

## Rabeprazole Sodium 20mg Tablet

### SUMMARY OF PRODUCT CHARACTERISTIC

**1. Name of the Medicinal Product**  
**RABEMAC 20**

Rabeprazole Sodium 20mg tablet

**2. Qualitative and Quantitative Composition**  
Each delayed release tablet contains:

Rabeprazole Sodium.....20mg

**For Excipients see point 6.1**

**3. Pharmaceutical Form**  
Enteric Coated Tablet

**4. Clinical Particulars**

**4.1 Therapeutic indications**

Rabeprazole tablets are indicated for the treatment of:

- Active duodenal ulcer
- Active benign gastric ulcer
- Symptomatic erosive or ulcerative gastro-oesophageal reflux disease (GORD).
- Gastro-Oesophageal Reflux Disease Long-term Management (GORD Maintenance)
- Symptomatic treatment of moderate to very severe gastro-oesophageal reflux disease (symptomatic GORD)
- Zollinger-Ellison Syndrome
- In combination with appropriate antibacterial therapeutic regimens for the eradication of *Helicobacter pylori* in patients with peptic ulcer disease.

**4.2 Posology and method of administration**

**Adults/elderly:**

**Active Duodenal Ulcer and Active Benign Gastric Ulcer:** The recommended oral dose for both active duodenal ulcer and active benign gastric ulcer is 20mg to be taken once daily in the morning.

Most patients with active duodenal ulcer heal within four weeks. However a few patients may require an additional four weeks of therapy to achieve healing. Most patients with active benign gastric ulcer heal within six weeks. However again a few patients may require an additional six weeks of therapy to achieve healing.

**Erosive or Ulcerative Gastro-Oesophageal Reflux Disease (GORD):** The recommended oral dose for this condition is 20mg to be taken once daily for four to eight weeks.

**Gastro-Oesophageal Reflux Disease Long-term Management (GORD Maintenance):** For long-term management, a maintenance dose of Rabeprazole 20mg once daily can be used depending upon patient response.

**Symptomatic treatment of moderate to very severe gastro-oesophageal reflux disease (symptomatic GORD):** 10mg once daily in patients without oesophagitis. If symptom control has not been achieved during four weeks, the patient should be further investigated. Once symptoms have resolved, subsequent symptom

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control can be achieved using an on-demand regimen taking 10mg once daily when needed.

**Zollinger-Ellison Syndrome:** The recommended adult starting dose is 60 mg once a day. The dose may be titrated upwards to 120mg/day based on individual patient needs. Single daily doses up to 100mg/day may be given. 120mg dose may require divided doses, 60mg twice daily. Treatment should continue for as long as clinically indicated.

**Eradication of *H. pylori*:** Patients with *H. pylori* infection should be treated with eradication therapy. The following combination given for 7 days is recommended.

Rabeprazole 20mg twice daily + clarithromycin 500mg twice daily and amoxicillin 1g twice daily.

For indications requiring once daily treatment Rabeprazole tablets should be taken in the morning, before eating; and although neither the time of day nor food intake was shown to have any effect on rabeprazole sodium activity, this regimen will facilitate treatment compliance.

Patients should be cautioned that the Rabeprazole tablets should not be chewed or crushed, but should be swallowed whole.

**Renal and hepatic impairment:** No dosage adjustment is necessary for patients with renal or hepatic impairment.

#### **Children:**

Rabeprazole is not recommended for use in children, as there is no experience of its use in this group.

### 4.3 Contraindications

Rabeprazole is contra-indicated in patients with known hypersensitivity to rabeprazole sodium, or to any excipient used in the formulation. Rabeprazole Sodium is contra-indicated in pregnancy and during breast feeding.

### 4.4 Special warnings and precautions for use

#### **General:**

Symptomatic response to therapy with rabeprazole sodium does not preclude the presence of gastric or oesophageal malignancy, therefore the possibility of malignancy should be excluded prior to commencing treatment with Rabeprazole.

Patients on long-term treatment (particularly those treated for more than a year) should be kept under regular surveillance.

