Reviewer’s report

Title: West Nile Virus Encephalitis: Neurological Manifestations and Prospective Longitudinal Outcomes

Version: 1  Date: 16 January 2014

Reviewer: Vittorio Sambri

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1. Page 4 “Background”. The Authors should adjourn the epidemiology of WNV in the USA to 2012 (and possibly in a less defined way for 2013) since these data are currently available on the CDC web site (http://www.cdc.gov/westnile/statsMaps/finalMapsData/data/2012WNVHumanInfectionsbyState.pdf and http://www.cdc.gov/westnile/statsMaps/preliminaryMapsData/index.html).

2. Page 4 “Background”. A recent reference that report the mortality rate (report likely as described by ref n. 8 – 2006 -) in the recent years should be added.

3. Page 7 “Enrollment criteria”. The clinical criteria used to enroll the patients in the study has been subsequently supported by laboratory evidence of IgM detection in the CSF or in the serum (as an alternative the Authors state that “WNV disease had already been proven” but how this was proven should be disclosed). The CDC guidelines for the serological diagnosis of WNV human infection (see: http://www.cdc.gov/westnile/resources/pdfs/wnvGuidelines.pdf) clearly report that “IgM detection” is “a front-line assay” and that “Because the IgM and IgG ELISA tests can cross-react between flaviviruses (e.g., SLE, dengue, yellow fever, WN), they should be viewed as screening tests only.” As a consequence, a confirmatory test such as PRNT must be performed in due time for “a case to be considered as confirmed”. The Authors must discuss the results in the light of these issues since there are many potentially “confounding and related” flaviviruses that can hamper the findings of this study.

4. “Discussion”. No discussion about the results obtained with the therapeutic interventions….why do not to take out this part from the study?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests'