Reviewer's report

Title: Inflammation gene variants and susceptibility to albuminuria in the U.S. population: analysis in the Third National Health and Nutrition Examination Survey (NHANES III), 1991-1994

Version: 1 Date: 23 July 2010

Reviewer: lingyi lu

Reviewer's report:

Major Compulsory Revisions

1- Please discuss power in light of the allele frequency and provide some sort of post hoc power calculation.

2- Please give a brief statement why choose additive model and co-dominant model instead of additive, dominant and recessive model.

3- Please include a brief statement of the strategy in choosing snps from inflammation candidate genes for association test at the genes and polymorphisms section. How and why partial polymorphisms are selected from 27 genes? Do LD, allele frequency, or genotyping quality be considered as selection criteria? The authors indicate selecting snps rs1260326 and rs890945 from two published papers [ref35, ref36] however there are more associated snps in the two papers. Please give a brief description about why only two of them are selected.

4- Recent admixture population of different ethnic groups with different alleles and disease frequencies may cause spurious association results between markers and complex traits. Non-Hispanic blacks and Mexican American can be considered as recent admixture population. The authors indicate that there are no ancestry-informative markers available to estimate the admixture proportion. So author should be more careful to present the association results in Non-Hispanic blacks and Mexican American population.

Minor Essential Revisions

1- Risk alleles are nowhere presented throughout the report. Please include modeled allele as well as the frequency of the modeled alleles and include them into table2 to table 5.

2- Please indicate each population (non-Hispanic whites, non-Hispanic blacks, Mexican American) sample size used in the analysis.

Discretionary Revisions

NO
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests