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## A General Class of Semiparametric Rates Models for Recurrent Event Data

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**Abstract** In this article, we propose a general class of semiparametric rates models for recurrent event data, which includes the proportional rates model and a semiparametric additive rates model as special cases. For the inference on the model parameters, estimating equation approaches are developed. The consistency and asymptotic normality properties of the proposed estimators are established.

**Key words** semiparametric rates models; recurrent event; marginal regression;  
estimating equation

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