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ATTAINABLE KIEFER BOUNDS USING CENSORED SAMPLES FROM LEFT TRUNCATED FAMILY OF DISTRIBUTIONS

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ABSTRACT

We consider left truncated family of distributions in which the densities are in their natural form. Identifying suitable prior densities we compute Kiefer bounds on variance of unbiased estimators of the parametric functions involved in densities. Type II left censored and doubly censored samples are taken into consideration. Further, the bounds are shown to be attained by variances of estimators based on the sample considered. Results are illustrated through examples. The bounds based on complete and censored samples are compared.

KEYWORDS: Censored Samples, Ideal Estimation Equation, Kiefer Bound, Left Truncated Distribution, Minimum Variance Unbiased Estimator, Parametric Function, Variance Bound