

9<sup>th</sup> International Conference on

# Nephrology: Kidney & Therapeutics

September 29-30, 2016 Orlando, USA

## HLA polymorphism and susceptibility to end-stage renal disease in Cantonese patients awaiting kidney transplantation

**Cao Qiong**

Nanfang Hospital-Southern Medical University, China

End-stage renal disease (ESRD) is a worldwide public health problem. Currently, many genome-wide association studies have suggested a potential association between human leukocyte antigen (HLA) and ESRD by uncovering a causal relationship between HLA and glomerulonephritis. However, previous studies, which investigated the HLA polymorphism and its association with ESRD, were performed with the modest data sets and thus might be limited. On the other hand, few researches were conducted to tackle the Chinese population with ESRD. Therefore, this study aims to detect the susceptibilities of HLA polymorphism to ESRD within the Cantonese community, a representative southern population of China. From the same region, 4541 ESRD patients who were waiting for kidney transplantation and 3744 healthy volunteer bone marrow donors (controls) were randomly chosen for this study. Polymerase chain reaction-sequence specific primer method was used to analyze the HLA polymorphisms (including HLA-A, HLA-B and HLA-DRB1 loci) in both ESRD patients and controls. The frequencies of alleles at these loci and haplotypes were compared between ESRD patients and controls. A total of 88 distinct HLA alleles and 1361 HLA A-B-DRB1 haplotypes were detected. The frequencies of five alleles, HLA-A\*24, HLA-B\*55, HLA-B\*54, HLA-B\*40(60), HLA-DRB1\*04, and one haplotype (HLA-A\*11-B\*27-DRB1\*04) in ESRD patients was significantly higher than those in the controls, respectively. Five HLA alleles and one haplotype at the HLA-A, HLA-B and HLA-DRB1 loci appeared to be associated with ESRD within the Cantonese population.

### Biography

Cao Qiong has completed her Master of Science degree in Medical Science in the year 2003 from the First Military Medical University. She is the Director of Division of Tissue Typing Center, Nanfang Hospital, the largest transplantation center of Southern China. She has published more than 20 papers in reputed journals.

caoliy2000@126.com

### Notes: