Reviewer's report

Title: Free radical scavenger, edaravone, reduces the lesion size in human brain ischemic stroke

Version: 4 Date: 28 September 2010

Reviewer: Paul A. Lapchak

Reviewer's report:

Minor changes:
Title- The title should indicate Lacunar Strokes
Abstract- Background- First sentence, "inflammation and" should be removed.
Abstract- Methods. Expand NIH to National Institutes of Health (NIH) Stroke Scale (NIHSS)
Abstract- Results. Time limited is curious. Is this time-dependent after edaravone treatment? Please clarify.
Abstract- Results- "Only labeled" does not seem correct.
Abstract- Conclusion- improved neurological deficit sooner suggests that the ultimate result was identical. Is that what was intended?
Background- tPA is only FDA-approved within 3 hours. The therapeutic window may be expanded to 4.5 hours based upon the work of Hacke et al. Please correct the sentence.
Methods- Patients sections- Correct National Institute to National Institutes
Statistical Analysis- Please define trend.
Discussion- Third paragraph. The statement appears to be too general for such a large number of patients enrolled. Were all lesions in the same area in every patient? If not, please expand the discussion to include type of lesion and brain structure.
Paragraph 4- Please remove the speculation regarding hemorrhage.
Hemorrhagic changes would have a clinical manifestation.
Conclusion- This section should directly state the limitation to lacunar strokes.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

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

'I declare that I have no competing interests'