Reviewer’s report

Title: Assessing Known Chronic Kidney Disease Associated Genetic Variants in Saudi Arabian Populations

Version: 0 Date: 01 Nov 2017

Reviewer: William Oetting

Reviewer’s report:

In this manuscript, in testing 8 SNPs previously associated with chronic kidney disease, one SNP in the MYH9 gene was found significant in a Saudi Arabian population.

The authors state that 50 variants have been associated with chronic kidney disease and estimated glomerular filtration rate but only 8 were chosen. What was the basis for choosing these particular SNPs?

How diverse is this population? Is there a principal components analysis to look at population diversity?

It is interesting that all three MYH9 SNPs are in complete LD (rs4821480, rs4821481 and rs2032487) with an r-squared and D’ of 1.000, but only rs4821480 was found to be significant. Is the LD between these SNPs different in the Saudi Arabian population? Why would only rs4821480 be significant and the others not?

Multivariable logistic regression analysis using two MYH9 SNPs (rs4821480 and rs4821481) were significant but not rs4821481 alone. What would be a reason for this?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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