

### **Specific Comments To Authors:**

#### **- Editing is needed**

**-Answer:** Thank you for your suggestion! The manuscript has been sent to MedE for language polishing and editing, and the English Editing Certificate was uploaded.

#### **- Spell out abbreviations at first instance in the text**

**-Answer:** We have made corresponding changes in the manuscript as required.

#### **- How did you define haemodynamically significant PDA? You should mention this in the methods section**

**-Answer:** At present, the International consensus of haemodynamically significant PDA include clinical symptoms and echocardiographic indicators. LA/AO and PDA diameter are the most important ultrasonic indicators for hemodynamically significant PDA. The ratio of LA/AO  $\geq 1.5$  suggests the possibility of hemodynamic changes in persistent PDA. So we made 1.5 as the cut-off value of LA/AO and established a ROC curve by using the sensitivity of LUS to predict the possibility of hemodynamic changes in persistent PDA. The results showed LUS had the moderate accuracy for predicting hemodynamic changes in persistent PDA with the area under the curve (AUC) was 0.741 (95%CI 0.621~0.839), and sensitivity and specificity were 93.75% and 50.94%. These were both mentioned in methods of abstract and introduction with red marked.

#### **- How many neonates were ventilator dependent in each group? Was there any difference in LUS between those on ventilator and those not? How the ventilator affects LUS?**

**-Answer:** We retrospectively analyzed the situation of each neonate, the results showed there were 68 neonates were ventilator dependent in PDA group, and 84 in control group, there were no statistic difference between the two groups ( $\chi^2=0.884$   $P=0.233$ ). The LUS in neonates on ventilator were  $8.00\pm3.66$  points , and  $5.83\pm3.12$  points in neonates without ventilator, the

results also showed no difference ( $t=0.577$   $P=0.155$ ) . The results were added in the results section of abstract and main text with red marked. We considered the reasons for these results may be as follows: firstly, the subjects were very low birth weight neonates, whose lungs were not fully developed, most of them were ventilator dependent in both groups; secondly, the ultrasound examination was carried out earlier on the fourth day after delivery, the duration of ventilator maintenance was not long, and the risk of ventilator-associated pneumonia was low.

**- Lung consolidation can be due to reasons other than pulmonary oedema (commonly infection etc). B-lines detect interstitial lung water, a prodrome of pulmonary oedema and maybe more accurately relate to the hemodynamic status of the heart-lung axis. I would suggest performing the analysis using as lung ultrasound score the sum of B-lines in all regions of each patient.**

**-Answer:** Thank you for your suggestion! However this is a retrospective study, we scored the lungs according to the method of Brat et al, which included both B line and lung consolidation, and were recognized by the majority. In this study, most cases were showed different degrees of B lines, only 19 combined with lung consolidation in PDA group and 20 in control group. The reasons of lung consolidation can be complicated, it is also a manifestation of increased lung water content. If only B lines were analyzed, lung water content may be underestimated. In addition, lung diseases caused by definite pathogenic factors (including meconium aspiration syndrome, pulmonary hemorrhage and pneumonia, et al) which could lead to lung consolidation were excluded in this study, it may reduce its impact in certain extent. In the future work, we can consider evaluating the lung water condition by scoring the sum of B-lines in all regions for the appropriate cases.

## EDITORIAL OFFICE' S COMMENTS

(1) Science editor:

1 Scientific quality: The manuscript describes an observational study of the bedside cardiopulmonary ultrasonography predicts lung water content in very low-weight preterm neonates with patent ductus arteriosus. The topic is within the scope of the WJCC. (1) Classification: C. (2) Summary of the peer-review report: There are some problems in the abbreviations and methods of this manuscript, which need further modification. The questions raised by the reviewers should be answered. (3) Format: 1 table and 2 figures. 29 references were cited, including 14 references published in the last 3 years. No self-citation. **(The questions raised by the reviewers were be answered and resolved point -by-point)**

2 Language evaluation: C. Language editing certificate was provided. **(The manuscript has been sent to MedE for language polishing and editing, and the English Editing Certificate was uploaded)**

3 Academic norms and rules: The authors provided the biostatistics review certificate, the institutional review board approval form was uploaded, the written informed consent and the STROBE Statement. The authors need to provide the signed conflict-of-interest disclosure form and copyright license agreement. No academic misconduct was found in the Bing search.**(The signed conflict-of-interest disclosure form and copyright license agreement were uploaded)**

4 Supplementary comments: (1) Unsolicited manuscript. (2) Supported by Zhejiang Medical and Health Science and Technology Project; Zhejiang Natural Science Public Welfare Fund. (3) The topic has not been published in the WJCC.

5 Issues raised: (1) The “Article Highlights” section is missing. Please add the “Article Highlights” section at the end of the main text; (2) The authors did not provide the approved grant application form(s). Please upload the

approved grant application form(s) or funding agency copy of any approval document(s); and (3) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. **(We added the “Article Highlights” section at the end of the main text and the funding agency copy and original pictures were uploaded)**

6 Recommendation: Conditional acceptance.