Letter to the Editor

# Effect of early vitamin A supplementation on bronchopulmonary dysplasia in premature infants

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We thank Wu *et al.* for his comments on the systematic review and meta-analysis: "*The effects of early vitamin A supplementation on the prevention and treatment of bronchopulmonary dysplasia in premature infants: a systematic review and meta-analysis*" published in *Journal of Translational Pediatrics* (1). The results showed that the incidence of bronchopulmonary dysplasia (BPD) in the experimental group [–0.71, 95% confidential interval (CI): –0.34 to –0.00; Z =1.98; P=0.05] was lower than that in the control group. The 28-day oxygen uptake rate, 36-week survival rate, incidence of patent ductus arteriosus, days of mechanical ventilation, and 28-day ventilator in the observation group were lower than those in the control group, but there was no statistical difference between the two (P>0.05). The results showed that early vitamin A supplementation had no significant effect on oxygen uptake rate, 36-week survival rate, days of mechanical ventilation, and 28-day ventilator use. In the analysis of the effect of early vitamin A supplementation in the prevention and treatment of BPD, it was found that its odds ratio (OR) value was –0.71, which was significantly less than 1, indicating that early vitamin A supplementation had a certain preventive effect on BPD (2). However, due to the limited number of articles included in this study, the effect of vitamin A on BPD was not significant. In the future work, we will further verify and confirm the role of vitamin A in the prevention and treatment of BPD through a large number of research results.

The result was based on the calculation results of RevMan5.3 software, and the OR value obtained was not within the 95% CI, which was unbelievable. Due to personal negligence, it has not been carefully checked and confirmed. According to your suggestion, the results of relevant indicators in figure 4 have been recalculated many times, and the results show that BPD incidence [0.71, 95% confidential interval (CI): 0.56 to 0.91; Z =2.73; P=0.006].

The choice of different models can be determined based on the quality of the underlying data, with random effects models chosen if study-level variability is expected to be meaningful (3). The random effects model can be used for significant testing, rejecting the null value of the homogeneous effect size (4). If the random effects model analysis has no significant heterogeneity (that is, not significant), the fixed effects estimates will be derived. These estimates change only in the presence of significant heterogeneity (5). Therefore, the random effects model was adopted for analysis.

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com/article/view/10.21037/tp-22-26/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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