Reviewer’s report

Title: Enhanced prehospital volume therapy does not lead to improved outcomes in severely injured patients with severe traumatic brain injury

Version: 1 Date: 28 Jan 2018

Reviewer: George Shaw

Reviewer's report:

PIn this article entitled," Enhanced prehospital volume therapy does not lead to improved outcomes in severely injured patient with severe traumatic brain injury (EMMD-D-17-00113_R1)," the authors present the results of a retrospective study on the relationship between pre-hospital volume and mortality with several secondary outcomes noted as well. Overall, they found no relationship between prehospital volume administration and any change in outcome. In addition, higher volumes resulted in more significant coagulopathies.

Overall, the paper is clear, well-written and a significant study, I have a few comments as listed below.

Major Comments
Page 7, Line 2 : The investigators limit their study population to those patients who present primarily to the study hospitals. No transfer patients are included. This somewhat limits the generalizability of their conclusions as many trauma patients are transferred from non-trauma hospitals to trauma centers. Many of these patients therefore have received significant interventions elsewhere as a result. Some comment in the Discussion section regarding this limitation is warranted.

Table 2, Page 27, Line 25: The listed pre-hospital times are really long. This should be discussed, as should be the impact on patient outcomes. It is well-known in the trauma literature that the sooner these patients get to definitive care, the better they do.

Minor Comments
p. 11, line 11: 'Show" should be "showed.'

Table 2, page 27, lines 41,42: Please observe conventions for significant digits and presumed precision of measurements. For example, claiming any precision after the decimal point for BP measurements is not plausible; a similar argument for heart rate values is also reasonable.

Finally, I think the authors understate their conclusions. This study, and others that are similar can lead a reasonable investigator to conclude that there is no role for pre-hospital volume other than blood in the resuscitation of trauma patients. In fact, the administration of colloids and crystalloids may be harmful.

Thank you for the opportunity to review this interesting and significant paper.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal