



統計科學研究所

INSTITUTE OF
STATISTICAL SCIENCE



SEMINAR



STATAS

Seminar

Title : On Selecting Treatments With Multiple Bernoulli Endpoints

Speaker : Prof. Pinyuen Chen (陳平雲教授)

(Department of Mathematics, Syracuse University, USA)

Time : 10:30 ~ 12:00, Thursday, December 28, 2023

Place : Auditorium, B1F, Institute of Statistical Science

Abstract

We present a fixed sample size procedure and a closed sequential procedure to compare k (> 1) experimental treatments with a standard. All the treatments produce outcomes with two Bernoulli endpoints. The goal is to select the treatments whose success rates of both endpoints are better than their respective standards. We modify and generalize Dunnett (1984)'s formulation for comparing treatments with one Bernoulli endpoint to a formulation for comparing treatments with two Bernoulli endpoints. We derive the lower bound of the probability of a correct selection for both procedures and use it to calculate the sample sizes needed to achieve probability requirements. An example is given to illustrate the application of our procedures. ※ Tea reception starts at 10:10.

※ Online live streaming through Cisco Webex will be available.