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Robust and efficient parametric estimation for censored survival data

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Abstract We fit parametric models to survival data in the case of censoring and (outlier) contamination. To do so, we adapt the robust density power divergence methodology of Basu, Harris, Hjort, and Jones (*Biometrika*, 85, 549–559, 1998) to the case of censored survival data. Asymptotic properties, simulation performance and application to data are provided.

Keywords Density power divergence \cdot Kaplan–Meier \cdot L_2 -estimator \cdot M-estimator