



# Discussion on the interpretation of the results and selection of the effect model in a meta-analysis

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*Response to:* Qu Y, Sun H, Chen J, *et al.* Systematic review and meta-analysis: gray-scale ultrasound and shear wave elastography in the diagnosis of primipara pregnancy and delivery. *Ann Palliat Med* 2021;10:11664-77.

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We read with great interest the recent published study by Qu and colleagues entitled “Systematic review and meta-analysis: gray-scale ultrasound and shear wave elastography in the diagnosis of primipara pregnancy and delivery” (1). They explored the value of gray-scale ultrasonography combined with shear wave elastography (SWE) in the assessment of primipara pregnancy and delivery. However, after a careful learning of the literature, we would like to pay attention to some important missing aspects in the study.

Firstly, in the results section of the abstract, the authors revealed that age (Figure 4), body mass index (BMI) (Figure 6), gestational age (Figure 5), gestational age at delivery (Figure 7), neonatal weight (Figure 8), and cervical depth (Figure 9) were significantly different from those of the control group. However, we believe the results are false because of the P values >0.05 showed in referred figures above and there are no statistical differences.

Secondly, in Figure 13, the meta-analysis on the comparison of shear wave velocity of posterior lip was performed by using a random effect model. However, the enrolled articles were considered to be homogeneous because of  $P=0.53$  and  $I^2=0\%$ . Therefore, we believe that the fixed effect model should be adopted actually (2).

In short, Qu *et al.* (1) revealed a significant issue with regard to the value of gray-scale ultrasonography combined with SWE in the assessment of primipara pregnancy and delivery, however, the conclusions of the present study

should be interpreted with caution because of the concerns above.

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