



# Reply to letter to the editor regarding “Efficacy and safety of finerenone in patients with chronic kidney disease: a systematic review with meta-analysis and trial sequential analysis”

Zhangning Fu<sup>1,2</sup>, Xiaodong Geng<sup>1,2</sup>, Kun Chi<sup>1,2</sup>, Chengcheng Song<sup>1,2</sup>, Di Wu<sup>2</sup>, Chao Liu<sup>2</sup>, Quan Hong<sup>2</sup>

<sup>1</sup>Medical School of Chinese PLA, Beijing, China; <sup>2</sup>Department of Nephrology, Chinese PLA General Hospital, Chinese PLA Institute of Nephrology, State Key Laboratory of Kidney Diseases, National Clinical Research Center for Kidney Diseases, Beijing Key Laboratory of Kidney Diseases, Beijing, China

*Correspondence to:* Quan Hong; Chao Liu. Department of Nephrology, Chinese PLA General Hospital, Chinese PLA Institute of Nephrology, State Key Laboratory of Kidney Diseases, National Clinical Research Center for Kidney Diseases, Beijing Key Laboratory of Kidney Diseases, 28 Fuxing Road, Beijing 100853, China. Email: redhq@163.com; chaoliu301@foxmail.com.

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We would like to appreciate Qiu *et al.* taking an interest in our article (1) and their insightful comments.

In their letter, Qiu *et al.* mentioned that it would have made the results more perfect if we had assessed the long-term efficacy of finerenone on the cardiorenal endpoints in patients with chronic kidney disease (CKD) and included the latest cardiorenal outcome trial (CROT) of finerenone conducted by Pitt *et al.* (2021) (2). Therefore, they performed a further meta-analysis involving the studies of Pitt *et al.* (2) and Bakris *et al.* (3) to evaluate the long-term efficacy and safety of finerenone in patients with type 2 diabetes (T2D) and CKD.

As Qiu *et al.* pointed out, we agreed that the results of long-term cardiorenal efficacy of finerenone in Qiu *et al.*'s meta-analysis were more comprehensive since they not only included the latest trial of finerenone but also assessed both the long-term cardiorenal composite outcomes and the individual outcomes of finerenone. Although their findings suggested that finerenone could be used to improve long-term cardiovascular and renal prognosis in patients with T2D and CKD, evidence to reach this conclusion was far from sufficient because of the limited trials included in their meta-analysis. Thus, further studies are required to evaluate these outcomes.

There are also some issues we should clarify here. We have

mentioned that finerenone might have a long-term benefit for patients with CKD in our previous meta-analysis (1) according to our included studies. We did not pool some of these individual long-term results owing to our deadline for retrieval and the limited quantity of included trials. In addition, our trial sequential analysis (TSA) results indicated that the cardiorenal efficacy and safety (including the short-term and the long-term) of finerenone still need to be further proved.

To summarize, we appreciated the comments made by Qiu *et al.* and agreed with the conclusion they made that finerenone might be recommended in patients with T2D and CKD to improve their long-term cardiovascular and renal prognosis. However, due to the limited number of included studies, high-quality studies with larger sample sizes are still needed in the future to further confirm these results and reach a more convincing conclusion.

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*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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## References

1. Fu Z, Geng X, Chi K, et al. Efficacy and safety of finerenone in patients with chronic kidney disease: a systematic review with meta-analysis and trial sequential analysis. *Ann Palliat Med* 2021;10:7428-39.
2. Pitt B, Filippatos G, Agarwal R, et al. Cardiovascular Events with Finerenone in Kidney Disease and Type 2 Diabetes. *N Engl J Med* 2021. [Epub ahead of print]. doi: 10.1056/NEJMoa2110956.
3. Bakris GL, Agarwal R, Anker SD, et al. Effect of Finerenone on Chronic Kidney Disease Outcomes in Type 2 Diabetes. *N Engl J Med* 2020;383:2219-29.

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