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## COMPARATIVE STUDY ON PHARMACOKINETICS OF AMERICAN GINSENG IN THE MAIN COMPONENT OF HUAQIZEREN

Kaixin Liu<sup>1</sup>, Sun Yu<sup>1</sup>, JiaXin Li<sup>1</sup>,Pengyang Yu<sup>1</sup>, Qijing Huang<sup>1</sup>,Yu ChiZhang<sup>1</sup>, Xiaonan Liu<sup>1</sup>, PengLing Ge<sup>1\*</sup>

<sup>1</sup>Department of Pharmacology, School of Basic Medical Sciences, Heilongjiang University of Chinese Medicine, Harbin 150040, China; \*Corresponding authors: Pengling Ge, Department of Pharmacology, School of Basic Medical Sciences, Heilongjiang University of Chinese Medicine, 24 Heping Road, Harbin 150040, China; E-mail: penglingge@126.com

**Objectives** Comparative study on HuaQiZeRen of ginsenoside Rb1 and American ginseng of ginsenoside Rb1 in rat plasma pharmacokinetics.

**Materials and methods** The establishment of ultra high liquid chromatography tandem mass spectrometry to study the sensitivity and reliability of HuaQiZeren single herbs ginseng in rats in vivo pharmacokinetic characteristics, improve drugability evaluation HuaQiZeren. SD rats were randomly divided into HuaQiZeren group and American ginseng group were orally given HuaQiZeren and Panax quinquefolium decoction, to give medicine before and after a series of time points of blood plasma samples were collected for determination of Pharmacokinetic parameters were calculated by DAS software, the main medicine ginseng group and active ingredient group ZerenHuaQiZeren ginsenoside Rb1 pharmacokinetic parameters were compared, observe the main pharmacokinetic parameters have no significant difference.

**Results** Between 0.05~10 and g/mL concentrations, ginsenoside Rb1 had a good linear relationship in plasma, with a lower limit of 0.05 g/mL, and the difference between day and day was less than 10%. Citi group and Zeren ginseng group active component ginsenoside Rb1 pharmacokinetic parameters were the main drugs in rats: Cmax (g/L) 779.6 + 70.92 and 608.6 + 85.67; Tmax (H) 2 and 0.75; the elimination half-life t<sub>1/2</sub> (H) 15.58 + 7.574 and 9.947 + 4.099; AUC<sub>0-t</sub> area under the concentration time curve (g/L\*h) 9937 + 1503 and 3662 + 301.5; the average residence time of MRT<sub>0-t</sub> (H) 0.7406 and 14.67. 7.825 + 0.4090; plasma clearance rate of CL (L/h/kg) 0.1968 + 0.04122 and 0.4992 + 0.07002. Comparison of pharmacokinetic parameters and the ginseng group active ingredients of ginsenoside Rb1, Citibank Group HuaQiZeren active ingredients of ginsenoside Rb1 Cmax P<0.01, AUC<sub>0-t</sub> P<0.01, T<sub>1/2</sub> P<0.05 and MRT<sub>0-t</sub> were significantly increased in P<0.01, CL and P<0.01 decreased significantly.

**Conclusion** In vivo the main active ingredients of Citigroup Zeren ginsenoside Rb1 absorption and metabolism is relatively slow, can maintain a high plasma concentration. The compatibility of active ingredients Citibank Zeren of ginsenoside Rb1 in Panax ginseng and absorption.

**Key words:** Huaqizeren; ginsenoside Rb1; HPLC-MS/MS; Comparative pharmacokinetics

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## PROGRESSIN PHARMACOLOGICAL ACTIVITIES OF DIOSMIN

Kong Xiaoyue

(School of Pharmacy, Heilongjiang University of Chinese Medicine, Harbin 150040, China)

**Abstract:** Diosmin is flavonoids compound. It can increase the tension of the vein, improve microcirculation, promote lymphatic reflux, and alleviate edema. In recent years, some new pharmacological effects of diosmin have been studied. In this paper, the pharmacological effect from diosmin of recent years were bebriefly reviewed, which provides scientific basis for the development and utilization of diosmin.

**Key words:** Diosmin; pharmacological