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Jackknife empirical likelihood for linear transformation models with right censoring

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Abstract A class of linear transformation models with censored data was proposed as a generalization of Cox models in survival analysis. This paper develops inference procedure for regression parameters based on jackknife empirical likelihood approach. We can show that the limiting variance is not necessary to estimate and the Wilk's theorem can be obtained. The jackknife empirical likelihood method benefits from the simpleness in optimization using jackknife pseudo-value. In our simulation studies, the proposed method is compared with the traditional empirical likelihood and normal approximation methods in terms of coverage probability and computational cost.

Keywords Linear transformation model · Empirical likelihood · Jackknife · Coverage probability

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