

## INTISARI

Obat-obat antiinflamasi terus mengalami perkembangan dan inovasi sampai saat ini. Senyawa sintesis turunan kalkon 1-(2,5-dihidroksifenil)-3-(piridin-2-il)propenon memiliki persentase DAI sebesar  $50,05 \pm 16,24$  dan tidak berbeda signifikan dengan ibuprofen ( $57,22 \pm 20,13$ ). Tujuan penelitian ini dilakukan untuk mengetahui gejala toksik dan wujud efek toksik setelah perlakuan selama 90 hari.

Proses penelitian ini dilakukan mengacu pada *OECD Test Guideline 408 ; Repeated Dose 90-day Oral Toxicity Study in Rodents* dengan menggunakan mencit betina galur *Swiss* berusia 6 minggu. Terdapat 4 kelompok hewan uji ( $n=10$ ) yaitu kontrol PVP 0,5%, dosis 100, 200 dan 400 mg/kg BB serta 2 kelompok satelit ( $n=5$ ) yakni satelit kontrol PVP 0,5% dan satelit dosis 400 mg/kg BB. Pengamatan dilakukan terhadap gejala klinik, perkembangan berat badan, perkembangan asupan makan dan minum serta pemeriksaan histopatologi.

Hasil penelitian menunjukkan bahwa pemberian senyawa uji 1-(2,5-dihidroksifenil)-3-(piridin-2-il)propenon secara oral berulang selama 90 hari menimbulkan gejala klinik berupa piloreksi, kelemahan fisik, perlambatan gerak dan kepala miring. Selain itu pemberian senyawa uji juga mempengaruhi asupan makan dan minum, purata kenaikan berat badan dan wujud efek toksik berupa infiltrasi glikogen, kongesti, nekrosis dan degenerasi melemak pada organ hati, pneumonia interstisial pada paru, depleksi limfosit pada limpa, serta nefrosis dan kongesti pada ginjal.

**Kata kunci : toksisitas subkronis, 1-(2,5-dihidroksifenil)-3-(piridin-2-il)propenon, histopatologi**

## ABSTRACT

Anti-inflammatory drugs continue to experience development and innovation to date. Synthesis of chalcone derivatives 1-(2,5-dihydroxyphenyl)-3-(pyridine-2-yl)propenone has a percentage of DAI of  $50.05 \hat{\pm} 16.24$  and not significantly different from ibuprofen ( $57.22 \hat{\pm} 20.13$ ). The purpose of this study was conducted to determine the toxic symptoms and the form of toxic effects after treatment for 90 days.

This research process was carried out referring to the OECD Test Guideline 408; Repeated Dose 90-day Oral Toxicity Study in Rodents using a 6-week old Swiss mice female mice. There were 4 groups of test animals ( $n = 10$ ), namely 0.5% PVP control, 100, 200 and 400 mg / kg BB doses and 2 satellite groups ( $n = 5$ ), namely 0.5% PVP control satellite and 400 mg satellite / kg BB. Observations were made on clinical symptoms, weight development, development of food and drink intake and histopathological examination.

The results showed that the administration of test compounds 1-(2,5-dihydroxyphenyl)-3-(pyridine-2-yl)propenon orally repeatedly for 90 days caused clinical symptoms in the form of Piloereksi, physical weakness, slowing motion and tilted head. Besides giving test compounds also affect the intake of food and drink, even weight gain and the form of toxic effects in the form of glycogen infiltration, congestion, necrosis and fatty liver degeneration, interstitial pneumonia in the lungs, lymphocyte depletion of the spleen, and nephrosis and congestion in the kidneys.

**Keywords : subchronic toxicity, 1-(2,5-dihydroxyphenyl)-3-(pyridine-2-yl)propenon, histopatologic**