



## Pharmacokinetics of Andrographolide Dripping Pills, a Modern Chinese Herb Medicine, by LC-MS/MS Method in Beagle Dogs

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**SUMMARY.** A rapid and sensitive method for the analysis of andrographolide in dog plasma using liquid chromatography coupled to tandem electrospray ionization mass spectrometry (LC-MS/MS) was developed and validated. The analyte and internal standard (IS), warfarin, were extracted from plasma with ethyl acetate and then separated by RP-HPLC. Detection was performed by negative ion electrospray ionization in multiple reaction monitoring (MRM) mode, monitoring the transitions  $m/z$  349.1→287.2 and  $m/z$  307.0→116.9, for quantification of andrographolide and IS, respectively. Excellent linearity was found to be from 2.5 to 1000 ng/mL with a lowest limit of quantitation (LLOQ) of 2.5 ng/mL. The inter-day accuracy of the drug containing plasma samples was 100.4-109.7 %, with a precision of 3.72-6.94 %. The intra-day accuracy was 95.1-102.5 %, with a precision of 6.04-9.87 %. The developed method was successfully applied to the pharmacokinetic study of andrographolide dripping pills in Beagle dogs for the first time.

**KEY WORDS:** Andrographolide, Beagle dogs, Dripping pills, LC-MS/MS, Pharmacokinetics.

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