

Open peer review report 1

Reviewer 1: Angélica Zepeda, UNAM, Mexico, Mexico.

Comments to the authors: In this work, the authors evaluate plasmatic levels of VEGF, Ang-1 and G-CSF at 1, 3 and days post-TBI and found that GF levels change along time reporting that while Ang-1 and G-CSF upregulated levels correlate with a good outcome, VEGF high levels correlate with a poor outcome.

The manuscript is properly presented with a good use of English.

General comments:

The manuscript should be considered for "short communication" rather than for "full article."

Results—TBI patients showed significantly increased GFs levels within 7 d compared to HCs.

"HCs" not previously defined

Specify what GOSE measures

Graphical comparisons between control and TBI groups at different time point per GF should be included.

Control blood samples from 3 different time points paired to the days when blood samples were obtained from the TBI group should be used for comparison to test for intrinsic variables in GF levels.

The method for obtaining the ROC needs further description and so do the parameters of the GOSE considered to calculate the ROC

Was the study performed in serum or in plasma?

DISCUSSION:

"...and supports the hypothesis that Ang-1 plays a role in the development of good functional outcomes in TBI..." the so-called Ang-1 hypothesis is not clearly stated in the manuscript.

The introduction and the discussion sections seem to have biased information: Evidence suggesting VEGF as a positive factor for recovery has also been shown (see for example, Sköld et al 2006). Although Thau-Zuchman et al., 2010 is cited is not properly commented in the introduction nor is it contrasted in the discussion section. Also, VEGF-A and VEGF-B levels have shown to be involved in different process after brain damage. It would be worth considering commenting on that.