



Bioavailability Enhancement of Sulpiride by Self-Microemulsifying Drug Delivery System

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SUMMARY. The self-microemulsifying drug delivery system (SMEDDS) was employed to improve the bioavailability of sulpiride, a drug which is poorly soluble. The mean droplet size and emulsification time of the test formulation used for *in vivo* study were 9.27 ± 2.02 nm and 87 ± 5 s, respectively. When compared with Reference (Dogmatil®), the test formulation exhibited faster *in-vitro* drug release rate. The C_{max} and AUC values of the test formulation were significantly higher than those of Reference, with an enhancement of 210.64% in the extent of absorption in rabbits. In conclusion, SMEDDS could be a potential drug delivery system to enhance the bioavailability of sulpiride.

KEY WORDS: Self-microemulsifying drug delivery system, Sulpiride, bioavailability.

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