

Study of A -optimality for the univariate logistic model with random effects

M.T. Santos Martín¹, J. M. Rodríguez Díaz², C. Tommasi³

SUMMARY

Optimal designs for the logistic regression model have been extensively studied in the context of fixed effects, but the interest in finding optimal designs for the model with random effects is steadily increasing (see for instance [1]). Recently [2] have studied optimum designs for logistic models with random intercept. In this work A -optimal designs are derived for the univariate logistic regression model with normally distributed random coefficients. An A -optimum design minimizes the average of the variances of the optimal estimates for the parameters, and some integral approximations are provided which are useful to compute numerically the designs.

Keywords: Logistic regression models, optimal design of experiment

AMS Classification: 62K05

References

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¹Department of Statistics. University of Salamanca
maysam@usal.es

²Department of Statistics. University of Salamanca
juanmrod@usal.es

³Department of Economics, Business and Statistics. University of Milan
chiara.tommasi@unimi.it