

# **The Effect of K<sub>3</sub>EDTA Vacutainer Tube Blood Postponement at 25°C Temperature on Erythrocyte Morphology**

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## **ABSTRACT**

Blood sampling using K<sub>3</sub>EDTA vacutainer tube often does not pay attention to time and temperature in storage, thus affecting the results of examination in peripheral smear preparation, especially erythrocyte morphology which has time limit for storing blood samples of maximum time an hour at normal temperature (25°C). The aim of this research is identify of erythrocytes morphology by postponed blood samples storage at 25°C for 0 hours (immediately examined), 1 hour, 2 hours, and 3 hours. The research type is analytic experimental research. Samples were obtained directly with Simple Random Sampling as many as 6 samples, each 3 ml did not experience hemolysis and was inserted into K<sub>3</sub>EDTA vacutainer tube and then examined to identify the erythrocytes morphology. The results of this study showed criteria both storage postponed in 0 hours of samples as much as 4 preparations, and the length of postponed sample of 3 hours as much as 1 preparation. Low criteria is in two hours of postponed sample of 2 preparations, and the higher 3-hour postponed in storing samples of 5 preparations. Kruskal-Wallis in alternative statistical test showed a significance value of  $0.761 > 0.05$  so it can be concluded that there was no effect of postponing blood samples storage of K<sub>3</sub>EDTA vacutainer tubes at 25°C to erythrocytes morphology.

Key words: K<sub>3</sub>EDTA vacutainer tube, Erythrocytes Morphology.