

INTISARI

Produk kombinasi ekstrak etanolik rimpang kunyit dan herba meniran (EKM) merupakan produk obat herbal baru yang terbukti memiliki aktivitas hepatoprotektor secara *in vivo*, namun belum diuji keamanannya. Penelitian ini bertujuan untuk mengetahui efek pemberian EKM selama 90 hari pada tikus betina galur Wistar terhadap fungsi hati normal.

Penelitian dilakukan berdasarkan *guideline* pengujian toksisitas suatu zat dalam *Organisation for Economic Co-operation and Development* (OECD) 408 (*Repeated Dose 90-day Oral Toxicity Study in Rodent*) dan Peraturan Kepala BPOM RI Nomor 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, yaitu kelompok kontrol, dosis 90, 180, dan 360 mg/kgBB. Setiap kelompok menggunakan 10 hewan uji, ditambah masing-masing 5 hewan uji sebagai satelit untuk pengamatan reversibilitas pada kelompok kontrol dan dosis tertinggi. Pengamatan dilakukan terhadap aktivitas SGOT dan SGPT, kadar kolesterol dan protein, *gross* patologi dan histopatologi organ hati. Data dianalisis secara statistik menggunakan uji ANOVA, *paired samples T-test*, dan *independent samples T-test* dengan taraf kepercayaan 95%.

Penelitian menunjukkan bahwa pemberian EKM dengan dosis 90, 180, dan 360 mg/kgBB sekali sehari secara subkronis selama 90 hari tidak berpengaruh terhadap aktivitas SGOT dan SGPT, kadar kolesterol dan protein, gambaran *gross* patologi dan histopatologi organ hati tikus betina galur Wistar.

Kata kunci : EKM, toksisitas subkronis, tikus Wistar betina, fungsi hati

ABSTRACT

Herbal product that contains *Curcuma domestica* Val. and *Phyllanthus niruri* L. extract has been proven has hepatoprotective activity in the *in vivo* testing, however, it has not been tested for safety. This study aims to determine the effect of Gamalive-A consumption for female Wistar rats to normal liver function in 90 days.

The research is conducted based on the guidelines of the toxicity testing of a substance in the OECD 408 (Repeated Dose 90-day Oral Toxicity Study in Rodents) and the government regulation of BPOM RI Number 7 of 2014 about "Pedoman Uji Toksikologi Nonklinis secara In Vivo". The tests were conducted on 50 female Wistar rats that were divided into 4 groups: control group, group at doses of 90, 180, and 360 mg/kgBB. Each group uses 10 rats, plus each 5 rats as a satellite for observation of reversibility in the control group and the highest dose. The research were done on the SGOT and SGPT activity, cholesterol and protein concentration, gross pathology and histopathology of the liver. Data were statistically analyzed using ANOVA test, paired samples T-test and independent samples t-test with the level of significance 95%.

The research showed that the sub-chronically administration of Gamalive-A with a dose of 90, 180, and 360 mg/kgBB once a day for 90 days has no effect on the activity of SGOT and SGPT, cholesterol and protein concentration, gross pathology and histopathology of female rat Wistar liver.

Keywords: EKM, subchronic toxicity, female Wistar rats, liver function