# Peer Review File

## Review Comments-reviewer A

First, the title needs to indicate the clinical research design of this study, i.e., a prospective cohort study.

**Reply1:** Our clinical study was a multi-centre retrospective cohort study. In order to make the content and title of the article more consistent, we discussed that the title of the article should be changed to "Shortime mortality and severe complications of very premature infants, a multicenter retrospective cohort study from Jiangsu province during 2019-2021" to be more appropriate. At the same time, we also modified the keywords.

**Change in the text:** We have modified our manuscript title as advised (see Page 1, line 2-3; Page 3, line 72-73)

Second, the abstract is not standardized and needs further revisions. The **background** did not explain why the authors focused on very premature infants and what the knowledge gap is. The **methods** did not describe the inclusion of subjects, the assessment of baseline factors, follow up procedures, and measurements of outcome, in-hospital death, out-hospital death, or both. The results need to briefly describe the clinical characteristics of the study sample and quantify the findings on associated factors by reporting HR and accurate P values. The conclusion should not repeat the main findings again and please have detailed comments for the clinical implications of the findings.

**Reply2:** Your suggestions on the abstract are very reasonable and have been revised accordingly.

**Change in the text:** We have modified abstract as advised (see Page 2-3, line 35-71)

Third, in the introduction of the main text, the authors need to have comments on the knowledge gaps and limitations of prior studies on the mortality and factors associated with mortality in very premature infants and clearly indicate the clinical significance of this study.

**Reply3:** Your advice is very useful, and we have added more to the relevant content.

**Change in the text:** We have modified introduction as advised (see Page 4-5, line83-91,114-116)

Fourth, in the methodology of the main text, please accurately describe the clinical research design, sample size estimation, assessment of baseline clinical factors, follow up details, and measurements of mortality and its time frame. In statistics, the authors need to explain why Cox regression was not used to identify associated factors, since the death can be time-to-event data. Please describe the details of selection of

factors in the multiple regression model. I suggest to delete the ROC analysis since the predictive value is not the focus of this study and ROC cannot analyze the performance of categorical factors. Please describe the calculation of effect size measures and ensure $P<0.05$ is two-sided.

**Reply4:** We used a prospective database. but after discussion by all authors, considered the actual content to be retrospective. So we changed the title of the article to "Shortime mortality and severe complications of very premature infants, a multicenter retrospective cohort study from Jiangsu province during 2019-2021", we think the change will be more appropriate.

As we studied not only the death, but also the serious complications in very preterm infants, a proportion of very preterm infants died after abandoning hospital.The factors that affect this are complex, so we chose ROC curve analysis instead of COX analysis.

**Change in the text:**We have modified the title and methods (see Page 1, line 2-3; Page 6, line 123)

Finally, please cite this paper to enrich the content of this paper: Qi Z, Wang Y, Lin G, Ma H, Li Y, Zhang W, Jiang S, Gu X, Cao Y, Zhou W, Lee SK, Liang K, Qian L; Chinese Neonatal Network. Impact of maternal age on neonatal outcomes among very preterm infants admitted to Chinese neonatal intensive care units: a multi-center cohort study. Transl Pediatr 2022;11(7):1130-1139. doi: 10.21037/tp-22-1.

**Reply5:** This multicenter study is very meaningful and the reference has been added to the article, thank you for your advice.

