**ABSTRACT**

The present research work is an attempt to formulate and evaluate fast dispersible tablets of a model antiemetic drug, prochlorperazine maleate using natural disintegrants prepared by direct compression method.

The drug excipients compatibility studies were carried out using FT-IR. The tablets were compressed by direct compression method, using directly compressible lactose as diluent. Cassia tora (10%, 15%, 20%), Cassia nodosa (10%, 15%, 20%),ispaghula husk powder (10%, 15%, 20%) were used as disintegrants at different concentration. Talc was used as glidant and magnesium stearate was used aslubricating agent. Sunset yellow (supra) FD&C yellow #6 was used as coloring agent on dry basis.

The precompression parameters like bulk density, tapped density, Carr’s index and angle of repose were determined. The post compression parameters like hardness, thickness, friability, weight variation, disintegration time, wetting time for all the formulations were carried out. Formulations containing cassia nodosa exhibited quicker disintegration of tablets than compared to those containing cassia tora and ispaghula husk powder. The most satisfactory formulation showed minimum disintegration time of 33 sec and released maximum amount of drug in shortest

duration of time. It was found to be stable during stability studies conducted for 2 months as per ICH guidelines.

**Key words:** Dispersible tablets, direct compression, prochlorperazine maleate, natural

disintegrants.