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**The toxicity of Aceporol 460 as a novel high loading capacity solubilizer of paclitaxel**

Kim YeoWoon, Kim JaYoung, Cho MinJung, Song HyeWeon, Lee MinJae, Kim JongJae, Lee MiSuk, Sheen YhunYhong
College of Pharmacy, Ewha Womans University,

Previously, we reported a novel polymeric micellar solubilizer, Aceporol 330, that showed relatively low toxic effects when it was compared with that of Cremophor EL which is currently being used for paclitaxel. In this study, we have developed a new micellar solubilizer, Aceporol 460, that has 3-4 times higher loding capacity for paclitaxel than Aceporol 330. The single-dose and the repeated-dose toxicity of Aceporol 460 were evaluated in ICR mice. For single dose toxicity test, male and female mice were randomly assigned to one of five study groups to receive, and injected intravenously with dosages of 0, 3, 4mL Cremophor EL/kg body weight, and 3, 4mL Aceporol 460/kg body weight, respectively. In both male and female mice, LD50 for Aceporol 460 can not be determined even at the maximal administrable dosage, 4mL/kg, due to the high viscosity of chemical and there was no significant change in body weight, hematological and serum biochemical analysis, organ weight, and histopathological examination compared with that of Cremophor EL. For the repeated dose toxicity test, male and female mice were given the dosage of 0, 1.6mL Cremophor EL/kg body weight/day, and 1.6mL Aceporol 460/kg body weight/day for 2 weeks. Results of repeated dose toxicity tests for 2 weeks suggested that Aceporol 460 treated group show no significant toxicological findings with body weight, hematological and serum biochemical analysis, organ weight, urinalysis, and ophthalmoscopic and histopathological examination compared with that of Cremophor EL. These results indicate that Aceporol 460 have higher paclitaxel-loading capacity than Aceporol 330 and less toxic effects than Cremophor EL in male and female mice.

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