

## **EFFECT OF BLOOD K3EDTA BLOOD DELAYS ON TRUMBOSIT AMOUNT USING AUTOMATIC HEMATOLOGY ANALYZER**

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### **ABSTRACT**

Examination of platelet counts one of the most frequent hematologic examinations. The sample used is blood K3EDTA is a sample that should be directly examined. Delayed hematologic examination will affect the measurement of the hematology analyzer in which the technology used relies on the size and nature of the fluid from the cell to differentiate the population of each cell. This research wanted to prove whether or not there is any change of platelet count if done by delaying the examination time that the sample is stored in room temperature. Using Hematology Analyzer. Type of quantitative research with experimental approach. This research was conducted on 9 samples from the employees of Puskesmas Wonosalam I Kabupaten Demak. 3 ml venous blood sample in K3EDTA vacutainer was done routine hematologic examination using Procan PE-6800 Hematology Analyzer tool. Anova One Way statistical test used SPSS software to analyze the effect of delay of examination on platelet count at 60, 120 and 180 minute delays. The average number of platelets examined immediately was 312,000 cells /  $\mu$ l of blood, 60 minutes delay was 289 000 cells /  $\mu$ l of blood, the delay of 120 minutes was 275,000 cells /  $\mu$ l of blood and 180 minutes delay was 258,000 cells /  $\mu$ l of blood. Based on statistical test results there are significant differences from the results of examination of platelet counts of K3EDTA blood samples at room temperature with delay duration of 120 and 180 minutes. The longer the delay time then the number of platelets examined will decrease further. The percentage decrease of platelet count at 60 minute delay is 7.37%, 120 minutes delay is 11.86%, and 180 minutes delay is 17.31%.

**Keywords** : Number of platelets, K3EDTA blood, duration of examination check, immediate examination.