

INTISARI

Talnoni, M.Y.M. 2022. Analisis Hasil *Quality Control* Alat *Hematology Analyzer* di Laboratorium RSUP Surakarta. Program Studi D4 Analisis Kesehatan, Fakultas Ilmu Kesehatan, Universitas Setia Budi.

Quality Control adalah suatu proses yang dilakukan untuk evaluasi proses pengujian untuk memastikan bahwa sistem mutu berjalan dengan benar untuk menjamin hasil pemeriksaan laboratorium. Di RSUP sudah dilakukan QC harian tapi tidak dievaluasi lebih mendalam sehingga peneliti tertarik untuk melakukan penelitian ini. Tujuan dari penelitian ini untuk mengetahui hasil analisis data *quality control* alat *hematology analyzer* di laboratorium RSUP Surakarta.

Metode penelitian yang digunakan adalah kuantitatif non-eksperimen dengan jenis deskriptif observasional yaitu menjabarkan data statistik tanpa melakukan perlakuan secara langsung pada variabel penelitian. Penelitian dilakukan dengan menganalisis data hasil *quality control hematology analyzer* tahun 2021 di laboratorium RSUP.

Hasil *quality control* pada parameter hemoglobin, hematokrit, leukosit, eritrosit, dan trombosit berturut-turut KV (0,69%-1,69%) d% (-1,36%-5,44%), KV (0,87%-2,34%) d% (-6,20%-6,26%), KV (1,51%-2,10%) d% (-3,58%--0,26%), KV (0,77%-2,10%) d% (-7,72%-0,70%), KV (2,39%-15,56%) d% (4,69%-60,71%). Kesimpulan dari penelitian ini adalah nilai KV tidak melebihi batas maksimum yaitu <5% pada beberapa parameter kecuali trombosit bulan Mei, September, dan Oktober. Pada perhitungan nilai bias (d%) terdapat nilai yang melebihi batas maksimum yaitu <10% pada parameter trombosit bulan April, Mei, September, dan Oktober. Jumlah kesalahan pada grafik *Levey-Jennings* berdasarkan *Westgard Multirules* ditemukan pelanggaran aturan peringatan (1_{2s}) dan aturan penolakan (1_{3s}, R_{4s}, 4_{1s}, dan 10_x).

Kata Kunci : *Quality Control, Hematology Analyzer, Akurasi, Presisi, Koefisien Variasi, Nilai bias*

ABSTRACT

Talnoni, M.Y.M. 2022. *Analysis of the Quality Control Results of Hematology Analyzer at the Laboratory of RSUP Surakarta*. Bachelor's degree Program in Medical Laboratory Technology, Health Sciences Faculty, Setia Budi University.

Quality Control is a process carried out for the evaluation of the testing process to ensure that the quality system is running properly to guarantee the results of laboratory examinations. At the RSUP, daily QC has been carried out but it has not been evaluated in depth so that researchers are interested in conducting this research. The purpose of this study was to determine the results of the analysis of quality control data on a hematology analyzer in the laboratory of RSUP Surakarta.

The research method used is non-experimental quantitative with descriptive observational type, which describes statistical data without direct treatment of research variables. The research was conducted by analyzing the results of the quality control hematology analyzer in 2021 in the RSUP laboratory.

The results of quality control on the parameters of hemoglobin, hematocrit, leukocytes, erythrocytes, and platelets, respectively KV (0.69%-1.69%) d% (-1.36%-5.44%), CV (0.87 %-2.34%) d% (-6.20%-6.26%), CV (1.51%-2.10%) d% (-3.58%--0.26%), kv (0.77%-2.10%) d% (-7.72%-0.70%), KV (2.39%-15.56%) d% (4.69%-60.71 %). The conclusion of this study is that the CV value does not exceed the maximum limit of <5% in several parameters except platelets in May, September, and October. In the calculation of the bias value (d%) there is a value that exceeds the maximum limit of <10% in the platelet parameters in April, May, September, and October. The number of errors on the Levey-Jennings chart based on Westgard Multirules found violations of the warning rule (1_{2s}) and the rejection rule (1_{3s}, R_{4s}, 4_{1s}, and 10_x).

Keywords : Quality Control, Hematology Analyzer, Accuracy, Precision, Coefficient of Variation, Bias Value