Reviewer’s report

Title: MTHFR C677T and MTR A2756G Polymorphisms and the Homocysteine Lowering Efficacy of Different Doses of Folic Acid in Hypertensives Chinese Adults

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Reviewer: Madhu Khullar

Reviewer’s report:

A point mutation in MTHFR gene (C677T) in Caucasian population has been shown to be associated with mild hyper-homocysteinemia, particularly in subjects with low plasma folate levels. There have been a few studies examining the role of MTHFR genotypes on effect of folic acid supplementation in reducing HC levels. In this manuscript, authors report the effect of folic acid supplementation in 2 doses (0.4/0.8 mg/day) on homocysteine (HC) levels in Chinese hypertensive patients may be influenced by MTHFR C677T genotypes. They show data supporting that dietary supplementation with 0.8 mg folic acid is more effective in decreasing HC levels in these patients, but is still not as effective in case of MTHFR 677TT genotype carriers.

My major comments are:

1. The sample size is rather small, when sub-grouped into various groups (Control, low FA and High FA), for genetic association studies.

Minor comments

2. Table 2 and Fig. 2 are presenting same data, so either of these should be given.

3. It will be better to give Response of Plasma Homocysteine lowering to Different Doses of Folic Acid Supplementation by MTHFR C677T /MTR Genotypes as Delta reduction/percent reduction. The current Tables are v confusing.

4. Fig. 1 is also not needed.

5. Authors should cite some Asian studies as there is ethnic difference between Asians and Caucasians as far MTHFR genotypes and Folate levels are concerned.

6. Enalapril has been reported to influence HC levels, authors should discuss this vis a vis their results.

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

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests’