



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

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*Comment on:* Feng H, Zhou H, Shang Y. The effectiveness and safety of Chinese herbal medicine in infertile women with luteal phase deficiency: a systematic review and meta-analysis. *Ann Palliat Med* 2022;11:2492-502.

Submitted Sep 07, 2022. Accepted for publication Nov 04, 2022.

doi: 10.21037/apm-22-1050

**View this article at:** <https://dx.doi.org/10.21037/apm-22-1050>

We read the recently published study by Feng *et al.* entitled “*The effectiveness and safety of Chinese herbal medicine in infertile women with luteal phase deficiency: a systematic review and meta-analysis*” (1). Feng *et al.* aimed to assess the efficacy and safety of Chinese herbal medicine (CHM) by using meta-analysis and comparing it with conventional Western therapies (CWT) to elucidate the improvement in progesterin and clinical pregnancy rates. However, after reviewing the literature, we would like to raise concerns regarding some important issues in the paper.

Firstly, in the results section of clinical pregnancy rates, the authors depicted that a random-effects model was adopted for the statistical analysis because of the significant differences in CHM formulations. However, a fixed-effects model was actually shown in *Fig. 3*, which was not consistent with what the authors stated.

Secondly, in the results section of statistical analysis, Feng *et al.* stated that data were pooled by a random-effects model if a high heterogeneity was found among included studies. However, as seen in *Figs. 4, 5*, the enrolled articles were considered to be significantly heterogeneous ( $I^2=94%$  and  $I^2=85%$ ). Therefore, we believe that the random-effects model should be adopted, whereas the authors actually adopted a fixed-effects model to perform the meta-analysis.

In summary, Feng *et al.* showed a significant clinical issue concerning CHM in infertile women with luteal phase

deficiency. However, the results of this study should be interpreted warily due to the issues above.

## Acknowledgments

*Funding:* None.

## Footnote

*Provenance and Peer Review:* This article was a standard submission to the journal. The article did not undergo external peer review.

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <https://apm.amegroups.com/article/view/10.21037/apm-22-1050/coif>). The authors have no conflicts of interest to declare.

*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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**Cite this article as:** Fang Q, Wu J. Discussion on the selection of the effect model in a meta-analysis. *Ann Palliat Med* 2022;11(12):3842-3843. doi: 10.21037/apm-22-1050

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1. Feng H, Zhou H, Shang Y. The effectiveness and safety of Chinese herbal medicine in infertile women with luteal phase deficiency: a systematic review and meta-analysis. *Ann Palliat Med* 2022;11:2492-502.