INTISARI

Produk kombinasi ekstrak rimpang kunyit dan herba meniran diformulasi dalam bentuk kapsul yang selanjutnya disebut sebagai produk EKM. Produk EKM telah terbukti secara *in vivo* memiliki aktivitas sebagai antihepatotoksik, namun belum diuji keamanannya. Penelitian ini bertujuan untuk mengevaluasi ketoksikan pemberian produk EKM pada tikus betina galur Wistar selama 90 hari masa perlakuan dan 28 hari masa reversibilitas terhadap fungsi ginjal.

Metode yang digunakan mengacu pada *guideline* OECD (*Organisation for Economic Co-operation and)* 408 (*Repeated Dose 90-day Oral Toxicity Study in Rodent*) dan Peraturan Kepala BPOM RI No 7 tahun 2014 tentang Pedoman Uji Toksisitas Nonklinik secara *In Vivo*. Pengujian dilakukan pada 50 ekor tikus betina galur Wistar yang dibagi menjadi 4 kelompok masing-masing sepuluh ekor betina, yaitu kelompok kontrol NaCMC 0,5%, dosis 90 mg/kgBB, dosis 180 mg/kgBB, dan dosis 360 mg/kgBB. Pada kelompok kontrol dan dosis 360 mg/kgBB masing-masing ditambahkan lima ekor tikus sebagai kelompok satelit. Pengamatan meliputi analisis kadar kimia darah (kreatinin dan urea), pemeriksaan histopatologis ginjal, dan analisis urin. Data dianalisis secara statistik menggunakan uji ANOVA, Kruskal-Wallis, *paired samples t test,* Wilcoxon *independent samples t test*, dan Mann-Whitney dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa pemberian dengan dosis 90 mg/kgBB, 180 mg/kgBB, dan 360 mg/kgBB sekali sehari secara subkronis selama 90 hari tidak berpengaruh secara bermakna terhadap kadar serum kreatinin, kadar urea darah, gambaran *gross* patologis, histopatologis organ ginjal, dan urin tikus betina galur Wistar.

Kata kunci: EKM, fungsi ginjal, toksisitas subkronis

ABSTRACT

Combination of turmeric extract and meniran herb was capsulated into EKM product. EKM product was in vivo proven had activity that considered as anti-hepatotoxic though the safety was not confirmed. This research is intended to evaluate EKM product's toxicity in Wistar female rodent during 90 days of testing period and 28 days of kidney function reversibility.

The research used method with reference from OECD (Organization for Economic Cooperation and Development) number 408 (Repeated Dose 90-day Oral Toxicity Study in Rodent) also refer to Rule of Head BPOM RI No. 7 2014 about In Vivo Non-Clinic Toxicity Test Guideline. The test was done in 50 Wistar female rodents that grouped into 4 groups with each 10 rodents. The control group was controlled in dosage of CMC-Na 0,5%, next with dosage of 90mg/kgBB, the other with dosage of 180 mg/kgBB, and dosage of 360 mg/kgBB. On control group and dose of 360 mg/kgBB group was added another 5 rodents as satellite group. This observation involves of chemical blood analysis (creatinine and uric), examination of kidney's histopalogic and urine analysis. Data was analyzed statistically using ANOVA test, Kruskal-Wallis, paired samples t test, Wilcoxon independent samples t test and Mann-Whitney with 95% of confidence interval.

The results show that dosage of 90 mg/kgBB, 180 mg/kgBB and 360 mg/kgBB once a day a subchronic during 90 days is not significantly affect toward amount of creatinine serum, blood uric, drawing of pathologic gross, histopalogic of kidney and rodents' urine.

Keyword: EKM, kidney function, subchronic toxicity