Reviewer’s report

**Title:** Genetic polymorphisms located in genes related to immune and inflammatory processes are associated with end-stage renal disease

**Version:** 1  **Date:** 26 March 2012

**Reviewer:** Tibor Fulop

**Reviewer’s report:**

**General Comments:**
This study represented one of the recently proliferating ones, describing tentative genetic-phenotype associations from a Spanish cohort of renal transplant recipients. In general, the authors have done an admirable job in describing the baseline known information, process of recovery of the information, including the referencing to genetic databases, genetic software programs, Supplemental Tables. Good idea of separate list of important abbreviations submitted. They have, appropriately, adjusted for multiple testing (“FDR”) which removed the significance from initial positive finding, a fact perhaps somewhat under-emphasized in the paper. I think this may be important, as SNIPs were fitted here with the most likely inheritance model (so another variable introduced). The examined index cohort of patients was heterogeneous group in terms of underlying etiology ESRD before transplant, which partially may be responsible for the lack of convincing positive findings. Thus, this study may not be a truly negative study, more likely a (relatively) failed one due to limited number of enrollees. Thus I would view the results primarily as hypothesis-generating ones.

**Major compulsory revisions:**
**Discussion.**
1st sentence: so state of inflammation is inherited, acquired, or genetic predisposition in CKD?
2nd sentence: I would not call it “evidence” yet – maybe a strong suggestion… especially, as all linked to pathways of inflammation (so biologically meaningful connection) but p value not significant after adjusting.

Multiple references appear to be mislabeled and I suspect suffered corruption during the editing process (e.g. 18, 21, 22, 28, 32)

**ABSTRACT:**
**Background.**
1st paragraph – 2nd sentence in the current format somewhat internally inconsistent, the flow of idea would work better as “Chronic Kidney Disease progression has been linked to pro-inflammatory cytokines and markers of inflation … also these marker are elevated in ESRD” sequence.
Results.
May want to add to 95% Confidence Intervals to OR, if space allows
Should mention in Abstract also, that after adjusting for multiple testing, results
lost significance.

Results:
Table 1. should feature actual p values (for gender & age comparisons)

Minor issues: None

Level of interest: An article whose findings are important to those with closely
related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the
statistics.

Declaration of competing interests:
I declare no competing interest