

広島統計談話会
Hiroshima Statistics Study Group

第 261 回談話会を下記のように開催致しますので
御参集下さいませようご案内申し上げます。

You are cordially invited to the 261st meeting as scheduled below.

日 時 : 20 10 年 12 月 17 日 (金) 15:00 –
Date : December 17, 2010 (Fri) 15:00 –
場 所 : 放射線影響研究所 講堂
Place : RERF Auditorium
演 者 : ロバート D. アボット 博士 (放射線影響研究所統計部 主任研究員)
Speaker : Robert D. Abbott, Ph.D.
Senior Research Scientist
Department of Statistics, RERF
演 題 : 「ロジスティック回帰を用いた生存解析における正確な検定のための簡便
な方法」
Title : “A Simple Approach for Exact Testing in Survival Analysis Using
Logistic Regression”

要 約 :

Abstract:

In assessments of the association between a risk factor and time to a relatively common event, inference is often dependent on asymptotic theory and the attractive features and ease of interpretation of standard survival analyses. When events are rare and the timing of events is only approximately known, however, inference from such conventional methods become uncertain. As an alternative, valid inference can be based on the exact distribution of the sufficient statistic that corresponds to a regression parameter of interest, conditioned on fixing the sufficient statistics for the remaining nuisance parameters at their observed values. Such an approach is especially useful in a logistic regression that is easily adapted for a survival analysis of discrete failure times. The purpose of this presentation is to describe the simple use of exact testing methods in a survival analysis based on a logistic model that takes into account the problem of grouped event times and the modeling of a relatively rare event. An example is given for the assessment of the association between late-life hemoglobin as a peripheral source of iron neurotoxicity and the incidence of Parkinson's disease.