



Tissue Distribution and Pharmacokinetics of Vitexin-2''-O-Rhamnoside in Mice after Oral and Intravenous Administration

Yang DU¹, Fei WANG¹, Dong WANG¹, Hai-bo LI², Wen-jie ZHANG¹,
Zhong-zhe CHENG¹, Xi-xiang YING^{1*} & Ting-guo KANG¹

¹ School of Pharmacy, Liaoning University of Traditional Chinese Medicine, Dalian, 116600, China;

² School of Basic Medical Sciences, Liaoning University of Traditional Chinese Medicine, Shenyang, 110032, China

SUMMARY. The aim of the study was to characterize the preclinical pharmacokinetics and comparative pharmacokinetics of pure vitexin-2''-O-rhamnoside (VR) in mice after oral and intravenous administration at dose of 30 mg/kg. A sensitive and specific HPLC method with internal standard was developed and validated for the pharmacokinetic studies of VR. The results showed that VR was rapidly and widespreadly distributed throughout the whole body after administration and the oral bioavailability of VR was 4.89%. The highest VR level after intravenous dosing was obtained in gallbladder, followed by liver, intestine, kidney, stomach, lung, heart, spleen and muscle. While, the highest VR level after oral route was observed in intestine, followed by stomach, gallbladder, liver, heart, kidney and muscle.

KEY WORDS: HPLC, Pharmacokinetics, Tissue distribution, Vitexin-2''-O-rhamnoside.

* Author to whom correspondence should be addressed. *E-mail:* yingxixiang@163.com