Name of journal: World Journal of Clinical Cases

Manuscript NO: 76574

Title: Diffusion tensor imaging (DTI) pipeline measures of cerebral white matter integrity: an overview of recent advances and prospects

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05257465

Position: Editorial Board

Academic degree: MS

Professional title: Associate Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: Malaysia

Manuscript submission date: 2022-03-22

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-04-11 11:29

Reviewer performed review: 2022-04-16 11:44

Review time: 5 Days

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<th>Scientific quality</th>
<th>[ Y] Grade A: Excellent</th>
<th>[ ] Grade B: Very good</th>
<th>[ ] Grade C: Good</th>
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<th>Conclusion</th>
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| Re-review       | [ Y] Yes | [ ] No |
SPECIFIC COMMENTS TO AUTHORS

1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes.

2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes.

3 Key words. Do the key words reflect the focus of the manuscript? Yes.

4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes.

5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? NA

6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? NA

7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper’s scientific significance and/or relevance to clinical practice sufficiently? Yes.

8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends? Yes.

9 Biostatistics. Does the manuscript meet the requirements of biostatistics? NA

10 Units. Does the manuscript meet the requirements of use of SI units? Yes.

11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? Yes.

12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? Yes.

13 Research methods
and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? NA 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? NA Specific Comments To Authors: In the review paper, the authors introduce an overview of cerebral small vessel disease (CSVD), the principle of DTI, DTI pipeline processing and the prospects of the DTI metrics for CSVD. The article is well written and has a clear structure, which is of great help to the study of CSVD with DTI.
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Title: Diffusion tensor imaging (DTI) pipeline measures of cerebral white matter integrity: an overview of recent advances and prospects

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05448308

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: China

Author’s Country/Territory: Malaysia

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Reviewer chosen by: Dong-Mei Wang

Reviewer accepted review: 2022-05-10 17:20

Reviewer performed review: 2022-05-23 15:05

Review time: 12 Days and 21 Hours

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SPECIFIC COMMENTS TO AUTHORS

The authors present an interesting review titled as Diffusion tensor imaging (DTI) pipeline measures of cerebral white matter integrity: an overview of recent advances and prospects, the review is generally innovative in the pipeline point of view, however, I have several concerns which I hope the authors may pay attention and revise. Firstly, the manuscript is not well structured, they wrote about CSVD in several different paragraphs. I would suggest them to make it concise; Secondly, they stated they would highlight advances in DTI pipeline processing and the prospect of this DTI metrics as potential imaging biomarker for CSVD, however, they didn’t put this as the main focus. I would suggest they focus on their purpose. In addition, I suggest the authors to list some relevant application examples/literature in the four pipelines.