SEMIPARAMETRIC ESTIMATION WITH CORRELATED RECURRENT EVENT DATA UNDER INFORMATIVE MONITORING

Akim Adekpedjou[1] and Jonathan Quiton[2]

University of Missouri-Rolla, United States[1]
Western Kentucky University, United States[2]

Consider a recurrent event data where frailty models are used to account for correlations among the inter-event times within each unit under study. In this setting, consider the problem of semiparametric estimation of the inter-event time distribution under informative monitoring and using a Gamma frailty model. In this talk, we present the Nelson-Aalen and Kaplan-Meier type estimators for the inter-event time distribution function, as well as their large and finite sample properties. Finally, these estimators will be demonstrated by applying to biomedical and engineering data sets.