



## Development and Evaluation of Acyclovir Mucoadhesive Tablet using a Novel starch based Platform

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**SUMMARY.** The present study evaluated novel polymer mixtures prepared by spray drying of an aqueous dispersion of moth bean starch with Carbopol 934P and HPMC K4M for to be used as platform for per-oral mucoadhesive drug delivery.  $3^2$  factorial designs were employed to evaluate influence of different concentrations of hydrophilic polymers i.e. Carbopol 934P and HPMC K4M with constant concentration of moth bean starch on the drug release as well as *in vitro* adhesion time. All the formulations were studied for physical evaluation i.e. hardness, friability, content uniformity, drug-excipient compatibility as well as stability study. Two formulations F1 and F4 out of nine containing low amount of synthetic polymer exhibited desirable *in vitro* mucoadhesion time >8 h and drug release >90 % in controlled manner.

**KEY WORDS:** Acyclovir, Carbopol 934P, HPMC K4M, Moth bean starch, Mucoadhesive tablet.

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