## **Open peer review report 1**

## Reviewer: Daoli Zhu, Nantong University, China.

## **Comments to the authors:**

Through the retrospective summary of both cases material, magnetic resonance imaging (MRI), after searching relevant literature, scientific design and careful analysis of brain white matter hyperintensities (WMHs) from the brain white matter age differences and heterogeneity of the disorder of atherosclerosis lesions. The correlation between the age factors and the prevalence of WMHs was explored. With more and more clinical data, the relationship between age and recent incidence. A retrospective review of 833 cases of case control was carried out. The prevalence rate is early with age. Recent work stress significantly increases the age of white matter lesions in the brain. The prevalence of white matter hyperintensity (WMHs) is associated with age-related risk factors (cardiovascular disease, smoking, drinking, diabetes, hypertension and history of cerebral infarction). It has the significance of clinical scientific research and social practice.

## Shortcomings:

The article is not concise enough and clear, the English description is not standardized, and it needs to be further modified and perfected. Mistakes in English spelling need to be corrected.

It is recommended to keep table 1 and table 2.

Table 3 is deleted, but the content and two Figure of Figure 2 become together the 1 Figure, the ordinate is The prevalence of WMHs (%), and the abscissa is Age distribution (years), It iss displayed in the form of a histogram, mark P is less than or equal to a value of 0.05 indicates a statistically significant mean + standard error (the mean + SEM), the comparison between the two "\*" or " \*\* ". It is displayed on the top of the rectangle on the top of a small bar.

Table 4 is deleted and the content is changed to a histogram. And can be simple and clear standard display [with statistical content]!

Table 5 is deleted, The histogram 5 made from the relevant content needs to be modified. The ordinate is a Fazekas table scale score [Fazekas scale scores (scores)], the abscissa is the age distribution of the high signal of white matter in the brain

[the percentage of WMHs cases in each age-distribution group (years)]. The comparison between the number of "\*" or "\* \*" labeled values above the standard bar standard is statistically significant.

Figure 1 suggests that a histogram be changed.

Note that each histogram will be put the name of the Figure below the attached Figure. Both the ordinate and the abscissa should be marked with the name and unit.