

## ABSTRAK

Pengukuran kadar kreatinin pada serum ialah salah satu parameter laboratorium klinis yang dipakai untuk mengevaluasi fungsi ginjal. Peningkatan kadar kreatinin yang signifikan sering menjadi tanda awal timbul munculnya penyakit ginjal. Metode Jaffe nondeproteinisasi dan metode enzimatik ialah metode yang digunakan laboratorium klinik untuk mengukur kadar kreatinin serum. Pengendalian mutu pada akurasi dan presisi metode Jaffe nondeproteinisasi terhadap metode enzimatik perlu dilakukan guna memastikan bahwa hasil pemeriksaan yang diberikan kepada pasien benar-benar valid. Tujuan penelitian ini ialah untuk mengevaluasi akurasi dan presisi pengukuran kadar kreatinin memakai metode Jaffe nondeproteinisasi terhadap metode enzimatik serum non-ikterik dan ikterik. Metode yang digunakan untuk menganalisis data ialah deskriptif analitik untuk menganalisis persentase Ketelitian dan Ketepatan. Penelitian ini dilakukan di laboratorium RSUD Haji Provinsi Jawa Timur dan di Laboratorium Farmalab dengan jumlah sampel sebanyak 60 serum. Hasil penelitian memperlihatkan nilai bias (inakurasi) pengukuran kadar kreatinin metode Jaffe nondeproteinisasi terhadap metode enzimatik pada serum ikterik sebesar 10%, serum non-ikterik kelompok responden normal 2,53% dan serum non-ikterik kelompok responden abnormal -2,67%. Koefisien variasi pengukuran kadar kreatinin metode Jaffe nondeproteinisasi pada serum ikterik kelompok responden normal ialah 2,41%, serum ikterik kelompok responden abnormal 3%, serum non-ikterik kelompok responden normal 2,3%, dan serum non-ikterik kelompok responden abnormal 0,80%. Dari hasil penelitian, diambil kesimpulan bahwa Ketelitian dan Ketepatan pengukuran kadar kreatinin memakai metode Jaffe nondeproteinisasi terhadap metode enzimatik pada serum ikterik dan non-ikterik memperlihatkan hasil yang baik, sehingga hasil pemeriksaannya bisa dipercaya.

**Kata Kunci :** Akurasi, Presisi, Kreatinin, Metode Jaffe nondeproteinisasi, Metode Enzimatik

## ABSTRACT

One of the clinical laboratory tests used to evaluate the function of the kidneys is the measurement of the creatinine level in the serum. A significant increase in creatinine levels is often the first sign of kidney disease. The non-deproteinized Jaffe method and the enzymatic method are methods used by clinical laboratories to measure serum creatinine levels. Quality control of the accuracy and precision of the non-deproteinized Jaffe method versus the enzymatic method is necessary to ensure that the test results provided to patients are truly valid. This study was designed to evaluate the accuracy and precision of the non-deproteinized Jaffe Creatinine Assay compared to the enzymatic method using non-icteric and icteric serum. Descriptive analysis to analyze the percentage of accuracy and precision was used to analyze the data. This study was conducted in Jawa Timur RSUD Haji laboratory and Farmalab laboratory with a total sample size of 60 sera. The results showed that the bias value (inaccuracy) of measuring creatinine levels of non-deproteinized Jaffe method against enzymatic method in icteric serum was 10%, non-icteric serum of normal respondent group was 2.53%, and non-icteric serum of abnormal respondent group was -2.67%. The coefficient of variation of the creatinine level measurement of the non-deproteinized Jaffe method in the icteric sera of the normal group of subjects was 2.41%, in the icteric sera of the abnormal group of subjects was 3%, in the non-icteric sera of the normal group of subjects was 2.3%, and in the non-icteric sera of the abnormal group of subjects was 0.80%. From the results of the study, it was concluded that the accuracy and precision of the measurement of creatinine levels by the non-deproteinized Jaffe method compared with the enzymatic method in icteric and non-icteric serum showed good results, so the results of the study were trustworthy.

**Keywords:** Accuracy, precision, creatinine, Jaffe non-deproteinisation method, enzymatic method