A risk of cross-hypersensitivity reactions with other proton pump inhibitor or substituted benzimidazoles cannot be excluded.

Patients should be cautioned that rabeprazole tablets should not be chewed or crushed, but should be swallowed whole.

There have been post marketing reports of blood dyscrasias (thrombocytopenia and neutropenia). In the majority of cases where an alternative aetiology cannot be identified, the events were uncomplicated and resolved on discontinuation of rabeprazole.

Hepatic enzyme abnormalities have been seen in clinical trials and have also been reported since market authorisation. In the majority of cases where an alternative aetiology cannot be identified, the events were uncomplicated and resolved on discontinuation of rabeprazole.

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No evidence of significant drug related safety problems was seen in a study of patients with mild to moderate hepatic impairment versus normal age and sex matched controls. However because there are no clinical data on the use of Rabeprazole in the treatment of patients with severe hepatic dysfunction the prescriber is advised to exercise caution when treatment with Rabeprazole is first initiated in such patients.

Co-administration of atazanavir with Rabeprazole is not recommended.

Treatment with proton pump inhibitors, including Rabeprazole, may possibly increase the risk of gastrointestinal infections such as *Salmonella*, *Campylobacter* and *Clostridium difficile*.

### ***Usage in Pregnancy — Pregnancy Category B***

There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

### ***Nursing Mothers***

It is not known if unmetabolized rabeprazole is excreted in human breast milk. Since many drugs are excreted in milk, and because of the potential for adverse reactions to nursing infants from rabeprazole, a decision should be made to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

### ***Pediatric Use***

The safety and effectiveness of rabeprazole for the treatment of GERD patients < 12 years of age have not been established. The safety and effectiveness of rabeprazole for other uses have not been established in pediatric patients.

### ***Geriatric Use***

No overall differences in safety or effectiveness were observed between these subjects and younger subjects, and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

## **4.5 Interaction with other medicinal products and other forms of interaction**

Rabeprazole sodium produces a profound and long lasting inhibition of gastric acid secretion. An interaction with compounds whose absorption is pH dependent may occur. Co-administration of rabeprazole sodium with ketoconazole or itraconazole may result in a significant decrease in antifungal plasma levels. Therefore individual patients may need to be monitored to determine if a dosage adjustment is necessary when ketoconazole or itraconazole are taken concomitantly with Rabeprazole sodium.

In clinical trials, antacids were used concomitantly with the administration of Rabeprazole sodium and, in a specific drug-drug interaction study, no interaction with liquid antacids was observed.

Co-administration of atazanavir 300mg/ritonavir 10mg with omeprazole (40 mg once daily) or atazanavir 400mg with lansoprazole (60mg once daily) to healthy volunteers resulted in a substantial reduction in atazanavir exposure. The absorption of atazanavir is pH dependent. Although not studied, similar results

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are expected with other proton pump inhibitors. Therefore PPIs, including rabeprazole, should not be co-administered with atazanavir.

#### 4.6 Pregnancy and lactation

##### ***Pregnancy: Category B***

There are no data on the safety of rabeprazole in human pregnancy. Reproduction studies performed in rats and rabbits have revealed no evidence of impaired fertility or harm to the foetus due to rabeprazole sodium, although low foeto-placental transfer occurs in rats. Rabeprazole sodium is contraindicated during pregnancy.

##### ***Lactation:***

It is not known whether rabeprazole sodium is excreted in human breast milk. No studies in lactating women have been performed. Rabeprazole sodium is however excreted in rat mammary secretions. Therefore Rabeprazole sodium should not be used during breast feeding.

#### 4.7 Effects on ability to drive and use machines

Based on the pharmacodynamic properties and the adverse events profile, it is unlikely that rabeprazole sodium would cause an impairment of driving performance or compromise the ability to use machinery. If however, alertness is impaired due to somnolence, it is recommended that driving and operating complex machinery be avoided.

