

# Parametric/Nonparametric Hybrid Two Sample Problem by Empirical Likelihood with Censored Data

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*Abstract:* We use the hazard formulation of the censored data empirical likelihood to study the two sample parametric/nonparametric hybrid model. We demonstrate that a proper Empirical Likelihood definition that takes into account of censoring will result an empirical likelihood ratio test with a proper chi-square limiting distribution under null hypothesis. We illustrate the use of the proposed test by way of testing the ROC curve with censored data, among others. Results are compared to Zhou & Liang (2005 Biometrika).

Joint work with Hua Liang, Department of Biostatistics, University of Rochester.