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

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The docetaxel of sterile freeze-dried powder injections was of Taxotere. We has been 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 profession software (DAS, version 2.0). The 90% CIs for the In-transformed ratios of $C_{\text{max}}$, $AUC_{0-t}$ 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 beneficially to further study the pharmacokinetics and bioequivalence of the human in the future research.

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