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# Rabeprazole

## A Viewpoint by Simmy Bank

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Rabeprazole is the most recent of 4 currently available proton pump inhibitors (PPIs), the others being omeprazole, lansoprazole and pantoprazole. In practice these appear to be largely interchangeable with regard to duodenal and gastric ulcer healing, reflux oesophagitis and *H. pylori* eradication with antibiotics.

Experience with long term usage of PPIs spans some 10 years for maintenance therapy for reflux oesophagitis, and adverse effects have been few. Rabeprazole may have 2 major differences from its predecessors: it is a 'partially reversible' PPI and it has gastric effects other than its antisecretory properties which may promote ulcer healing. To date, these are largely experimental findings. The reversible effects were evidenced by enhanced dissociation from the $H^+,K^+$-ATPase enzyme system and stimulation of mucin synthesis and an increase in intracellular mucin content suggest beneficial gastric effects. In patients with peptic ulcers, acid secretion returned to baseline levels in 2 days versus 4 days with omeprazole. Nevertheless, there was still a 61% inhibition of acid secretion after 72 hours. Antibiotic activity against *H. pylori* appears to be greater than that produced by omeprazole and lansoprazole. Rabeprazole did not produce any serious drug interactions and the adverse effect profile appears excellent. However, it is suggested that rabeprazole be discontinued before starting ketoconazole and that digoxin concentrations should be monitored while receiving rabeprazole.

Clinical trials have been carried out in about 500 duodenal ulcer patients and 540 with gastro-oesophageal reflux disease. The healing rates are consistently superior to those with $H_2$ receptor antagonists and similar to those with omeprazole, which is now the apparent gold standard for comparative studies. Phase III and IV studies are in progress and it remains to be seen whether there are any differences in the therapeutic value of rabeprazole and that of other PPIs. This applies particularly to whether the partially reversible effect on the proton pump, and thus shorter duration of acid inhibition, will prove to be therapeutically important. Some of the studies appear to show a greater and more rapid pain relief with rabeprazole than with omeprazole and $H_2$ receptor antagonists, but further studies are clearly necessary to confirm these findings; particularly whether the reversible, shorter duration of action will allow the drug to be used as an 'antacid' for 'on demand' use to relieve symptoms with less reliance on maintenance therapy.

In summary, rabeprazole appears to be similar in therapeutic and tolerability profile to the other 3 available PPIs. Whether its experimentally demonstrated partially reversible and gastroprotective properties will be of added therapeutic value remains to be evaluated.