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In Vitro-In Vivo Correlation Study of Metochlopramide-Orally Disintegrating Tablets

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Abstract: Solid *tapai* extract had been applied as excipient in formulating orally disintegrating tablets (ODTs). Solid *tapai* extract was used as excipient by combining solid *tapai* extract with corn starch and avicel. The formula was designed using simplex lattice design method with three component mixture. The optimized formula was determined by *in vitro* and *in vivo* study. The objective of this pilot study was to discover *in vitro* and *in vivo* correlation of optimized metochlopramide-ODTs. The design of *in vivo* test designed by using six rabbits. The drug released in the plasma was measured by HPLC instrument using glacial acetic acid 1% in aquabidestilata and metanol-acetonitrile (1:3.7) with ratio 60:40. The result showed that *in vitro* test on pH 1.2 and 7.4 had correlation to *in vivo* test with coefficient correlation of 0.996 and 0.975.

Keywords: metochlopramide, *in vivo*, *in vitro*.

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