#### 4.8 Undesirable effects

The most commonly reported adverse drug reactions, during controlled clinical trials with rabeprazole were headache, diarrhoea, abdominal pain, asthenia, flatulence, rash and dry mouth. The majority of adverse events experienced during clinical studies were mild or moderate in severity, and transient in nature. The following adverse events have been reported from clinical trial and post-marketed experience.

Frequencies are defined as: common (>1/100, <1/10), uncommon (> 1/1,000, <1/100), rare (>1/10,000, <1/1000) and very rare (<1/10,000).

System Organ Class	Common	Uncommon	Rare	Very Rare	Not Known
Infections and infestations	Infection				
Blood and the lymphatic system disorders			Neutropenia Leucopenia Thrombocytopenia Leucocytosis		
Immune system disorders			Hypersensitivity <sup>1,2</sup>		
Metabolism and nutrition disorders			Anorexia		Hyponatremia

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<b>Psychiatric disorders</b>	Insomnia	Nervousness	Depression		Confusion
<b>Nervous system disorders</b>	Headache Dizziness	Somnolence			
<b>Eye disorders</b>			Visual disturbance		
<b>Vascular disorders</b>					Peripheral oedema
<b>Respiratory, thoracic and mediastinal disorders</b>	Cough Pharyngitis Rhinitis	Bronchitis Sinusitis			
<b>Gastrointestinal disorders</b>	Diarrhoea Vomiting Nausea Abdominal pain Constipation Flatulence	Dyspepsia Dry mouth Eructation	Gastritis Stomatitis Taste disturbance		
<b>Hepato-biliary disorders</b>			Hepatitis Jaundice Hepatic encephalopathy <sup>3</sup>		
<b>Skin and subcutaneous tissue disorders</b>		Rash Erythema <sup>2</sup>	Pruritus Sweating Bullous reactions <sup>2</sup>	Erythema multiforme, toxic epidermal necrolysis (TEN), Stevens-Johnson syndrome (SJS)	
<b>Musculoskeletal, connective tissue and bone disorders</b>	Non-specific pain Back pain	Myalgia Leg cramps Arthralgia			
<b>Renal and urinary disorders</b>		Urinary tract infection	Interstitial nephritis		
<b>Reproductive system and breast disorders</b>					Gynaecomastia
<b>General</b>	Asthenia	Chest pain			

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<b>disorders and administration site conditions</b>	Influenza like illness	Chills Pyrexia			
<b>Investigations</b>		Increased hepatic enzymes <sup>3</sup>	Weight increased		

<sup>1</sup> Includes facial swelling, hypotension and dyspnoea

<sup>2</sup> Erythema, bullous reactions and hypersensitivity reactions have usually resolved after discontinuation of therapy.

<sup>3</sup> Rare reports of hepatic encephalopathy have been received in patients with underlying cirrhosis. In treatment of patients with severe hepatic dysfunction the prescriber is advised to exercise caution when treatment with Rabeprazole Sodium is first initiated in such patients.

#### 4.9 Overdose

Experience to date with deliberate or accidental overdose is limited. The maximum established exposure has not exceeded 60mg twice daily, or 160mg once daily. Effects are generally minimal, representative of the known adverse event profile and reversible without further medical intervention. No specific antidote is known. Rabeprazole sodium is extensively protein bound and is, therefore, not dialysable. As in any case of overdose, treatment should be symptomatic and general supportive measures should be utilized.

### 5. Pharmacological Properties

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Alimentary tract and metabolism, Drugs for peptic ulcer and gastro-oesophageal reflux disease (GORD), proton pump inhibitors  
ATC code : A02B C04

**Mechanism of Action:** Rabeprazole sodium belongs to the class of anti-secretory compounds, the substituted benzimidazoles, that do not exhibit anticholinergic or H<sub>2</sub> histamine antagonist properties, but suppress gastric acid secretion by the specific inhibition of the H<sup>+</sup>/K<sup>+</sup>-ATPase enzyme (the acid or proton pump). The effect is dose-related and leads to inhibition of both basal and stimulated acid secretion irrespective of the stimulus. Animal studies indicate that after administration, rabeprazole sodium rapidly disappears from both the plasma and gastric mucosa. As a weak base, rabeprazole is rapidly absorbed following all doses and is concentrated in the acid environment of the parietal cells. Rabeprazole is converted to the active sulphenamide form through protonation and it subsequently reacts with the available cysteines on the proton pump.

**Anti-secretory Activity:** After oral administration of a 20mg dose of rabeprazole sodium the onset of the anti-secretory effect occurs within one hour, with the maximum effect occurring within two to four hours. Inhibition of basal and food stimulated acid secretion 23 hours after the first dose of rabeprazole sodium are 69% and 82% respectively and the duration of inhibition lasts up to 48 hours. The inhibitory effect of rabeprazole sodium on acid secretion increases slightly with

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repeated once-daily dosing, achieving steady state inhibition after three days. When the drug is discontinued, secretory activity normalises over 2 to 3 days.

**Serum Gastrin Effects:** In clinical studies patients were treated once daily with 10 or 20mg rabeprazole sodium, for up to 43 months duration. Serum gastrin levels increased during the first 2 to 8 weeks reflecting the inhibitory effects on acid secretion and remained stable while treatment was continued. Gastrin values returned to pre-treatment levels, usually within 1 to 2 weeks after discontinuation of therapy.

Human gastric biopsy specimens from the antrum and the fundus from over 500 patients receiving rabeprazole or comparator treatment for up to 8 weeks have not detected changes in ECL cell histology, degree of gastritis, incidence of atrophic gastritis, intestinal metaplasia or distribution of *H. pylori* infection. In over 250 patients followed for 36 months of continuous therapy, no significant change in findings present at baseline was observed.

**Other Effects:** Systemic effects of rabeprazole sodium in the CNS, cardiovascular and respiratory systems have not been found to date. Rabeprazole sodium, given in oral doses of 20mg for 2 weeks, had no effect on thyroid function, carbohydrate metabolism, or circulating levels of parathyroid hormone, cortisol, oestrogen, testosterone, prolactin, cholecystokinin, secretin, glucagon, follicle stimulating hormone (FSH), luteinising hormone (LH), renin, aldosterone or somatotrophic hormone.

Studies in healthy subjects have shown that rabeprazole sodium does not have clinically significant interactions with amoxicillin. Rabeprazole does not adversely influence plasma concentrations of amoxicillin or clarithromycin when co-administered for the purpose of eradicating upper gastrointestinal *H. pylori* infection.

## 5.2 Pharmacokinetic properties

**Absorption:** Rabeprazole Sodium is an enteric-coated (gastro-resistant) tablet formulation of rabeprazole sodium. This presentation is necessary because rabeprazole is acid-labile. Absorption of rabeprazole therefore begins only after the tablet leaves the stomach. Absorption is rapid, with peak plasma levels of rabeprazole occurring approximately 3.5 hours after a 20mg dose. Peak plasma concentrations ( $C_{max}$ ) of rabeprazole and AUC are linear over the dose range of 10mg to 40mg. Absolute bioavailability of an oral 20mg dose (compared to intravenous administration) is about 52% due in large part to pre-systemic metabolism. Additionally the bioavailability does not appear to increase with repeat administration. In healthy subjects the plasma half-life is approximately one hour (range 0.7 to 1.5 hours), and the total body clearance is estimated to be  $283 \pm 98$  ml/min. There was no clinically relevant interaction with food. Neither food nor the time of day of administration of the treatment affect the absorption of rabeprazole sodium.

**Distribution:** Rabeprazole is approximately 97% bound to human plasma proteins.

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**Metabolism and excretion:** Rabeprazole sodium, as is the case with other members of the proton pump inhibitor (PPI) class of compounds, is metabolised through the cytochrome P450 (CYP450) hepatic drug metabolising system.

*In vitro* studies with human liver microsomes indicated that rabeprazole sodium is metabolised by isoenzymes of CYP450 (CYP2C19 and CYP3A4). In these studies, at expected human plasma concentrations rabeprazole neither induces nor inhibits CYP3A4; and although *in vitro* studies may not always be predictive of *in vivo* status these findings indicate that no interaction is expected between rabeprazole and cyclosporin. In humans the thioether (M1) and carboxylic acid (M6) are the main plasma metabolites with the sulphone (M2), desmethyl-thioether (M4) and mercapturic acid conjugate (M5) minor metabolites observed at lower levels. Only the desmethyl metabolite (M3) has a small amount of anti-secretory activity, but it is not present in plasma.

Following a single 20mg <sup>14</sup>C labelled oral dose of rabeprazole sodium, no unchanged drug was excreted in the urine. Approximately 90% of the dose was eliminated in urine mainly as the two metabolites: a mercapturic acid conjugate (M5) and a carboxylic acid (M6), plus two unknown metabolites. The remainder of the dose was recovered in faeces.

**Gender:** Adjusted for body mass and height, there are no significant gender differences in pharmacokinetic parameters following a single 20mg dose of rabeprazole.

**Renal dysfunction:** In patients with stable, end-stage, renal failure requiring maintenance haemodialysis (creatinine clearance  $\leq 5\text{ml/min/1.73m}^2$ ), the disposition of rabeprazole was very similar to that in healthy volunteers. The AUC and the  $C_{\text{max}}$  in these patients was about 35% lower than the corresponding parameters in healthy volunteers. The mean half-life of rabeprazole was 0.82 hours in healthy volunteers, 0.95 hours in patients during haemodialysis and 3.6 hours post dialysis. The clearance of the drug in patients with renal disease requiring maintenance haemodialysis was approximately twice that in healthy volunteers.

**Hepatic dysfunction:** Following a single 20mg dose of rabeprazole to patients with chronic mild to moderate hepatic impairment the AUC doubled and there was a 2-3 fold increase in half-life of rabeprazole compared to the healthy volunteers. However, following a 20mg dose daily for 7 days the AUC had increased to only 1.5-fold and the  $C_{\text{max}}$  to only 1.2-fold. The half-life of rabeprazole in patients with hepatic impairment was 12.3 hours compared to 2.1 hours in healthy volunteers. The pharmacodynamic response (gastric pH control) in the two groups was clinically comparable.

**Elderly:** Elimination of rabeprazole was somewhat decreased in the elderly. Following 7 days of daily dosing with 20mg of rabeprazole sodium, the AUC approximately doubled, the  $C_{\text{max}}$  increased by 60% and  $t_{1/2}$  increased by approximately 30% as compared to young healthy volunteers. However there was no evidence of rabeprazole accumulation.

**CYP2C19 Polymorphism:** Following a 20mg daily dose of rabeprazole for 7 days, CYP2C19 slow metabolisers, had AUC and  $t_{1/2}$  which were approximately



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1.9 and 1.6 times the corresponding parameters in extensive metabolisers whilst  $C_{max}$  had increased by only 40%.

#### 5.3 Preclinical safety data

Non-clinical effects were observed only at exposures sufficiently in excess of the maximum human exposure that make concerns for human safety negligible in respect of animal data.

Studies on mutagenicity gave equivocal results. Tests in mouse lymphoma cell line were positive, but *in vivo* micronucleus and *in vivo* and *in vitro* DNA repair tests were negative. Carcinogenicity studies revealed no special hazard for humans.

### 6. Pharmaceutical Particulars

#### 6.1 List of Excipients

Mannitol, Low substituted hydroxy propylcellulose

(L-HPC LH21),

Heavy Magnesium Oxide, Ethyl Cellulose (7 Cps), Isopropyl alcohol,

Dichloromethane, Purified Talc, Magnesium Stearate, Methacrylic acid

copolymer Type A Drug coat L100, Diethyl Phthalate, Titanium Dioxide (E171),

Acetone, Hypromellose 15cps, Propylene glycol, Colour iron red oxide (E172)

#### 6.2 Incompatibilities

None

#### 6.3 Shelf life

36 Months

#### 6.4 Special precautions for storage

Store below 25°C in dry place. Protected from light.

#### 6.5 Nature and contents of container

Alu/Alu blister pack of 7 tablets. Such 2 blisters packed in the cartons along with pack Insert.

Alu/Alu blister pack of 7 tablets. Such 4 blisters packed in the carton along with pack insert.

#### 6.6 Special Precaution for disposal

No special requirements.

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

### 7. Supplier

**Macleods Pharmaceuticals Ltd.**

304, Atlanta Arcade, Marol Church Road,

Andheri (East), Mumbai- 400 059,

**Rabeprazole Sodium 20mg Tablet**

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India

Phone: +91-22-66762800

Fax: +91-22-2821 6599

E-mail: exports@macleodsphara.com

- 8. WHO Reference Number (Prequalification Programme)**
- 9. Date of first Prequalification/ last renewal**
- 10. Date of Revision of the Text:**

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory.

NS2 POM S2

## Rabemac 20

Rabeprozole Sodium Delayed Release Tablets 20 mg

### Composition:

Each delayed release tablet contains:  
Rabeprozole Sodium 20 mg

**Category of Distribution:** Prescription Preparation (P,P)

Zimbabwe Registration Number: To be allocated

**Pharmacological Classification :** 16.7 Antacid

**ATC Code:** A02B C04

### Description

Rabeprozole sodium is a substituted benzimidazole that inhibits gastric acid secretion. It is a proton pump inhibitor. Yellow coloured circular biconvex enteric coated tablets plain on both the sides.

### Pharmacology

#### Mechanism of Action

Rabeprozole sodium belongs to a class of antisecretory compounds (substituted benzimidazole proton-pump inhibitors) that do not exhibit anticholinergic or histamine H<sub>2</sub>-receptor antagonist properties, but suppress gastric acid secretion by inhibiting the gastric H<sup>+</sup>, K<sup>+</sup> ATPase at the secretory surface of the gastric parietal cell. Rabeprozole blocks the final step of gastric acid secretion. In gastric parietal cells, rabeprozole is protonated, accumulates, and is transformed to an active sulfonamide.

### Pharmacokinetics

After oral administration of 20mg, C<sub>max</sub> of rabeprozole occurred over a range of 2.0 to 5.0 hours (T<sub>max</sub>). The rabeprozole C<sub>max</sub> and AUC are linear over an oral dose range of 10 mg to 40 mg. There is no appreciable accumulation when doses of 10 mg to 40 mg are administered every 24 hours; multiple dosing does not alter the pharmacokinetics of rabeprozole. The plasma half-life ranges from 1 to 2 hours. Absolute bioavailability for a 20mg oral tablet of rabeprozole (compared to intravenous administration) is approximately 52%. The effects of food on the absorption of rabeprozole have not been evaluated. Rabeprozole is 96.3% bound to human plasma proteins. Rabeprozole is extensively metabolized. The thioether and sulfone are the primary metabolites measure in human plasma. Rabeprozole is primarily metabolized in the liver by cytochromes P450 3A (sulfone metabolite) and P450 2C19 (desmethyl rabeprozole). The thioether metabolite is formed by reduction of rabeprozole.

Following a single 20mg oral dose of <sup>14</sup>C-labeled rabeprozole, approximately 90% of the drug was eliminated in the urine, primarily as thioether carboxylic acid; its glucuronide, and mercapturic acid metabolites. The remainder of the dose was recovered in the feces. Total recovery of radioactivity was 99.85%. No unchanged rabeprozole was recovered in the urine of feces.

In patients with stable, end-stages, renal failure requiring maintenance haemodialysis (creatinine clearance < 5mL/min/1.73 m<sup>2</sup>), the disposition of rabeprozole sodium was very similar to that in health volunteers. Elimination of rabeprozole sodium was somewhat decreased in the elderly. Following 7 days of daily dosing with 20mg of rabeprozole sodium, the AUC approximately doubled, the C<sub>max</sub> increased by 60% as compared to young healthy volunteers. However there was no evidence of rabeprozole sodium accumulation.

