



統計科學研究所

INSTITUTE OF  
STATISTICAL SCIENCE



S.E.M.I.N.A.R.



S.T.A.T.A.S.

## Postdoc Seminar

Title : Assessing a missing hazard ratio and confidence interval  
from a result of a published subgroup analysis

Speaker : Ms. 武富 奈菜美 (Taketomi, Nanami)

( Department of Biostatistics, Graduate School of  
Medicine, Kurume University, Fukuoka, Japan )

Time : 14:00 ~15:30 , Friday, Jan 13, 2023

Place : Auditorium, B1F, Institute of Statistical Science, AS

### Abstract

Results of subgroup analysis provide researchers valuable information in establishing research hypothesis for new clinical studies. However, it is often the case that the subgroups employed in a published paper miss the subgroup that researchers are interested in. We develop in this paper a method for assessing hazard ratio and its confidence interval in any subgroup that researchers are interested in based on the results of subgroup analysis given in a published paper, by focusing on a comparative clinical study of treatment group vs. control group having survival time as the primary endpoint, where subgroups are made by dividing the range of continuous bio-marker. The method is applied to Phase III clinical trial of comparing Nivolumab vs. Docetaxel for lung cancer where PD-L1 expression level is used to establish subgroups.

Keywords: biomarker, confidence interval, Cox proportional hazards model, hazard ratio, subgroup analysis.

※ Tea reception starts at 13:40.

※ Lecture in English. Online live streaming through Webex will be available.