

## **ON FRAILTY MODELS FOR KIDNEY INFECTION DATA WITH EXPONENTIAL BASELINE DISTRIBUTION**

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### **ABSTRACT**

The paper deals with the estimation of survival function with the use of linear hazard function and exponential base line distribution. Considering cox PH model with exponential base line distribution, the maximum likelihood estimator of general linear parametric function of regressors and frailty parameter has been obtained by taking very general form of the regression matrix and estimator being biased its MSE is obtained. Further the same has been estimated by least square theory using Gauss-Markoff model and it has been compared with usual estimator. The results have been applied by taking kidney infection data.

**KEYWORDS:** AN, BLUE, Frailty Models, GN, MLE, PKD