Reviewer's report

Title: Lack of association between the functional variant of BRCA-1 related associated protein (BRAP) gene and ischemic stroke

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Reviewer: Kevin Zbuk

Reviewer's report:

This manuscript explores the possible association between a variant in BRAP and Ischemic Stroke in a Chinese population. The study was negative, and the authors have been very straightforward that, despite multiple analysis strategies there is no association. I do believe it is important to publish negative studies in order to avoid publication bias. It is interesting that this SNP appears to be a susceptibility loci that might be ethnicity specific and perhaps this should be mentioned somewhere in the MS. From what I could see in the literature, the association has only been observed in Asian populations.

Major Revisions:
1) I feel that the authors need to be more explicit about the possibility that the study was underpowered to detect an association between the SNP and large vessel stroke. The power calculations they provide are for all ischemic stroke subtypes combined. However, the authors clearly state that large vessel stroke is the subtype most often associated with atherosclerosis, and yet made up a minority of the cases in the study.

2) The grammar should be significantly revised. As a few illustrative examples:

#) The title refers to "the" function variant of BRAP. I presume this is not the only functional variant in BRAP. If so, the title should include the specific SNP

#) In the background "To be noticed, a family history of myocardial infarction (MI) also increases a risk of stroke" is not standard grammar

#) Background "with a 1.3- fold risk for cerebral infarction' Is this an odds ratio/relative risk ?

Minor Revisions
1) In the background the authors state "To be noticed, a family history of myocardial infarction (MI) also increases a risk of stroke [3]. It implies that these two diseases have certain genetic determinants in common" This is not necessarily true - can be the result of shared reversible risk factors

2) The comment "Polymorphism rs11066001 was selected because it affected
the transcription of BRAP and showed the strongest association with MI risks.
Should not be in the DNA extraction and genotyping section of the methods
section.

3) It might have made more sense to define super-normal controls as "older"
controls without plaque, as the super-normal controls were significantly younger
than cases.

**Level of interest:** An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being
published

**Statistical review:** No, the manuscript does not need to be seen by a
statistician.