Prediction Intervals for a Future Observation in COX's Proportional Hazards Model

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Abstract In this paper, we construct a naive prediction interval for a future observation with a given covariate in the proportional hazards model, which is a popular tool for studying effects of covariates. We calibrate a prediction interval in order to get one with exact coverage probability using the idea of Escobar and Meeker(1999). Further, we illustrate our results using the Prentice lung cancer data.

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