

## NONPARAMETRIC SURVIVAL COMPARISONS FOR INTERVAL-CENSORED CONTINUOUS DATA

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**Abstract** The problem of two-sample survival comparisons has been investigated by several authors. Pepe and Fleming (1989) introduced a test for right-censored survival data. Petroni and Wolfe (1994) considered a similar test where the survival times can only take on a finite number of values. We extend their tests to general types of interval-censored data and introduce a class of test statistics based on integrated weighted differences between the two estimated survival functions. We derive the asymptotic distributions of the generalized test statistics, present a bootstrap test procedure and apply the proposed method to a set of interval-censored data from a breast cancer study.