ACUTE TOXICITY TEST OF QUADRIVALENT INFLUENZA VACCINE FORMULA ON THE LIVER HISTOPATHOLOGY IN WHITE MALE RATS (*Rattus norvegicus*)

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ABSTRACT

This study aims to determine in histopathological changes of liver white rat that had been vaccinated quadrivalent influenza vaccine formula from P.T. Biofarma. This study used sample of 20 white male rats (*Rattus norvegicus*) aged 8 weeks with an average weight of 200-250 grams and divided randomly into two groups with different treatments. The treatments consist of administered intramuscular injection with 0.5 ml PBS (control) and 0.5 ml of quadrivalent influenza vaccine (treatment). Treatment given on day 0, then on day 14 all rats euthanized for liver sample collection. The histopathological changes of liver were examined by using modified Knodell scoring method. Data was analyzed using Mann Whitney U Test. The results showed that quadrivalent influenza vaccine provides no significant changes in necrosis cell, degeneration, and portal inflammation in hepar histopathology (p > 0.05).

**Key words**: quadrivalent influenza vaccine, toxicity, liver, histopathology.