PANTOPRAZOLE

It is used to treat:
- Erosive Esophagitis Associated with GERD
- Short-term Treatment of GERD
- Zollinger-Ellison Syndrome
- Peptic Ulcer Disease (Off-label)

Pharmacological Category:
Proton Pump Inhibitors

Pregnancy:
Pregnancy category: B
Note: Risk versus benefit should be considered prior to use.

Lactation:
Not known whether pantoprazole is distributed into breast milk; not recommend

Side effects:
Common adverse effects are as follow:
- Acute Interstitial Nephritis
- Clostridium difficile-associated diarrhea
- Bone Fracture
- Cutaneous and Systemic Lupus Erythematosus
- Cyanocobalamin (Vitamin B-12) Deficiency
- Hypomagnesemia

Contraindications:
Hypersensitivity to pantoprazole or other proton pump inhibitors (PPIs)

Interactions:
- Interference with Antiretroviral Therapy

Co-administration of atazanavir or nelfinavir with proton pump inhibitors is expected to substantially decrease atazanavir or nelfinavir plasma concentrations and may result in a loss of therapeutic effect and development of drug resistance.
- Coumarin Anticoagulants

There have been postmarketing reports of increased INR and prothrombin time in patients receiving proton pump inhibitors, and warfarin concomitantly. Patients treated with proton pump inhibitors and warfarin concomitantly should be monitored for increases in INR and prothrombin time.
- Drugs for Which Gastric pH Can Affect Bioavailability

Pantoprazole can reduce the absorption of drugs where gastric pH is an important determinant of their bioavailability. Like with other drugs that decrease the intragastric acidity, the absorption of drugs such as ketoconazole, ampicillin esters, atazanavir, iron salts, erlotinib, and mycophenolate mofetil (MMF) can decrease.
Co-administration of Pantoprazole in healthy subjects and in transplant patients receiving MMF has been reported to reduce the exposure to the active metabolite, mycophenolic acid (MPA), possibly due to a decrease in MMF solubility at an increased gastric pH. The clinical relevance of reduced MPA exposure on organ rejection has not been established in transplant patients receiving Pantoprazole and MMF.
- Methotrexate

Concomitant administration of PPIs and methotrexate (primarily at high dose) may elevate and prolong serum levels of methotrexate and/or its metabolite hydroxymethotrexate. However, no formal drug interaction studies of methotrexate with PPIs have been conducted.

Dose:
Adult:
- Erosive Esophagitis Associated with GERD

Treatment: 40 mg PO once daily for 8-16 weeks
Maintenance of healing: 40 mg PO once daily
- Short-term Treatment of GERD

Oral therapy inappropriate or not possible: 40 mg IV infusion over 15 minutes once daily for 7-10 days; switch to PO once patient able to swallow
- Zollinger-Ellison Syndrome

40 mg PO once daily; up to 240 mg/day administered in some patients
80 mg IV infusion q8-12hr up to 7 days; switch to PO once patient able to swallow
- eptic Ulcer Disease (Off-label)

Duodenal ulcer: 40 mg PO once daily for 2 weeks
Gastric ulcer: 40 mg PO once daily for 4 weeks

Pediatric:
- Erosive Esophagitis Associated with GERD

<5 years
- Safety and efficacy not established

>5 years
- 15 kg to <40 kg: 20 mg PO once daily for up to 8 weeks
- 40 kg or greater: 40 mg PO once daily for up to 8 weeks

Dosage Form:
Each delayed release capsule contains 20 mg pantoprazole (as sodium sesquihydrate).

References:

1) British National Formulary 68, September 2014- March 2015, pages 57-58
2) Lexicomp,s Drug Reference Handbooks, American Pharmacists Association, 20th edition, pages 1314-1316
3) http://reference.medscape.com/drug/protonix-pantoprazole-342001
4) http://www.pdr.net/drug-summary/Protonix-Delayed-Release-Oral-Suspension-and-Tablets-pantoprazole-sodium-2095
5) https://www.drugs.com/pro/pantoprazole.html