**Answer to the Letter to the Editor of Feng Li et al. entitled
“Minimally invasive versus open transforaminal lumbar
interbody fusion: a meta-analysis based on the current evidence”
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We thank the readers for their comments on our article entitled “Minimally invasive versus open transforaminal lumbar interbody fusion: a meta-analysis based on current evidence” (Eur Spine J 22:1741–1749) [1]. We would like to respond to the comments one by one.

1. We searched only the MEDLINE database because most journals on orthopaedics and spinal surgery were included in this database. Searching only in this database might be insufficient. Therefore, we screened the references of the retrieved articles, but yielding no additional eligible studies.
2. Both RCT and non-RCT were included due to a small number of RCTs anticipated in the literature. Meta-analysis of non-RCT may be useful for clinical reference when there is lack of RCT [2]. Initially, we set the criteria of smallest sample size to ensure quality and comparability of data. Nevertheless, no studies were excluded due to the criteria.
3. The two papers by Wang and his colleagues [3, 4] included in our analysis were two different studies. They enrolled two different populations: primary surgery and revision surgery. There were no overlapping patients between the two studies. Therefore, neither of them should be excluded.
4. The inverse-variance method is the calculation way rather than the mathematical model. In RevMan version 5, inverse-variance and Mantel–Haenszel methods are two

ways of calculations for achieving DerSimonian and Laird random-effects model analysis. For continuous outcomes, RevMan 5 implements only one version of the DerSimonian and Laird random-effects model which is based on the inverse-variance approach [2]. We have detected significant heterogeneity among the studies particularly when we pooled the continuous outcomes. Therefore, we used random-effects models to pool these results. Our review included both RCT and non-RCT, so the different study design, study quality, patients' characteristics, and the diverse technical specifications inevitably lead to the heterogeneity among studies. We have discussed this limitation in our original paper [1].

5. Searching only in English published papers is a generally accepted strategy due to restriction of various technique supports. It is a limitation of many published meta-analyses, not only ours. Because of potential publication bias, we further used a funnel plot to assess it. We do not use Egger's linear regression test or Begg's rank correlation test because they are usually suitable for meta-analysis including a large number of studies, and the sensitivity of both methods is generally low when the analysis was based on <20 trials [5]. We choose complication rate for assessing publication bias as it was one of the primary outcomes when we compared the two surgical methods. Furthermore, the complication rate was reported in the majority of the included studies.

Conflict of interest None.

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