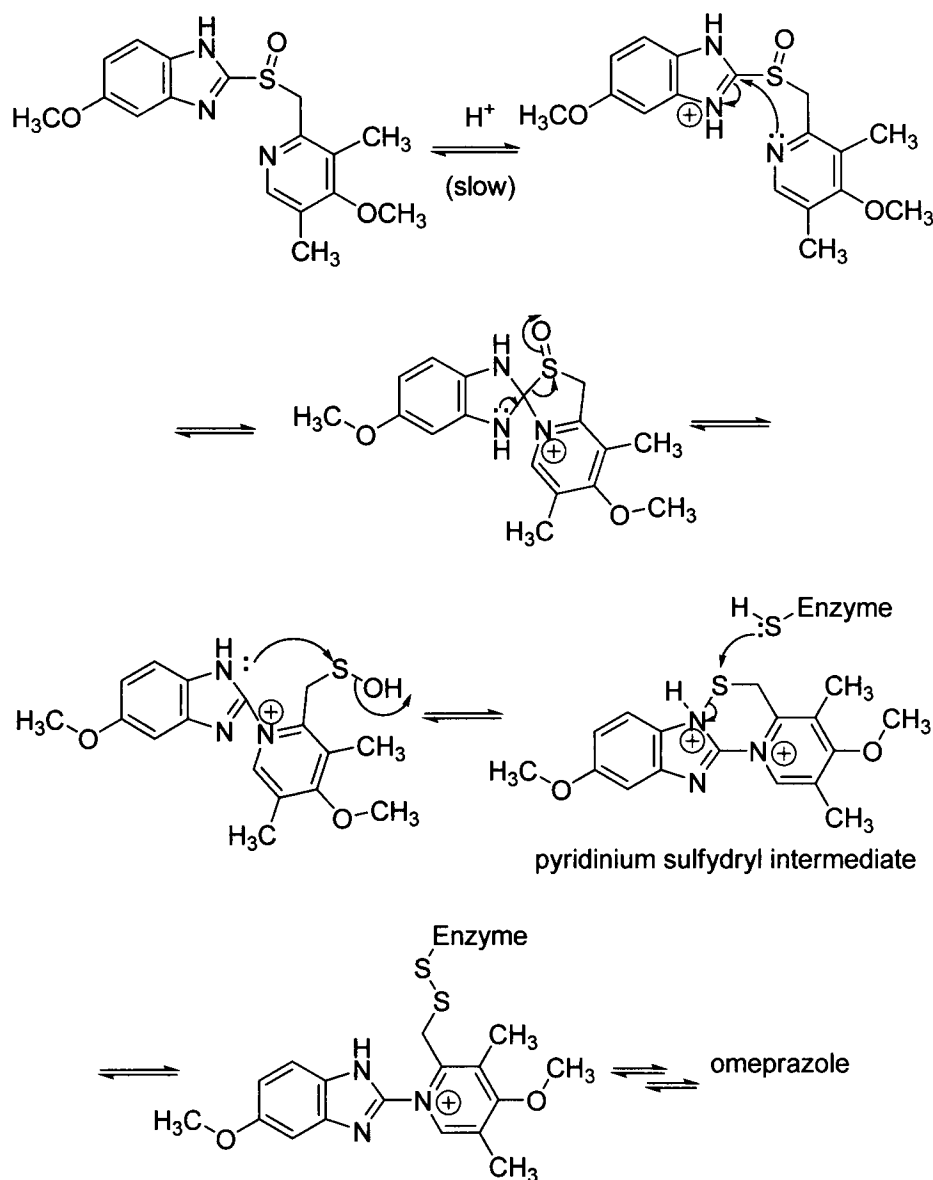


They are both pro-drugs and their MOA is through the “omeprazole cycle,” initiated by pyridine’s lone pair of electrons. In fact, pyridine’s lone pair of electrons could be viewed as the engine that propels the “omeprazole cycle.” The pyridinium sulfydryl intermediate is the actual inhibitory species.



There are quinoline-containing drugs from both nature and synthesis. Natural product drugs may be exemplified by quinine, an anti-malarial drug used for three centuries. Synthetic quinoline-containing drugs are