Reviewer's report

Title: Hypoxia and oxidative stress markers in hemodialysis pediatric patients with chronic kidney diseases: a prospective study

Version: 1 Date: 16 December 2011

Reviewer: Yuichi Makino

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Major concern

1) Advantages of assessing oxygenation status by the means the authors performed in this study is unclear. What is better than simply measuring, for example PO2 and 8-OHdG, in plasma (or urine).

2) Measuring plasma HIF-1alpha level is not convincing. HIF-1alpha does not have signal peptide sequence to come out of the cells. What is the source of measured HIF-1alpha in plasma and what is a physiological relevance of such HIF-1alpha. They may reflect nothing correlated with hypoxia.

3) Why PO2 in patients is significantly higher than healthy controls? This would meet serious conflict with the conclusion that hypoxic marker is higher in the patient. This would also suggest physiological inappropriateness of the authors methods to assess the oxygen status.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.