

## ABSTRAK

**Latar Belakang:** Pemeriksaan kadar ureum dipengaruhi tahap pra analitik sebagai faktor kesalahan terbesar, salah satunya adalah penyimpanan spesimen sebagai antisipasi apabila terjadi penambahan pemeriksaan ataupun mengkonfirmasi hasil pemeriksaan sebelumnya. Namun penyimpanan serum dalam tabung SST tidak dilakukan pemisahan dari bekuan darah. Penyimpanan serum harus dilakukan dengan baik dan benar untuk menghindari terjadinya penurunan kualitas sampel.

**Tujuan:** Mengetahui boleh atau tidak boleh melakukan pemeriksaan kadar ureum menggunakan serum dalam tabung separator yang segera diperiksa dan 7 hari disimpan pada suhu 2-8°C.

**Metode:** Jenis penelitian ini adalah *pre-experiment* dengan desain penelitian *one group pretest posttest design*. Sampel penelitian ini sebanyak 40 sampel serum sisa pasien rawat jalan RSUD Panembahan Senopati.

**Hasil:** Rerata kadar ureum yang segera diperiksa (45.65 mg/dl), rerata kadar ureum yang disimpan selama 7 hari pada suhu 2-8°C (43.85 mg/dl). Persentase selisih hasil pemeriksaan kadar ureum yang segera diperiksa dan yang disimpan selama 7 hari pada suhu 2-8°C sebesar 4%. Perbedaan kadar ureum dianalisis statistik dengan uji *wilcoxon* didapatkan nilai signifikansi (*Asymp. Sig*) 0.008 ( $p < 0.05$ )

**Kesimpulan:** Boleh melakukan pemeriksaan kadar ureum menggunakan serum dalam tabung separator yang segera diperiksa dan 7 hari disimpan pada suhu 2-8°C.

**Kata Kunci:** Serum, Kadar Ureum, Waktu Simpan, Suhu 2-8°C

## ABSTRACT

**Background:** The examination of ureum levels is influenced by the pre-analytical stage as the biggest error factor, one of which is the storage of specimens in anticipation of additional examinations or confirming the results of previous examinations. However, serum storage in SST tubes is not separated from blood clots. Serum storage must be done properly and correctly to avoid a decrease in sample quality.

**Objective:** To determine whether or not it is permissible to check ureum levels using serum in separator tubes that are immediately checked and 7 days stored at 2-8°C.

**Methods:** This type of research is a pre-experiment with a one group pretest posttest design. The samples of this study were 40 samples of serum left over from outpatients of Panembahan Senopati Hospital.

**Results:** The mean ureum level that was checked immediately (45.65 mg/dl), the mean ureum level that was stored for 7 days at 2-8°C (43.85 mg/dl). The percentage difference between the results of the examination of ureum levels that were immediately examined and those that were stored for 7 days at a temperature of 2-8°C was 4%. The difference in ureum levels was analyzed statistically with the *wilcoxon* test and the significance value (*Asymp. Sig*) was 0.008 ( $p < 0.05$ ).

**Conclusion:** It is okay to check ureum levels using serum in separator tubes that are checked immediately and 7 days stored at 2-8°C.

**Keywords:** Serum, Ureum Level, Storage Time, Temperature 2-8°C