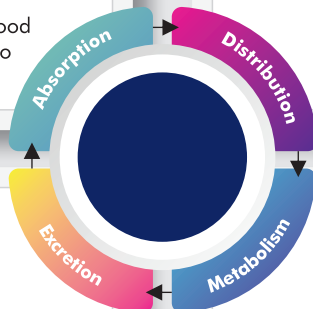


# mac Pantoprazole



## Pharmacokinetics

- Well absorbed
- Bioavailability - 77%
- T<sub>max</sub> - 2.5 hours
- Oral administration with food may delay absorption up to 2 h or longer



- Protein binding- Approx. 98 % mainly to albumin

- Elimination
- Urine (71%),
- Feces (18%)
- The t<sub>1/2</sub> is 1 h
- Duration - More than 24 h

- It undergoes little first-pass metabolism
- Extensively metabolized in the liver through CYP-450

To keep acid level under control...

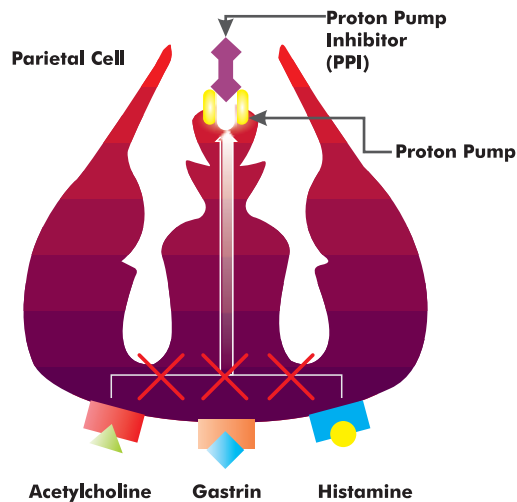
# mac Pantoprazole

Swift & sustained relief from GERD round the clock with solid effects.



# mac Pantoprazole

To keep acid level under control...



- Acetylcholine, gastrin and histamine can increase the acid production with increasing the activity of proton pump.
- Proton pump inhibitor blocks the final step of acid production.
- Therefore reduce the acidity of the stomach contents leaking into the esophagus, which reduces the incidence of heartburn

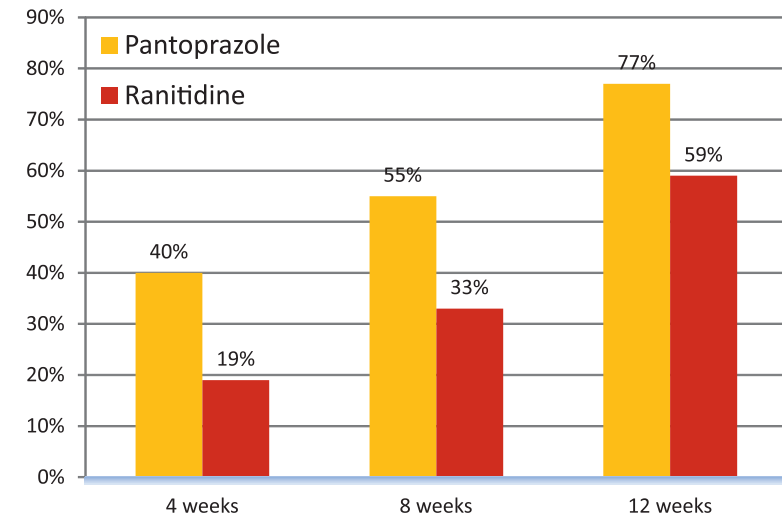
## Comparison of Pharmacokinetic Parameters of PPIs

PARAMETER	OME	ESO	LAN	RAB	PAN
Bioavailability(%)	30-65	64-89	80-85	52	77
AUC(μ.mol)	1.11-2.23	4.32-11.21	5.01	2.12	9.93
Half Life (h)	0.5-1	1.2	1.3-1.7	2.0	1.0-1.9
Tmax(h)	0.5-3.5	-	1.7	2.0	1.1-3.1
Urinary Excretion(%)	77	-	14-23	90	71-80

• Aliment Pharmacol Ther 2000; 14: 963-978.

## Results & Conclusion

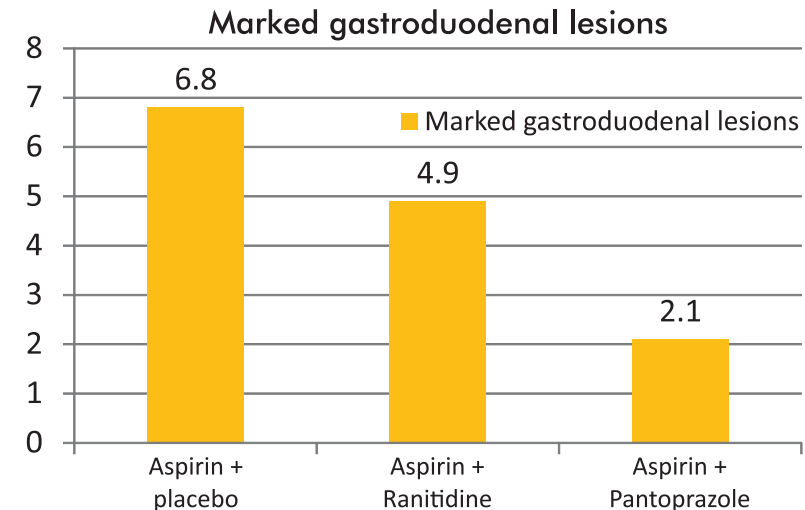
- Pantoprazole was associated with significantly higher rates of complete control of GERD symptoms than ranitidine



### Conclusions:

Low-dose PANTOPRAZOLE is an effective alternative to standard-dose ranitidine for initial and maintenance treatment of patients with symptomatic GERD.

## Results & Conclusion



Co-administration of 40 mg pantoprazole daily reduces significantly gastroduodenal lesions evoked by 300 mg ASA daily.