

The pharmacokinetics evaluation and bioequivalence of new docetaxel injections and taxotere using healthy rats

Zheng-Ping Jia

Lanzhou General Hospital of PLA, China

The docetaxel of sterile freeze-dried powder injections was of Taxotere. We have evaluated the pharmacokinetic properties and bioequivalence of the docetaxel of sterile freeze-dried powder injections and Taxotere by highly selective and accurate LC-MS/MS method in healthy rats. The pharmacokinetic parameters and bioequivalence of two injections were obtained by the professional software (DAS, version 2.0). The 90% CIs for the In-transformed ratios of C_{max} : AUC_{0-t} and $AUC_{0-\infty}$ were 101.3%-104.1%, 99.8%-100.8% and 99.4%-100.6%, respectively (all, $p < 0.001$). In this study, we attained the pharmacokinetic parameters of the two injections, meanwhile docetaxel of sterile freeze-dried powder injections appeared to be bioequivalent to Taxotere in healthy rats. The result was beneficial to further study the pharmacokinetics and bioequivalence of the human in the future research.

dyy615918@sina.com, wangrong-69@163.com