Reviewer's report

Title: Hypertension and the Development of New Onset Chronic Kidney Disease over a 10 year period: A Retrospective Cohort Study in a Primary Care Setting in Malaysia

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Reviewer: Tsuneo Konta

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In this retrospective 10-year follow-up study authors examined the risk factors for the development of renal insufficiency in hypertensive patients treated in the primary care setting. It showed that aging, diabetes, hyperuricemia and low GFR were the independent factors for the development of renal insufficiency. This study is basically confirmatory, however it has some strength such as long follow-up period and primary-case setting.

Major Compulsory Revisions

1. Table 3:
The units for independent variables (e.g., “per 1 year increase”) should be included.

The results were adjusted with serum creatinine and eGFR, concomitantly. Both parameters are indices of renal function. One parameter (eGFR in this case) is enough.

Minor Essential Revisions

1. Table 1:
The values of mean eGFR were not changed between 76 in 2002 and 75 in 2007. However, the prevalence of eGFR<60 were very different (18.9% and 30.9%). Please add some comment on this point.

2. Results (3rd paragraph):
The text said “those hypertensive without diabetes, the decline rate of eGFR was much lower at 0.92 +/- 2.22 ml/min per year.” Is it “-0.92 +/- 2.22”? The increase in eGFR after 10 years is unlikely. Furthermore, if the difference in eGFR decline between patients with/without diabetes is significant, please indicate the P value.

Discretionary Revisions

1. Table 1:
Although the smokers were defined in the Methods, the data regarding smoking is lacking in Table 1 and further analysis.
2. Discussion (1st paragraph):
This study calculated the eGFR in the unit of “mL/min”. In contrast, other reports showing the annual changes eGFR changes in the unit of body surface area-corrected form “mL/min/1.73m²” [Ref 13]. Therefore, it is inappropriate to compare the values in the different unit (with/without the correction by the body surface area).

3. Discussion (Limitation):
Proteinuria/albuminuria is one of the strongest predictors for eGFR<60 or end-stage renal disease (Yamagata et al. Kidney Int 2007, Iseki et al. Kidney Int 2003), therefore the analysis without the data of proteinuria reduces its value significantly.

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

**Quality of written English:** Acceptable

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