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**Simultaneous confidence bands for ratios of survival functions via empirical likelihood.**

(English summary)

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In the present article, a simultaneous confidence band for the ratio of two survival functions based on independent right-censored data is derived. Earlier, the authors studied such bands for the difference of two survival functions, but here they focus on the ratio which provides a more appropriate comparison in some applications, e.g., in comparing two treatments in biomedical settings. The present approach is formulated in terms of empirical likelihood and makes it possible to avoid the use of simulation techniques that are often needed for Wald-type confidence bands. By the transformation-preserving property, confidence bands are also obtained for the difference in the cumulative hazard functions. The approach is illustrated with a real data example.

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