole, substituted benzimidazoles or any of the components of this medication. When used for eradication of Helicobacter pylori, the contraindications for amoxicillin and clarithromycin as found in the corresponding Product Monographs should be taken into consideration.

#### 1.4.1.4.4 Special Warnings and Special Precautions for Use

In the presence of any alarm symptom (e.g. significant unintentional weight loss, recurrent vomiting, dysphagia, hematemesis or melaena) and when gastric ulcer is suspected or present, malignancy should be excluded, as treatment with esomeprazole may alleviate symptoms and delay diagnosis.

Patients on long-term treatment should be kept under regular surveillance.

Patients on on-demand treatment should be instructed to contact their physician if their symptoms change in character. When prescribing Esomeprazole for on demand therapy, the implications for interactions with other pharmaceuticals, due to fluctuating plasma concentrations of esomeprazole should be considered.

When prescribing Esomeprazole for eradication of Helicobacter pylori possible drug interactions for all components in the triple therapy should be considered. Clarithromycin is a potent inhibitor of CYP3A4 and hence contraindications and interactions for clarithromycin should be considered when the triple therapy is used in patients concurrently taking other drugs metabolized via CYP3A4 such as cisapride.

#### 1.4.1.4.5 Interaction with other medicinal products and other forms of interaction

Diazepam or similar sedating drugs.

Certain other drugs require the presence of stomach acid to be effective. Since esomeprazole eliminates stomach acid so effectively, the absorption of the following drugs may be adversely affected: ampicillin, digoxin, iron preparations, ketoconazole.

If you take any of the above medications, ask your physician. It is okay to take antacids.

#### 1.4.1.4.6 Pregnancy and Lactation

Pregnancy: A moderate amount of data on pregnant women no malformative or foeto/neonatal toxicity of esomeprazole. Caution should be exercised when prescribing to pregnant women.

Breastfeeding: It is not known whether esomeprazole is excreted in human breast milk. Therefore, Esomeprazole should not be used during breast-feeding.

**1.4.1.4.7 Effects on ability to Drive and use Machines**

Not applicable

**1.4.1.4.8 Undesirable Effects**

*Central and peripheral nervous system*: Common: Headache Uncommon: Dizziness

*Gastrointestinal Common*: Abdominal pain, diarrhoea, flatulence, nausea/vomiting, constipation. Uncommon: Dry
mouth

*Skin:* Uncommon: Dermatitis, pruritus, urticaria

*Rarely:* blurred vision, hypersensitivity reactions e.g. angioedema, anaphylactic reaction/shock, increased liver enzymes, and of myalgia.

*Ve1y rarely:* Erythema multifom1e, Stevens-Johnson syndrome, toxic epidennal necrolysis, alopecia, and hepatitis with or without jaundice have been reported.

**1.4.1.4.9 Overdose**

Symptoms of overdose may include: confusion, drowsiness, blurred vision, fast heartbeat, nausea, sweating, flushing, headache, dry mouth.

Treatment should be symptomatic and supportive.

**1.4.1.5 Pharmacological Properties**

**1.4.1.5.1 Pharmacodynamics Properties**

Esomeprazole magnesium (a substituted benzimidazole), reduces gastric acid secretion through a highly targeted mechanism of action. It is a specific inhibitor of the gastric enzyme H+, K+-ATPase (the proton pump) which is responsible for acid secretion by the parietal cells of the stomach.

**1.4.1.5.2 Pharmacokinetic Properties**

Absorption of esomcprazolc is rapid, with peak plasma levels occurring approximately 1-2 hours after dose. The absolute bioavailability is 64% after a single dose of 40mg and

increases to 89% after repeated once-daily administration. Esomeprazole is 97% plasma protein bound.

Food intake both delays and decreases the absorption of esomeprazole although this has no significant influence on the effect of esomeprazole on intra gastric acidity.

Esomeprazole is completely metabolised by the cytochrome P450 system (CYP). Almost 80% of an oral dose of esomeprazole is excreted as metabolites in the urine, the remainder in the faeces. Less than l% of the parent drug is found in urine.

**1.4.1.5.3 Preclinical Safety Data**

Not Applicable

**1.4.1.6 Pharmaceutical Particulars**

**1.4.1.6.1 List of Excipients**

Microcrystalline Cellulose USP-NF

Anhydrous sodium carbonate BP

CrosPovidone USP-NF

Povidone (PVPK-30) BP

Isopropyl alcohol BP

Calcium Stearate BP

Filmcoat MB

Dichloromethane (Methylene chloride)

Aqua Eze (Iron Oxide Red)

**1.4.1.6.2 Incompatibilities**

Not applicable.

**1.4.1.6.3 Shelf Life**

36 months

**1.4.1.6.4 Special Precautions for Storage**

Store below 30°C. Protect from Light & Moisture.

**1.4.1.6.5 Nature and Contents of Container**

10 Tablets are packed in Alu-Alu Blister Pack. Such 3 Alu-Alu Blisters are packed in printed Carton with Packing Insert.

**1.4.1.6.6 Special precaution for disposal and other handling**

Any unused product or waste material should be disposed of in accordance with local requirements.

**1.4.1.7 Marketing Authorization Holder And Manufacturing Site Addresses**

**1.4.1.7.1 Name and Address of Marketing Authorization Holder**

Lincoln Pharmaceuticals Limited
Trimul Estate, Khatraj, Taluka: Kalol,
District: Gandhinagar Gujarat, India.
Telephone no.: +91-79-41078096
Fax: +91-79-41078062
E-mail: hiren@lincolnpharma.com;
Web site: www.lincolnpharma.com

**1.4.1.7.2 Name and Address of manufacturing site(s)**

Lincoln Pharmaceuticals Limited
Trimul Estate, Khatraj, Taluka: Kalol,
District: Gandhinagar Gujarat, India.
Telephone no.: +91-79-41078096
Fax: +91-79-41078062
E-mail: hiren@lincolnpharma.com;
Web site: www.lincolnpharma.com

**1.4.1.8 Marketing Authorization Number**

To be included after obtaining first registration.

**1.4.1.9 Date of First <Registration> / Renewal of The <Registration>**

It will be applicable after registration of this product.

**1.4.1.10 Date of Revision of the Text**

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**1.4.1.11 Dosimetry (If Applicable)**

Not Applicale

**1.4.1.12 Instructions for preparation of radiopharmaceuticals (if Applicable)**

Not Applicable