

## **ABSTRACT**

An oral, time dependent pulsincap dosage form of Rabeprazole was designed for chronotherapy of peptic ulcer, and proposed for colon targeting. The time delayed capsule was prepared by sealing the drug powder inside the insoluble hard gelatin capsule body and plugged with erodible polymer plug. The erodible plug was prepared by direct compression method by using polymers like guar gum, sodium alginate, HEC, HPMCK4M at concentration of (30 mg, 40 mg). The bodies of the capsule were then closed with untreated caps and completely coated with 5% cellulose acetate phthalate to prevent variable gastric emptying. The whole system is pulsincap dosage form. The objective of this formulation is to determine the lag time. The ability of pulsincap to provide colon specific drug delivery system was determined by *in vitro* drug release studies in buffer solution at pH 1.2 (gastric media) for 2 h, at pH 7.4 for 3 h and at pH 6.8 (colonic fluid) for remaining hour. The dissolution profile of formulation F2 and F4 containing 40 mg of guar gum and 40 mg of sodium alginate showed negligible drug release in the small intestine fluid, but the maximum amount of the drug was released in the colon.

**Keywords:** Chronobiology, peptic ulcer, pulsincap, Chronopharmaceutics.