広島統計談話会

Hiroshima Statistics Study Group

第 300 回談話会を下記のように開催致しますので
御参集下さいますようご案内申し上げます。

You are cordially invited to the 300th meeting as scheduled below.

日　時：　　　2016 年 9 月 16 日（金）15:00 –
Date　:　　　September 16, 2016 (Fri) 15:00 –

場　所：　　　放射線影響研究所　比治山ホール
Place　:　　　RERF Hijiyama Hall

演　者：　　　中島　栄二（放射線影響研究所　統計部　研究員）
Speaker　:　　Eiji Nakashima, Ph.D.
　　　　　　　Research Scientist
　　　　　　　Department of Statistics, RERF

演　題：　　　「区分的指数モデルによる死亡加速時間の推定：寿命調査の全固形がん
　　　　　　　死亡率データ１９５０－２００３への応用」
Title　:　　　"Estimating Accelerated Failure Time using Piecewise Exponential Model:
　　　　　　　Application to LSS All Solid Cancer Mortality Data 1950-2003"

要　約：

Summary:

In the analysis of the cohort follow-up data such as the Life Span Study (LSS) cohort of atomic-bomb survivors at Radiation Effects Research Foundation, the major time scale is usually (attained) age for the hazard model and time since exposure (TSX) for the accelerated failure time (AFT) model. Piecewise exponential or grouped Poisson model used for the analysis of large scale follow-up data is a parametric extension of exponential model. Under the general parametric continuous hazard model including the excess relative, excess absolute risk and AFT models, it is known that the general parametric hazard regression model is equivalent to piecewise exponential model. We transform the piecewise exponential ERR model into the failure time acceleration rate (FTAR) model depending on the covariates and estimate the expected acceleration time (EAT) from the FTAR model. We illustrate the method using the all solid cancer mortality follow-up data of the LSS atomic-bomb survivors. Comparison between cause specific death and all causes death is discussed.