### Indications

Rabeprozole sodium is indicated in the treatment of

1. Gastroesophageal Reflux Disease (GERD)
2. Duodenal Ulcers
3. Zollinger- Ellison Syndrome

### Contraindications

Rabeprozole is contraindicated in patients with known hypersensitivity to rabeprozole, substituted benzimidazoles or to any component of the formulation.

### Precautions

Symptomatic response to therapy with rabeprozole sodium dose not precludes the presence of gastric or esophageal malignancy, therefore the possibility of malignancy should be excluded prior to commencing treatment with Rabeprozole. Caution should be exercised when treatment with rabeprozole is first initiated in patients with severe hepatic dysfunction.

### Pregnancy (Pregnancy Category B)

Animal studies revealed no evidence of impaired fertility or harm to the fetus due to rabeprozole. There are, however no adequate and well controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

### Nursing Mothers

It is not known if unmetabolized rabeprozole is excreted in human breast milk and hence should be used with caution in nursing mothers.

### Pediatric Use

The safety and effectiveness of rabeprozole in pediatric patients have not been established.

### Drug interactions

The cytochrome P450 (CYP450) drug metabolizing enzyme system metabolizes Rabeprozole. Studies in healthy subjects have shown that rabeprozole does not have clinically significant interactions with other drugs metabolized by the CYP450 system, such as warfarin and theophylline given as single oral doses, diazepam as a single intravenous dose. In vitro incubations employing human liver microsomes indicated that rabeprozole inhibited cyclosporine metabolism with an IC<sub>50</sub> of 62 micromolar, a concentration that is over 50 times higher than C<sub>max</sub> in healthy volunteers following 14 days of dosing with 20mg of rabeprozole.

In normal subjects, co-administration of rabeprozole 20 mg QD resulted in an approximately 30% decreases in the bioavailability of ketoconazole and increases the AUC and C<sub>max</sub> of digoxin by 19% and 29%, respectively. Therefore, patients may need to be monitored when such drugs are taken concomitantly with rabeprozole. Co-administration of rabeprozole and antacids produced no clinically relevant changes in plasma rabeprozole concentrations.

### Adverse Reactions

The most common adverse event was headache, diarrhoea and nausea. Other adverse events were rhinitis, abdominal pain, asthenia, flatulence, pharyngitis, vomiting, non-specific back pain, dizziness, flu syndrome, infections, cough, constipation and insomnia. Further less frequent adverse events were rash, myalgia, chest pain, dry mouth, dyspepsia, nervousness, somnolence, bronchitis, sinusitis, chills, leg cramps, urinary tract infections, arthralgia and fever. Increased hepatic enzymes have been observed in 2% of patients. Treatment should be stopped immediately at the recurrence of skin lesions.

### Overdosage

There has been no experience with large overdoses with rabeprozole. No specific antidote for rabeprozole is known. Rabeprozole is extensively protein bound and is not readily dialyzable. In the event of over dosages, treatment should be symptomatic and supportive. Gastric lavage is recommended.

### Dosage and Administration

Usually given as Single dose in the morning.

Indication	Dosage
Gastroesophageal Reflux Disease (GERD)	20 mg once daily for 4-8 weeks
Duodenal Ulcers (DU)	20 mg once daily for 4 weeks
Zollinger Ellison Syndrome	60 mg once daily as long as clinically indicated

No dosage adjustment is necessary in elderly patients, in patients with renal disease or in patients with mild to moderate hepatic impairment.

### Storage

Store below 25°C, in a dry place. Protect from light. Keep out of reach of children.

### Presentation

Blister pack of 7 tablets.

**PRESCRIPTION AND DELIVERY CONDITIONS**  
List II

### MACLEODS

Manufactured in India by:  
MACLEODS PHARMACEUTICALS LTD.  
Off: Atlanta Arcade, Marol Church Road,  
Andheri (East), Mumbai - 400 059.

**DATE OF PREPARATION OF**  
**PRESCRIBING INFORMATION:**  
30 September 2023