## **ABSTRACT**

## POTENTIAL OF Hedyotis corymbosa (L) Lamk LEAF ETANOL EXTRACT INTO THE TOTAL OF NEW BLOOD VESSEL OF ORAL CANCER ON THE GALUR WISTAR RAT INDUCED BY BENZOPYRENE

**Background:** Oral cancer is a serious problem in some countries. This cancer on the  $6^{th}$  grade from all of the cancer in the world. Nowadays, therapy of oral cancer is surgery and chemotherapy which is need a lot of money and make many kind of side effect like leucopenia, alopesia, and mucositis. Hedyotis-corymbosa leaf has antiangiogenic effect that can inhibit progressivity of cancer. Purpose: To prove and to analyze the best dose Hedyotis-corymbosa leaf etanol extract to decrease of new blood vessel of oral cancer. Methods: This research is the laboratories experimental with post test only control group design. There are 24 Galur-wistar rat as research samples, and divided into four group, namely KK, KP 1 (375 mg/kg BB), KP 2 (750 mg/kg BB), and KP 3 (1500 mg/kg BB). All of this samples injected by benzopyrene intra muscular in oral twice a week for a month with the dose 8 mg/kg BB. Furthermore, each group was given Hedyotiscorymbosa leaf etanol extract with the dose 375 mg/kg BB, 750 mg/kg BB, and 1500 mg/kg BB for ten days. All samples were sacrificed and processing for histopatological evaluation among group. The data were tabulated and analyze statistically. **Result:** The total of new blood vessel in control group is higher than KP 1, KP 2, and KP 3. This result prove that Hedyotis-corymbosa leaf etanol extract can inhibit development of new blood vessel of oral cancer. The dose 750 mg/kg BB has the lowest total of new blood vessel compared with another dose. It means that 750 mg/kg BB is the best dose for inhibit progressivity of oral cancer. Conclusion: Hedyotis corymbosa leaf etanol extract can inhibit the new blood vessel of oral cancer, expecially in dose of 750 mg/kg BB.

**Keywords:** benzopyrene, Hedyotis corymbosa, new blood vessel, oral cancer