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Effects of *Pseudostellaria heterophylla* (Miq.) Pax on the Activities of CYP450 Enzymes in Rats Using a Cocktail Approach

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***SUMMARY*. To study the effects of *Pseudostellaria heterophylla* (Miq.) Pax (TZS) on CYP450 activities in rats, six probe drugs (phenacetin, tolbutamide, metoprolol, midazolam, omeprazole, and bupropion) were simultaneously given to rats which were randomly divided into 2 groups (n = 7 each): Control-group and TZS-group. In TSZ-group, rats were given 5 g/kg • d TSZ orally. Plasma concentrations of six probes were measured by LC-MS after administration for 14 consecutive days. Pharmacokinetic parameters were calculated by DAS 2.0 program. The result showed there was no obvious difference in pharmacokinetic parameters for phenacetin, metoprolol, midazolam, omeprazole and bupropion, except tolbutamide. The $MRT_{(0-t)}$, $MRT_{(0-\infty)}$ and $t_{1/2}$ of tolbutamide in TZS-group were 5.696 ± 0.382, 5.810 ± 0.503, and 3.30 ± 1.16 h, where in control-group were 9.142 ± 0.465, 9.497 ± 0.574, and 5.06 ± 0.67 h, they were all shorten significantly ($P < 0.01$). In conclusion, TZS can induce the activity of CYP2C11 of rats significantly after intragastric administration for 14 days.**

KEY WORDS: CYP450, Pharmacokinetic, Probe drug, *Pseudostellaria heterophylla* (Miq.) Pax.

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