

INTISARI

Magang, I.J. 2023. “Perbedaan Hasil Pemeriksaan Jumlah Retikulosit Metode Konvensional (Basah) Dengan Metode Automatic (Flowcytometry) Pada Pasien Anemia”. Program Studi D4 Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi Surakarta.

Retikulosit berasal dari proses pematangan normoblast di sumsum tulang. Retikulosit akan masuk ke dalam sirkulasi darah tepi dan bertahan kurang lebih selama 24 jam sebelum akhirnya mengalami proses pematangan dan akan menjadi eritrosit. Proses pembentukan sel darah merah yang meningkat ditandai dengan peningkatan retikulosit sedangkan penurunan atau tidak adanya retikulosit menunjukkan kegagalan fungsi sumsum tulang. Pemeriksaan retikulosit dapat dilakukan menggunakan dua cara yaitu dengan cara manual (basah dan kering) dan *automatic (Flowcytometry)*. Tujuan penelitian untuk mengetahui perbedaan hasil pemeriksaan jumlah retikulosit metode konvensional (basah) dengan metode *automatic (flowcytometry)* pada pasien anemia.

Jenis penelitian yang digunakan adalah penelitian observasional analitik dengan pendekatan *cross sectional*. Populasi dalam penelitian ini adalah semua pasien yang melakukan pemeriksaan dan terdiagnosa anemia, dengan jumlah sampel sebanyak 30 menggunakan teknik quota sampling. Penelitian dilakukan di Laboratorium Patologi Klinik RSUD Dr. Moewardi dan Laboratorium Hematologi Universitas Setia Budi pada bulan April-Mei 2023. Data diolah menggunakan *Saphiro-Wilk* dan Uji *Wilcoxon Test*.

Berdasarkan uji statistik yang telah dilakukan diperoleh hasil bahwa tidak terdapat perbedaan yang bermakna antara hasil pemeriksaan retikulosit metode konvensional (basah) dengan metode *automatic (flowcytometry)* pada sampel pasien anemia atau dengan nilai $p=0.967>0.05$.

Kata kunci: Retikulosit, Metode Konvensional, Metode Automatic, Anemia.

ABSTRACT

Magang, I.J. 2023. "Differences in the results of the examination of the number of reticulocytes conventional method (wet) with the automatic method (flowcytometry) in anemic patients". D4 Study Program of Medical Tecnology, Health Science Faculty, Setia Budi University.

Reticulocytes originate from the normoblast maturation process in the bone marrow. Reticulocytes will enter the peripheral blood circulation and last for approximately 24 hours before finally undergoing a maturation process and will become erythrocytes. The process of increased red blood cell formation is characterized by an increase in reticulocytes, while a decrease or absence of reticulocytes indicates a failure of bone marrow function. Reticulocyte examination can be done in two ways, namely manually (wet and dry) and automatic (Flowcytometry). The purpose of the study was to determine the difference in the results of the examination of the number of reticulocytes conventional method (wet) with the automatic method (flowcytometry) in anemic patients.

The type of research used is analytical observational research with a cross sectional approach. The population in this study was all patients who were examined and diagnosed with anemia, with a total of 30 samples using the quota sampling technique. The research was conducted at the Clinical Pathology Laboratory of Dr. Moewardi Hospital and the Hematology Laboratory of Setia Budi University in April-May 2023. Data was processed using Saphiro-Wilk and Wilcoxon Test.

Based on statistical tests that have been carried out, it was found that there was no significant difference between the results of conventional (wet) reticulocyte examination and the automatic method (flowcytometry) in samples of anemic patients or with a value of $p = 0.967 > 0.05$.

Keywords: Reticulocytes, Conventional Method, Automatic Method, Anemia.