

OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-20-00640

Title: Genetic variants of pri-let-7a-2 are associated with risk of ischemic stroke in a Chinese Northern Han population

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COMMENTS TO AUTHORS

The manuscript entitled "Genetic variants of pri-let-7a-2 are associated with risk of ischemic stroke in a Chinese Northern Han population" shows data from a hospital-based case-control study enrolling 1086 ischemic stroke patients and 836 control subjects, examining the effect of two SNPs (rs1143770 and rs629367) of pri-let-7a-2 on chromosome 11. Moreover, the study aims at investigating the association between pri-let-7a-2 genetic polymorphisms at the loci and ischemic stroke risk and gene-environment interactions in the northern Chinese Han population.

The authors demonstrate that rs1143770 CC genotype and C allele are related with a decreased risk of ischemic stroke while rs629367 CC genotype is related with an increased risk. Moreover, the data report that Rs1143770 in conjunction with alcohol use, smoking and hypertension history may have a combined effect in the pathogenesis of ischemic stroke. These findings have a dramatic clinical relevance, since they suggest that detecting pri-let-7a-2 polymorphisms may raise awareness of the risk of ischemic stroke, and individuals in high-risk groups might be advised to receive regular checkups to prevent stroke.

The manuscript is very clear, the text well organized, methods accurately described and results appropriately presented. The authors adequately discuss their data and honestly include the limitations of the study. I therefore believe that it is suitable for publication and I only suggest to following minor corrections:

- Please, verify that all abbreviations are defined at their first mention
- Page 3, line 36: please, replace the word "sufficient" with a more adequate term (e.g., abundant?)
- Page 4, line 19: please correct as "enrolling 1086 IS patients" (remove IN)
- Page 8, line 7: please use upper case (Pri-miRNA)