

1.2.2 Pharmacokinetics of Esomeprazole :

Pharmacokinetics profile of esomeprazole is summerised in table (3).

Table 3 : Pharmacokinetics parameters of Esomeprazole

| | |
|------------------------|--|
| Absorption | 90% |
| Volume of distribution | 16 L [healthy volunteers] |
| Protein binding | 97% |
| Metabolism | Mainly hepatic. Esomeprazole is completely metabolized by the cytochrome P450 system via CYP2C19 and CYP3A4. Metabolism produces inactive hydroxy and desmethyl metabolites, which have no effect on gastric acid secretion. Less than 1% of the parent drug is excreted in urine. |
| Route of elimination | Approximately 80% of the administered dose of esomeprazole is excreted as metabolites in urine and the remaining 20% is excreted in feces. |
| Half life | 1-1.5 hours |
| Clearance | Not Available |
| Toxicity | Blurred vision, confusion, drowsiness, dry mouth, flushing headache, nausea, rapid heartbeat, sweating |
| Affected organisms | Humans and other mammals |