



## Statistical Corner

Wilfred Hing-Sang WONG 黃慶生<sup>1</sup> and Daniel Yee-Dak FONG 方以德<sup>2</sup>

Department of Paediatrics & Adolescent Medicine<sup>1</sup>; Department of Nursing Studies<sup>2</sup>, The University of Hong Kong, Hong Kong

Question : If the p-value is 0.0501, can this be quoted as a significant result?

Answer : Unfortunately, No. If you have set your level of significance at 5%. The p-value has to be less than 0.05. Even when p-value is exactly 0.05 it should not be considered as statistically significant.

Question : Why should I also report the 95% confident interval? I have already showed a significant difference between the two groups.

Answer : It is impossible to know the size of the difference if only p-value is reported. Moreover, statistical significance does not necessarily imply clinical significance. With a sufficiently large sample size, even a tiny

clinically irrelevant difference may become statistically significant. A confidence interval provides information on the size of the observed difference and the sampling uncertainty.

Question : How to analyze dates?

Answer : Dates are often not analyzed directly. They are often converted to a meaningful quantitative measure by defining a reference date before the analysis is performed. For example, age of a subject is calculated as the difference of the date of first study visit from the date of birth (reference date), time to postoperative recurrence is calculated as the difference of the date of recurrence from the date of operation (reference date), etc. In situations when there is no appropriate reference date, descriptive statistics will be used to summarize the date.

Email: whswong@hkucc.hku.hk

## Report on APAPARI, 2005-08-27

Eric Yat-Tung CHAN 陳日東

Department of Paediatrics, Kwong Wah Hospital, Hong Kong

This year Asia Pacific Association of Pediatric Allergy, Respiratory and Immunology (APAPARI) meeting was held in Seoul, Korea and I was sponsored by the Society to attend this meeting. The meeting took place in Walker Hill, Seoul, Korea. I went there with many other Hong Kong doctors. I found Professor Le Souef's talk most impressive and I quoted some of his words during my presentation in KWH CME and HKSPR meeting. I also attended many lectures by Japanese and Korean and I am impressed by their molecular studies. Professor Gary Wong also talked about the latest progress of ISAAC study in APAPARI. I also met many Koreans and introduced our organization "HKSPR" and our journal to them. Surprisingly, most Korean speaks English although their pronunciation is quite different from ours.

In this year APAPARI, researchers further discuss about the T regulatory cells which tilt the balance of Th1 and Th2 and the polymorphisms of many molecules in our immune system, ie, interleukin, IL receptors, CD14, Toll-like receptors. Different combinations lead to different level of risk of allergy. It becomes clear that the final phenotype is a complex interaction between the genotype, timing of

allergen exposure and duration and amount of allergen exposure. It also seems that treatment can be specific and individualized if we know the genetic make up of that particular person or population. On the other hand, genes leading to atopy are complex: each of them only exerts little effect; they may have incomplete penetrance; they can interact with each other in non-additive way.

It was not all academic. We went down town to have dinner, had the chance to take some "raw beef", and have a little shopping. Surprisingly, all of us need to get some cosmetics and skin care products.

After all, genetic studies in the western countries did shine light on our understanding and future management of atopic diseases. There may be ethnic differences of the genetic make up. We may need more laboratories in Hong Kong to conduct molecular tests to help us understand the allergic genotype in Hong Kong. Study of genetic susceptibility in our country is needed and I hope that there will be a more effective management of atopy in the future.

I would also like to thank the Society for the sponsorship and I believe that continuing participation in the APAPARI would help further development in this area.

Email: ericytchan@yahoo.com