

**UNIVERSITI TEKNOLOGI MARA**

**THE EFFECTS OF IVERMECTIN ON  
BIOCHEMICAL PROFILE AND HISTOLOGICAL  
ANALYSIS OF LABORATORY MICE**

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## **ABSTRACT**

In the present study, the effect of single-dose of subcutaneous injection administration of ivermectin on biochemical parameters of laboratory mouse has been analyzed and compared with normal (control) animals. The histological structure of kidney and liver of laboratory mouse was also examined. All 60 mice with average weight of 30g were divided into 10 groups where 5 groups were treatment groups and the other 5 groups were control groups. Ectoparasites identification was done on Day-1. Blood samples and organ collections from one control group and one treatment group were obtained on Day-2, Day-7, Day-14, Day-21 and Day-28. Ivermectin was found to be safe in laboratory mouse as the results obtained from the Mann-Whitney U test in biochemical parameters (ALT, AST, Creatinine and Urea), p-values were greater than 0.05. For the histological study, kidney and liver of the laboratory mouse showed no significant changes in control and treatment groups. However, further research is desired to study the long term effect of ivermectin.