**Change in the text:** We have add the reference (see Page 5, line109; Page 6, line114-116).

1. Keywords should be within the numbers of 3-5. Please check and revise.

**Keywords:** Very premature birth; mortality; severe complications; risk factor analysis; gestational age at birth; severe asphyxia; persistent pulmonary hypertension of the newborn (PPHN)

  **Reply:** Thank you for your suggestion, we have deleted some key words after discussion
  **Change in the text:** see Page3, line 80-81)

2. Abstract should be within 200-350 words. Please shorten your Abstract.
  **Reply:** Thank you for your suggestion, after discussion, we have reduced the abstract to 346 words.
  **Change in the text:** see Page3, line (42-75)

3. Ref.38 was not cited in your paper, please cite it in order in text.

**Reply:** Sorry, there was an accidental error in the typography, which has already been revised in the article and references.
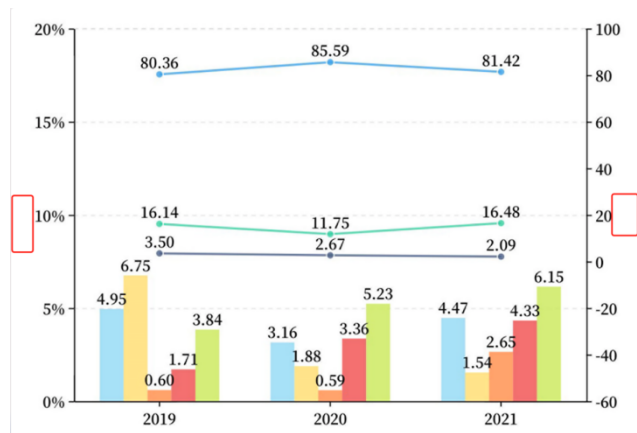
   **Change in the text:** see Page12, line344;see Page15, line 369-370

4. Please check the authors' names of those references, they do not match.

372  be related to premature infants. In a previous study on premature infants, Luo et al.
373  constructed a multivariate logistic regression model to analyze the morbidity and
374  mortality of premature infants in different GA and admission year groups, and they
375  observed a higher incidence of moderate-to-severe BPD and sepsis, and the decreased
376  incidence of sepsis and severe ROP (34). In addition, a prognostic study of 752
377  premature infants, Liu et al. showed that neonatal asphyxia, sepsis, shock,
378  hypoalbuminemia, and severe anemia all could be independent risk factors for the
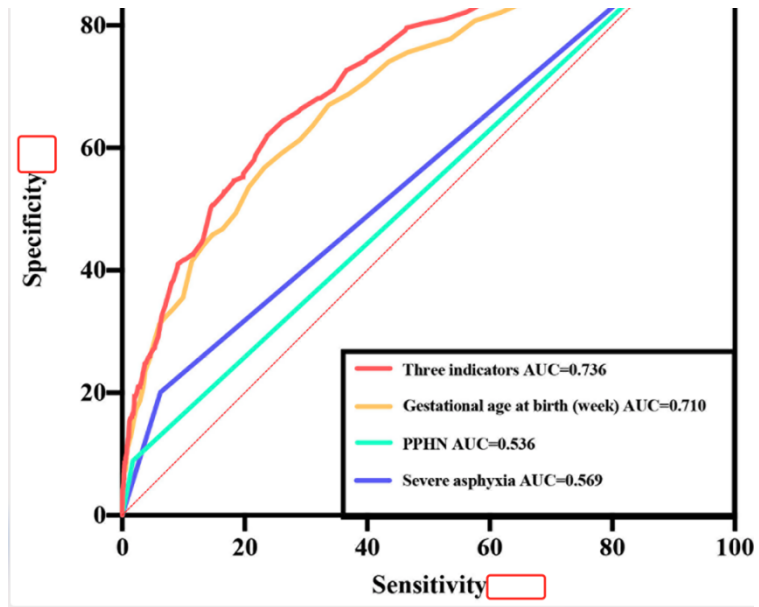379  development of NEC in VPTI (35). Other studies have also shown that PPHN as a

**Reply:** Sorry, there was an accidental error in the typography, which has already been revised in the article and references.

5. Please provide descriptions for the two X-axis and resend us updated figure 3.



**Reply:** Sorry, there was an accidental error in the figure, which has already been revised    as separate file.

6. Figure 6: Please provide units for the X- and Y-axis.

**Reply:** Sorry, there was an accidental error in the figure, which has already been revised    as separate file.