On Binary Longitudinal Data with time Independent Covariates

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ABSTRACT

This paper considers the extensions of logistic regression to the case where the binary outcome variable is observed repeatedly over time for each subject.. We proposed two working models that lead to consistent estimate of the regression parameters and of their variances under mild assumption about time dependence within each subject's data. The efficiency of the proposed estimators is examined. An analysis of occurrence of common disease and condition in children with the parental information is presented to illustrate the proposed method.