

ABSTRAK

Peningkatan pelayanan laboratorium kesehatan sangat berhubungan dengan pemantapan mutu laboratorium kesehatan. Serum kontrol merupakan bagian dari pemantapan mutu laboratorium kesehatan. Serum *lyophilized homemade* merupakan suatu jenis serum kontrol buatan sendiri. Penelitian ini bertujuan untuk mengetahui stabilitas serum kontrol *lyophilized homemade* terhadap kadar SGOT dan SGPT. Penelitian ini menggunakan metode eksperimental dengan bahan penelitian *pooled sera* yang disimpan pada suhu (-2°C) – (-4°C) dan -20°C selama 8 minggu. *Pooled sera* didapatkan dari responden yang tidak memiliki riwayat penyakit, terbebas dari HIV, AIDS, dan HbsAg. Penelitian dilakukan di Laboratorium Reference dan Laboratorium Kimia Klinik Poltekkes Surabaya. Hasil penelitian dilakukan analisa data menggunakan uji regresi linear. Parameter SGOT pada suhu *freezer* (-2) – (-4)°C didapatkan hasil lama penyimpanan berpengaruh sebesar 90,97% dengan komponen *error* 9,03%. Pada suhu *freezer* (-20)°C didapatkan hasil lama penyimpanan berpengaruh sebesar 78,71% dengan komponen *error* 21,29%. Pada parameter SGPT dengan suhu *freezer* (-2) – (-4)°C didapatkan hasil lama penyimpanan berpengaruh sebesar 96,71% dengan komponen *error* 3,29%. Pada suhu *freezer* (-20)°C didapatkan hasil lama penyimpanan berpengaruh sebesar 91,47% dengan komponen *error* 8,53%. Hasil pemeriksaan SGOT dan SGPT tidak ada yang melewati batas $\pm 2SD$ dan $\pm 3SD$ dan CV pada pemeriksaan SGOT dan SGPT tidak melewati batas CCV sehingga dikatakan stabil.

Kata kunci: serum kontrol *lyophilized homemade*, SGOT, SGPT.

ABSTRACT

Improving health laboratory services is closely related to strengthening the quality of health laboratories. Serum control is part of the quality assurance of health laboratories. Lyophilized homemade serum is a type of homemade control serum. This research aims to determine the stability of serum control lyophilized homemade against SGOT and SGPT levels. This research used an experimental method with pooled sera as research material stored at (-2°C) – (-4°C) and -20°C for 8 weeks. Pooled sera were obtained from respondents who had no history of disease, were free from HIV, AIDS, and HBsAg. The research was conducted at the Reference Laboratory and Clinical Chemistry Laboratory Poltekkes Surabaya. The results of the study were data analysis using linear regression test. The SGOT parameter at freezer temperature (-2) – (-4)°C showed that the storage time had an effect of 90.97% with an error component of 9.03%. At freezer temperature (-20)°C, the result of storage time has an effect of 78.71% with an error component of 21.29%. In the SGPT parameter with freezer temperature (-2) – (-4)°C, the result of storage time has an effect of 96.71% with an error component of 3.29%. At freezer temperature (-20)°C, the result of storage time has an effect of 91.47% with an error component of 8.53%. The results of the SGOT and SGPT examinations did not exceed the limits of $\pm 2SD$ and $\pm 3SD$ and the CV on the SGOT and SGPT examinations did not exceed the CCV limits so they were said to be stable.

Keywords: *serum control lyophilized homemade, SGOT, SGPT.*