**Name of journal:** World Journal of Diabetes

**Manuscript NO:** 92540

**Title:** MRI combined with serum endolipin and galactagogue-3 to diagnose cerebral infarction in the elderly with diabetes mellitus

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 07917309

**Position:** Peer Reviewer

**Academic degree:** PhD

**Professional title:** Assistant Professor

**Reviewer’s Country/Territory:** Singapore

**Author’s Country/Territory:** China

**Manuscript submission date:** 2024-02-26

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2024-03-03 11:52

**Reviewer performed review:** 2024-03-15 09:01

**Review time:** 11 Days and 21 Hours

<table>
<thead>
<tr>
<th>Scientific quality</th>
<th>Grade A: Excellent</th>
<th>Grade B: Very good</th>
<th>Grade C: Good</th>
<th>Grade D: Fair</th>
<th>Grade E: Do not publish</th>
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<tbody>
<tr>
<td><strong>Novelty of this manuscript</strong></td>
<td>Grade A: Excellent</td>
<td>Grade B: Good</td>
<td>Grade C: Fair</td>
<td>Grade D: No novelty</td>
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<tr>
<td><strong>Creativity or innovation of this manuscript</strong></td>
<td>Grade A: Excellent</td>
<td>Grade B: Good</td>
<td>Grade C: Fair</td>
<td>Grade D: No creativity or innovation</td>
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Cerebral infarction is a common disease that jeopardizes the physical and mental health of patients, with mortality and disability rates exceeding those of cardiovascular diseases, making it a focus of clinical attention. However, the diagnosis of cerebral infarction combined with diabetes mellitus in the elderly using differences, and the specific imaging differences, have rarely been reported in clinical practice. Therefore, the authors conducted a relevant study in which they found the expression of serum endolipin and Gal-3 in elderly patients with diabetes mellitus with cerebral infarction showed an elevated trend, and the degree of luminal stenosis was severe. MRI predominantly revealed large and multiple infarct foci. This combined index examination can improve the clinical diagnosis of diabetes mellitus combined with cerebral infarction. In essence, the study's contribution to the medical literature is laudable, as it not only expands our understanding of the diagnostic landscape in cerebral infarction but also stimulates further research into the role of systemic inflammation and metabolic dysregulation in cerebrovascular disease. Despite the need for a full disclosure of results and a robust discussion of the findings, the research approach and the focus on improving diagnostics
in high-risk populations is highly commendable and worthy of consideration in the wider scientific community. In reviewer’s opinion, the manuscript would benefit from a stronger theoretical framework explaining the biological mechanisms linking diabetes, cerebral infarction, and the investigated serum biomarkers. Comments:

1. Please check all the abbreviations in the article, e.g., 'wall area (MA), vessel area (WA)' on page 2. The abbreviations are incorrect. The complete writing of the MRI on page 4 should be ‘Magnetic Resonance Imaging’, et al. In addition, all abbreviations should have full names upon first appearance in the main text.

Reply: All incorrect abbreviations have been corrected, and check that all abbreviations have full names when they first appearance in the text.

2. There are some duplicated descriptions in the Methods section.

Reply: Duplicate description has been removed.

3. References 1 has not been presented in the main text, and additionally, references 10 and 17 do not match the descriptions in the body text with those in the appendices.

Reply: Reference 1 has been supplemented and references 10 and 17 have been revised.

4. Key words should re-organized, for example, no Endocannabinoids were found in the manuscript, and MRI should be magnetic resonance imaging.

Reply: Key words have been reorganized.