



Inhibition of the Metabolism of Zidovudine (AZT) by Herbal Component Scutellarein

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SUMMARY. Herb-drug interaction strongly limits the clinical utilization of herbs and synthetic drugs. The inhibition of drug metabolism has been widely accepted to be an important reason for herb-drug interaction. The present study aims to investigate the inhibitory potential of herbal component scutellarein towards the metabolism of AZT which is the first U.S. government-approved antiretroviral drug for the successful treatment for the HIV/AIDS infectiousness, trying to predict potential scutellarein-AZT interaction. Noncompetitive inhibition of scutellarein towards AZT metabolism was demonstrated with the inhibition kinetic parameter (K_i) to be 19.6 μM . *In vivo* scutellarein-AZT interaction seems not to occur *in vivo* maximum plasma concentration (C_{max}) after administration of 400 mg/kg scutellarin for rat. However, due to the complex factors affecting the *in vitro-in vivo* extrapolation (IV-IVE), the translation from *in vitro* data to *in vivo* situation should be given much attention.

KEY WORDS: Herb-drug interaction, Scutellarein, Zidovudine.

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