

Optimal Designs in Multiple Group Random Coefficient Regression Models

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Abstract

Random coefficients regression (RCR) models have been introduced in bio-sciences for selection purposes and are nowadays popular in many fields of statistical applications, for example in medical research and pharmacology. Optimal designs for the estimation of population (fixed) parameters are well discussed in the literature (see e. g. [2]). RCR models with known population (mean) parameters were investigated by [1]. [3] proposed solutions for optimal designs for the prediction of individual random parameters in models with unknowns population mean under assumption of the same treatment for all individuals. This talk presents analytical results for optimal designs for the prediction in multiple group RCR models, where different treatments are allowed for different groups.

Keywords

Mixed models, Multiple group models, Optimal designs, Prediction.

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References

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