

We thank the reviewers for their feedback and the opportunity to revise our manuscript. We have revised our manuscript as follows below:

Reviewer 1

1. Are there differences in trauma / nontrauma linked clinical scenarios? 2. Does age differences (preterm / neonate / infant / toddler) impact implementation / strategies in neurocritical care? 3. What exactly are the knowledge gaps in practice and how to address the same?

Response: To address questions 1, 2 and 3, we have created a new section entitled, “Existing Knowledge Gaps and Future Directions”. In this section, we now state that “While emerging evidence demonstrates that specific physiologic biomarkers are linked to functional outcomes after pediatric acute brain injuries, there is a severe lack of evidence toward specific neurotherapeutic strategies that improve functional outcomes. Knowledge gaps remain regarding whether biomarkers can be used to better understand whether specific neuroprotective treatments confer potential to benefit for patients stratified toward specific underlying physiologic profiles. Neuroprotective measures optimal toward care in TBI using invasive neuromonitoring may not necessarily translate to other non-traumatic conditions in which invasive monitoring may be used. It also remains unclear whether implementation of specific strategies, such as vasoactive support for CPP-guided management, may be appropriate for neonates and very young infants where cerebral blood flow differs from older children⁹⁹. Future comparative effectiveness studies and clinical trials involving different pediatric acute brain injury conditions will be needed to further address these knowledge gaps” (Pages 14, lines 26-28; Page 15, lines 1-12).

4. Utilization of charts / tables / illustrations would elevate the readability of the review

Response: We have now included a second figure (Figure 2, page 34) that provides a display of how secondary neurologic insults contribute to secondary brain injury. We are also including a third figure (Figure 3, Pages 35-36) that provides a stepwise algorithm for neuroprotection in Pediatric Neurocritical Care.

5. Can a stepwise algorithm in the pediatric neurocritical care management be drawn to get an

overview?

Response: We are also including a figure (Figure 3, Pages 35-36) that provides a stepwise algorithm for neuroprotection in Pediatric Neurocritical Care.

Reviewer 2

1 Title. "Approaches to Neuroprotection in Pediatric Neurocritical Care: A brief review" a minor change can be better.

Response: Thank you. We are now revising the title to "Approaches to Neuroprotection in Pediatric Neurocritical Care: A Brief Review"

7 Discussion. An illustration for the mechanism section would be better. 8 Illustrations and tables. An illustration for the mechanism section would be better.

Response: To address questions 7 and 8, we have now included a second figure (Figure 2, page 34) that provides a display of how secondary neurologic insults contribute to secondary brain injury.