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A critical appraisal of “effects of exercise therapy on disability, mobility, and quality of life in the elderly with chronic low back pain: a systematic review and meta-analysis of randomised controlled trials.”

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Abstract

This response letter addresses the comments received on our paper. The main points of our response include: Clarification of the definitions of primary and secondary indexes; Justification for the use of the RoB2 tool for quality assessment; Measures to improve sensitivity analysis and data consistency; Explanation and improvement plans regarding the timing of Prospero registration. We have provided detailed explanations of the study design and outlined specific measures for future improvements to enhance research transparency and quality.

Dear Editor,

Thank you for providing us with the opportunity to publish our study and for the valuable comments on our paper titled “Effects of exercise therapy on disability, mobility, and quality of life in the elderly with chronic low back pain: a systematic review and meta-analysis of randomised controlled trials.” We highly value these comments and hope to clarify some issues through the following response.

It was pointed out that the distinction between primary and secondary indexes in our study is unclear. This might have led to misunderstandings, as pain was not explicitly mentioned in the title and hypothesis. While the pain indicator is not mentioned in the title, it is detailed in the

study hypothesis and methods section. In future studies, we will clearly define primary and secondary indexes to ensure that readers fully understand our study design.

We used the RoB2 tool to assess the quality of the included studies, because it is widely used in randomized controlled trials. Based on articles by Sterne et al. [2] in BMJ and Higgins et al. [1] in the Cochrane Handbook for Systematic Reviews of Interventions, we believe RoB2 is suitable for this study. In future studies, we will consider using more appropriate assessment tools for non-pharmacological research, such as the Downs and Black scale, to more comprehensively assess study quality.

The sensitivity analysis provided valuable insights, showing that heterogeneity of the results significantly decreased after excluding studies with a high risk of bias. Regarding concerns about sensitivity analysis and data consistency, we will more rigorously review our data processing procedures to ensure the accuracy of all analyses and figures.

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Once again, we appreciate the valuable comments and suggestions on our study. We will make improvements based on the feedback and hope to provide more effective treatment options for elderly patients with chronic low back pain through further research. We hope our response clarifies some misunderstandings and further advances research in this field.

Sincerely,
Zhang Shikun.

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Zhang Shikun write the response letter; Zhou Wensheng check the letter.

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Data availability

No datasets were generated or analysed during the current study.

Declarations**Ethics approval and consent to participate**

Not applicable.

Consent for publication

All authors consent to the publication of this manuscript and have confirmed this.

Competing interests

The authors declare no competing interests.

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