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# Estimability of semiparametric switching meta-regression model\*

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**Abstract.** The primary objective of this study is to assess the estimability of the proposed model, referred to as the mixed semiparametric switching meta-regression model. The model is expressed as a Generalized Additive Model (GAM), which accommodates a high-dimensional set of covariates not usually considered in metadata. Furthermore, the applicability of the mixed semiparametric switching meta-regression model in meta-analysis settings is established in this study.

**AMS Subject Classification (2020):** 03C30, 03C65

**Keywords:** Meta-regression, mixed-effect model, switching regression, Semi-parametric

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