

ROUND 1

Dear Reviewer:

Define “favorable and unfavorable outcomes” before using the term “However, there are relatively few clinical investigations and treatment suggestions compared with the anterior circulation stroke.” What does this mean? This sentence has no relation/correlation with the previous sentence in the manuscript. Background should focus more on providing the “background for the current study” what is known, what is unknown, what do the authors intend to do with the current proposal.

➔ Thanks for the comment. We re-write our background and focused on our intension to find out the predictors of outcome (page 4). We avoided the term “unfavorable outcome” in background (page 4), and defined it before using it in methods (page 5). Furthermore, we added “Article Highlights” in page 20-22 to describe the “background for the current study” in brief.

Methodology: Author provide no evidence with regards to choice of primary outcome contrast. Why did the authors use mRS instead of other scales used to assess functional outcome such as trunk impairment scale, the fugl-meyer assessment of sensory motor function after stroke, MMSE, functional ambulation category (FAC) or the modified Barthel index (MBI). If the authors believe that mRS has the best evidence supporting its validation then appropriate citations should be included.

→ We choose Modified rankin scale (mRS) as the outcome measurement due to its global disability measurement, including instrumental activities of daily living (eg, meal preparation, shopping, handling money, etc.), basic activities of daily living (eg, walking, dressing, changing position, etc.) and other nonphysical characteristics (cognition, language, social functioning, mood disturbances, etc.). While other scales only focus on physical disabilities (trunk impairment scale, fugl-meyer assessment of sensory motor function, functional ambulation category and modified Barthel index) or cognition (MMSE). It's validity for assessing recovery from stroke and inter-rater reliability were also proved by numerous studies.^[1] (page 11)

Authors need to provide details for adverse events (AEs) related to intra-arterial thrombolytic group and non IAT group as well in table 1.

→ The main adverse events of intra-arterial thrombectomy and non IAT was symptomatic intracranial hemorrhage (SICH). There are 5 in 99 patients developed SICH. It was defined as CT-documented hemorrhage in combination with a more than 4-point change of NIHSS score.^[2] 2 patients who received IAT and 3 patients who received medical treatment alone developed symptomatic intracranial hemorrhage. Among the 5 patients, 1 patient had favorable outcome, and 4 patients had unfavorable outcome. We added the above information to table 1 (page 40) and in the paragraph (page 13).

Table 1 should be appropriately representing only the baseline characteristics and instead including outcome data such as favorable functional outcome. Categories with less than 10 patients should be clubbed together to improve the readability of table 1, otherwise the table appears to be unnecessarily long. It is unclear why the authors have separated non-IAT patients from IAT patients for the analysis (for Tables 2 and 3).

➔ We re-analysis and redoing our table. We deleted previous tables, re-analysis and redo our table (page 35-43). New table 1 (page 41-43) focus on determine the factors related to favorable outcome (mRS 0-3) or unfavorable outcome (mRS 4-6). We also do the ROC analysis and add one figure (page 33, Figure 1.), which showed that initial NIHSS was the strongest predictor to the 90 days functional outcome.

References

1. Banks JL, Marotta CA. Outcomes validity and reliability of the modified rankin scale: Implications for stroke clinical trials - A literature review and synthesis. *Stroke* 2007;**38**:1091-6 [PMID: 17272767 DOI: 10.1161/01.STR.0000258355.23810.c6]
2. Wahlgren N, Ahmed N, Dávalos A, Ford GA, Grond M, Hacke W, Hennerici MG, Kaste M, Kuelkens S, Larrue V, Lees KR, Roine RO, Soenne L, Toni D, Vanhooren G. Thrombolysis with alteplase for acute ischaemic stroke in the Safe Implementation of Thrombolysis in Stroke-Monitoring Study (SITS-MOST): an observational study. *Lancet*

2007;**369**:275–82 [PMID: 17258667 DOI: 10.1016/S0140-6736(07)60149-4]

Dear editor:

In this month, one of our co-authors, Yu-Ting Lin, asked for withdraw from the author list due to personal reason. First author, Yu-Chen Chiu changed represented institution, from “Department of Neurology, China Medical University Hospital, Taichung, Taiwan” to “Department of Neurology, An Nan Hospital, China Medical University, Tainan, Taiwan”. Also, one of the authors got wrong spelling, “Wei-Laing Chen” should change to “Wei-Liang Chen”.

This is the research gate link of doctor Wei-Liang Chen for reference.

<https://www.researchgate.net/profile/Wei-Chen-458>

ROUND 2

SPECIFIC COMMENTS TO AUTHORS

Authors have made the required changes to the manuscript. The flow of the manuscript is much improved along with the interpretation of the statistical analysis. As per the revised analysis the most significant factor which determines the long-term outcome is the initial NIHSS score. There is enough literature available which has established this fact previously. The current manuscript is adding no/ minimal new information.

Thank you very much for re-reviewed our manuscript.