Author's response to reviews

Title: The Neck-Region Polymorphism of DC-SIGNR in Peri-Centenarian from Han Chinese Population

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Version: 2 Date: 31 March 2009

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Dear Editor,

In the enclosed manuscript, we investigated the Neck-Region Polymorphism of DC-SIGNR in peri-centenarians from Han Chinese Population. The highly polymorphic DC-SIGNR neck region plays a vital role in host genetic predisposition to a number of infectious diseases. It has been suggested that polymorphisms in immune-related genes not only affect susceptibility to infectious diseases, but also influence the aging process through immunosenescence. As infection is a major cause of human death and a mechanism of natural selection, we hypothesized that VNTR polymorphism of DC-SIGNR might affect human life span and might be a genetic factor for longevity.

However, the association between neck-region VNTR polymorphism and life span has not yet been investigated. Here we randomly collected 361 peri-centenarian individuals (age#94 for female and age#90 for male) and 342 ethnically matched controls (age 22-53, mean 35.0±12.0) from Han Chinese to investigate whether the DC-SIGNR neck-region polymorphism played a role in longevity. A total of 11 genotypes and 5 alleles were genotyped in our population. The genotype distribution, allele frequencies and homozygote proportion did not show a significant difference between longevity and control group. Considering the Sex differences in lifespan are ubiquitous throughout the animal kingdom, we then stratified the samples by gender. There was more 6/7 genotypes in female longevity group than that in female control group, with a marginal level of significance (5.56 vs. 1.28%, p=0.041).

Our manuscript (entitle “The Neck-Region Polymorphism of DC-SIGNR in Peri-Centenarian from Han Chinese Population”, authors: Hui Li, Cheng-Ye Wang, Jia-Xin Wang, Nelson Leung-Sang Tang, Liang Xie, Yuan-Ying Gong,
Qing-peng Kong, Ya-Ping Zhang) is based on this study and has been seen and approved by all listed authors. We would like to submit it to BMC medical genetics as a Research Article.

For further information, please contact with,

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Thank you for your attention.

Sincerely yours,

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