

## INTISARI

Kombinasi cyclophosphamide dan methotrexate dosis rendah efektif mencegah angiogenesis pada metastasis kanker payudara Tujuan penelitian ini mengetahui pengaruh pemberian ekstrak sarang semut (*myrcodia pendens*), *methotrexate* dan *cyclophosphamide* terhadap sebaran sel Polimorfonuklear (PMN) pada mencit C3H yang diinokulasi adenokarsinoma mammae

Penelitian eksperimental dengan *post test only control group design*, dilakukan pada 24 mencit strain C3H. Penelitian menggunakan 4 kelompok uji yang dibagi secara random. i) pakan standar dan aquadest, ii) perlakuan pemberian ekstrak sarang semut 8 mg, iii) kombinasi *methotrexate* 0,13 mg/minggu dan *Cylophosphamide* 0,13 mg / hari, dan iv) ekstrak sarang semut 8 mg/hari serta kombinasi *methotrexate* 0,13 mg/minggu dan *Cylophosphamide* 0,13 mg / hari, dilakukan selama 3 minggu. uji *Oneway Anova* dan *Post Hoc Test* untuk membandingkan jumlah sebaran sel PMN antar kelompok.

Hasil Jumlah sebaran sel PMN adenokarsinoma mammae pada kelompok I,II,III,IV : (1,83 ± 0,75), (3,67 ± 1,03), (6,83 ± 0,75), (8,67 ± 1,21). Uji post hoc Bonferroni diperoleh perbedaan jumlah PMN yang bermakna pada semua kelompok ( $p < 0,05$ ).

Kesimpulan terdapat pengaruh pemberian ekstrak sarang semut (*myrcodia pendens*), kombinasi *methotrexate* dan *cyclophosphamide* terhadap sebaran sel PMN tumor pada mencit C3H yang diinokulasi adenokarsinoma mammae.

**Kata kunci:** *cyclophosphamide*, *methotrexate* sel PMN, Adenokarsinoma mammae.

## ABSTRACT

**Background :** Ekstact of Myercodia pendens containing Tannin and flavonoid has been shown have antiploriferative and antimitotic activity .Combination of low dose of cyclophosphamite and methotrexate is effective to prevents angiogenesis in breast cancer metastasis .This study aimed to determine the effect of extract myercodia pendens on the number of the polimorfonuklear(PMN) cells in female C3H mice inoculated with adenocarcinoma mammae.

**Method :** in this experimental research with post test only control group design, 24 female C3H mice were randomly divided into 4 groups : i) standard diet and aquadest, ii) standard diet, extract myercodia pendens 8 mg / day, iii) standard diet, combination methotrexate 0.13 mg / week and Cylophosphamide 0.13 mg / day, iv) standard diet ,extract myercodia pendens 8 mg / day and combination methotrexate 0.13 mg / week, Cylophosphamide 0.13 mg / day respectively for 3 weeks Test. The PMN Adenocarcinoma mammae were quantified using a light microscope with a magnification of 400x in 5 fields of view. The data were analyzed with one way anova followed by post hoc bonferroni test.

**Results :** The mean number of PMN cell adenocarcinoma of mammae in group I, II,III,IV were  $(1.83 \pm 0.75)$ ,  $(3.67 \pm 1.03)$ ,  $(6.83 \pm 0.75)$   $(8.67 \pm 1.21)$  respectively. There was a significant difference among the groups ( $p < 0.05$ )

**Conclusion:** The administration of extract myercodia pendens , Combination of cyclophosphamite and methotrexate affects the PMN cell in female C3H mice inoculated adenocarcinoma mammae.

**Keywords:** cyclophosphamide, methotrexate, PMN cells, adenocarcinoma mammae