



# A meta-analysis on the application value of gray-scale ultrasound combined with shear wave elastography in the measurement of pelvic floor muscles in primipara

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We thank Tu *et al.* for his comments on our paper, Systematic review and meta-analysis: “Gray-scale ultrasound and shear wave elastography in the diagnosis of primipara pregnancy and delivery”, published in journal of *Annals of Palliative Medicine* (1). We reported in the abstract section of our paper that there were no statistically significant differences in maternal age, body mass index (BMI), gestational age, gestational age at delivery, neonatal weight, and cervical depth between the study and control groups. As you stated, the results showed that the P values for these indicators were all greater than 0.05. However, the results were described in the abstract as being significantly different, which may have been due to an error in the way they were conveyed. We apologize for the misunderstanding this has caused you and your readers. However, in the results section of the main text, the analysis and description of these indicators are correctly reported.

The use of different effect models is based on the quality of the underlying data, with a random effects model selected if study-level variability is expected to be meaningful (2). A random effects model can be used for significance testing, rejecting null values for homogeneous effect sizes (3). If the random effects model analysis shows no significant heterogeneity, the fixed effect estimates will be derived. These estimates change only in the presence of significant heterogeneity (4). Therefore, a random effects model was adopted in this study for analysis. In addition, following your suggestion, we used a fixed effect model to analyze the

included data. The results showed that there was no obvious heterogeneity in the posterior lip shear wave velocity between the study group and the control group in figure 13, and the 95% confidence interval (CI) range, Z value, and P value were consistent with the results in our paper. Therefore, the use of a random or fixed effects model for this indicator does not affect the results of the data analysis.

After repeating our analysis and confirming the findings, we found that the points raised by Tu *et al.* have no influence on the results of our research.

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## Footnote

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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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