

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The aim of this study is to explore the correlation between BPV and SCD, and to understand whether blood pressure variability could be used for early detection of cognitive impairment. Guo HF et al selected 237 individuals with normal cognitive (NC) function as the control group, and 182 with subtle cognitive decline (SCD) as the experimental group. The basic data, laboratory examinations, scale tests, and ABPM test results of the SCD and NC groups were retrospectively analyzed, and the relationship between BPV and SCD was subsequently assessed. Finally, they found that BPV is independently related to SCD and that the increase of BPV is one of the risk factors for early cognitive decline. This study has some limitations, the results are not rich, and the sample size of study is not large enough. However, BPV detection is cheap, non-invasive, and has a large audience, which is also an advantage. Overall, the manuscript is well written. The experimental design of this study is very well and the purpose is clear. The data in tables are excellent and well discussed. Thank you for giving me the opportunity to review this study. Was the study approved by the Ethics committee? I recommend that the manuscript can be published after polishing the English.

Response: Thank you for your kind comments. This study has been approved by the Ethics Committee of the Shanghai Sixth People's Hospital Affiliated to Shanghai Jiao Tong University School of Medicine. We have stated it in the "Institutional review board statement" in the footnotes. At the same time, we also checked the language again.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: The theme of this work is very interesting. AD is a highly harmful disease, and there remains no truly effective therapy for AD. Early identification, screening, detection, and intervention are important for preventing the progression of the disease. In recent years, SCD has become a hot topic in early-stage AD research. Moreover, the blood pressure variability test is inexpensive, non-invasive and easy to be accepted by patients. Identifying BPV with cognitive impairment can provide clinicians with valuable insights into the treatment process. After the retrospective analysis of the correlation between BPV and SCD described in this article, BPV was found to be independently correlated with SCD and the increase of BPV was considered to be one of the risk factors for early cognitive decline. The design of this manuscript is very well, and the research direction is also very well. The results were excellent. These conclusions provide new information as a tool for assessing cognitive dysfunction and treatment effectiveness. However, before publication, it is necessary to pay attention to the following problems: It is suggested to revise the following minor issues for publication: The meaning expressed in the participants section should be that 1095 people should be screened, and after the inclusion criteria, 237 people should be the control group and 182 people should be the

SCD group. However, the description of this chapter is not very clear, it is recommended to update the description of this chapter.

Response: Thank you for your suggestion. We have made some revision concerning the description of experimental group and control group in first paragraph of "MATERIALS AND METHODS". Please have a check.