Meeting: 1006, Lubbock, Texas, AMS CP 1, Session for Contributed Papers

1006-62-23Seung-Hwan Lee* (slee2@iwu.edu), Mathematics and Computer Science, Illinois Wesleyan
University, PO Box 2900, Bloomington, IL 61702, and Song Yang. Checking the Censored
Two-Sample Accelerated Life Model using Integrated Cumulative Hazard Difference.

Some new statistical tests for the censored two-sample accelerated life model are discussed. Using some estimating functions, certain stochastic processes are introduced. They can be described by martingale residuals, and, given the data, conditional distributions can be approximated by zero mean Gaussian processes. Unlike usual methods regarding the model checking for the two-sample accelerated life model, the new methods provide asymptotically consistent tests against a general departure from the model. Some graphical methods are also discussed in terms of simulations. (Received December 20, 2004)