



## Co-administration of Methylophiopogonanone A Might Affect the Safe Utilization of Drugs for Patients with HIV

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**SUMMARY.** Herb-drug interaction related with the drugs used to treat HIV patients was speculated in the present study. Therefore, zidovudine (AZT) was selected as an example, and *in vitro* incubation model was utilized to evaluate the inhibitory effect of herbal component methylophiopogonanone A towards the metabolism of AZT. The results showed the concentration-dependent inhibition of methylophiopogonanone A towards human liver microsomes (HLMs)-catalyzed AZT glucuronidation. Dixon plot and Lineweaver-Burk plot using the reaction velocity *versus* the concentrations of AZT and methylophiopogonanone A were performed to demonstrate the competitive inhibition of methylophiopogonanone A towards the glucuronidation of AZT. The inhibition kinetic parameter ( $K_i$ ) value was calculated to be 87.8  $\mu$ M. All these information indicated the necessary monitoring of clinical safety for the co-administration of AZT and methylophiopogonanone A-containing herbs.

**KEY WORDS:** Herb-drug interaction (HDI), HIV, Metabolic inhibition.

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