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Seung-Hwan Lee* (slee2@iwu.edu). *Checking the Censored Two-Sample Accelerated Life Model using Integrated Cumulative Hazard Difference.*

New statistical tests for the censored two-sample accelerated life model are discussed. From the estimating functions using integrated cumulative hazard difference, stochastic processes are constructed. They can be described by martingale residuals, and, given the data, conditional distributions can be approximated by zero mean Gaussian processes. The new methods, based on these processes, provide asymptotically consistent tests against a general departure from the model. A graphical method is also discussed. In various numerical studies, the new tests performed better than the existing method, especially when the hazard curves cross. The proposed procedures are illustrated with two real data sets. (Received September 17, 2007)