Reviewer's report

Title: Uromodulin Concentrations are not Associated with Incident CKD Among Persons with Coronary Artery Disease

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Reviewer: Luca Rampoldi

Reviewer's report:

In their manuscript Shlipak and colleagues investigated on the association of the level of urinary uromodulin with incident CKD among patients with CAD.

In their study the authors confirmed the association of the protective allele of UMOD SNP rs12917707 with better kidney function and decreased uromodulin urinary levels. However, no significant differences in the uromodulin concentrations were observed between case/control groups. These data suggest that uromodulin levels are not associated with CKD among CAD patients and that other factors more strictly related to CAD, e.g. atherosclerotic damage, could play a role.

As the authors underlined in the Discussion section, the strength of the study lies on the unique attributes of the patient cohort and the fact that this is the second study to date assessing the role of urinary uromodulin concentration in the prediction of CKD. On the other hand, the main weakness of the study is the small sample size.

Major Compulsory Revision:
- Although studies #1 and #2 are clear, the results of study #3 are somewhat difficult to understand.

The baseline CrCl is different between cases and controls, even though not statistically significant. As CrCl is different among all participants according to their genotype (Table 1), one wonders if the difference in the case/control subsets is contributed by the UMOD polymorphism.

What are the genotype frequencies in the case/control sets?

Minor Essential Revisions:
- the number of individuals in the case/control study is not the same at page 2, 11 (99 cases and 92 controls) and at page 7 and in Table 3 (102 cases and 94 controls)

- Some of the references at page 16 look incomplete and should be corrected, e.g. #1 and #4.

Level of interest: An article of importance in its field
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 that I have no competing interests