

OPEN PEER REVIEW REPORT 1

Reviewer 1: Sagar Gaikwad, Senior Research Fellow, Indian Institute of Advanced Research, India.

Comments to authors:

In this manuscript "Association between PPAR γ genetic polymorphisms and ischemic stroke risk in a Northern Chinese Han population" the authors have investigated the association between two genetic polymorphisms of PPAR γ with ischemic stroke risk in 895 ischemic stroke patients and 883 case controls from Northern Chinese population. The authors shown that two PPAR γ genetic variants, rs1801282 and rs3856806, play an important role in the etiology of ischemic stroke. Further, the study also revealed a synergistic SNP-SNP interaction between the two risk alleles. This study suggests that the rs1801282 CG genotype and rs3856806 CT/TT genotypes in PPAR γ are significantly associated with increased ischemic stroke risk in Chinese population.

The study is scientifically sound and represents a valuable contribution to the literature. Overall, this is well performed study, with proper methods for a purpose; most results are convincing and support the author's conclusion.

- The authors should comment and discuss the role of PPAR γ in the discussion section (Zhao et al., 2009 J Neurosci; Culman et al., 2007 Trends Pharmacol Sci; Certo et al., 2015 Pharmacol Res, etc.).
- This reviewer strongly suggest that the authors include brief description about the SNP-SNP interaction for reader's better understanding.