## <English Version>

## Spatio-temporal Analysis with Risk Factors for Five Major Violent Crimes<sup>1)</sup>

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Summary: To examine the risk of the five major violent crimes that are causing serious problems in modern society, we develop the spatio-temporal models of the five major violent crimes. In the spatio-temporal model, various risk factors are considered to identify factors that significantly affect relative risk, and the best model is selected in terms of the deviance information criteria. Through this study, efficient strategies can be established to sustain people's safe everyday living by analyzing important risk factors affecting five major violent crimes and the relative risk of each region.

Keywords: Five major violent crimes, relative risk mapping, spatio-temporal model

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