Reviewer's report

Title: Circulating Dendritic Cell Precursors in Chronic Kidney Disease: A Cross-sectional Study

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Reviewer: Andréa E. M. Stinghen

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General Comments:

The paper entitled "Circulating Dendritic Cell Precursors in Chronic Kidney Disease: A Cross-sectional Study" is interesting since the authors propose a mechanism that could partly explain the relationship between immune response and atherosclerosis in CKD patients. In addition of clinical data regarding classical significances between controls and CKD patients the authors show important differences between Circulating Dendritic Cell Precursors such as myeloid, plasmacytoid, and total DCP. The authors proposed that the decrease of DCP in CKD implicates a potential role for DCP as a mediator of cardiovascular disease. Thus, since this point is the originality of the manuscript, the authors have to gain new insights about the relationship between cardiovascular status, immune response and chronic kidney disease and address an important topic in nephrology.

Minor Essential Revisions:

- At the abstract the authors should let more clear the abbreviations DPC, pDPC and tDPC and also standardize the way the abbreviation used to MDC/mDC;

- It is not clear if the authors use cardiovascular events or not. In the abstract they put "245 patients with CKD stage 3 (with and without known cardiovascular events)”, but in the end of page 5 they put “The aim of this investigation was to analyze the level of circulating DCP in patients with CKD stage 3 without a history of CVE”. It would be interesting to clarify better.

- Regarding that there is no standard deviation between the times in the data presented in table 1 supplementary data, maybe the authors could just cite in the text, it’s not necessary show the table;

- Regarding the P values on table 1 (results), or the authors use the exact P value or establish a significance level i.e. <0.001. Still regarding the statistical analysis, I was wondering if all the data had a normal distribution, since only Pearson was used to correlation analysis;

- It would be interesting to determine in clinical data if the marker of systemic inflammation CRP has correlation with circulating Dendritic Cell Precursors, and
also, if it will be possible, add more inflammatory markers such as fibrinogen and interleukine-6, once these have intimate association with CVD.

- How many experiments have been performed?
- The use of medicines was taken on account? Such as statins, diuretics, aspirin and ACE inhibitors;
- A drawback of the study is that only very limited information on the primary kidney diseases is available. It would be helpful if a more detailed description of the study population could be given;

**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.

**Declaration of competing interests:**
'I declare that I have no competing interests' below.