ESTIMATION OF THE MEDIAN SURVIVAL TIME UNDER RANDOM CENSORSHIP*

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An estimator of the median survival time m is
constructed from survival data subject to random right
censorship. For a broad class of nonparametric survival
and censoring distributions, the asymptotic theory of
the estimator is derived including its consistency in
p-th mean, asymptotic normality, and a.s. convergence.

1. Introduction.

In several longitudinal studies the median and mean survival times are
considered important summary statistics describing the survival experience of
the sample under observation. The mean survival time is a commonly used
statistic in the case of no censoring. This is due to its ease of computation
and the considerable literature available on its properties. However, its
competitor, the median survival time may be preferred with censored survival
data because it is less sensitive to large observations and to the censoring
pattern. The purpose of this article is to introduce an estimator of the median
survival time which has applications in a variety of situations encountered in