Reviewer's report

**Title:** The effect of homocysteine-lowering with B-vitamins on osteoporotic fractures in patients with cerebrovascular disease: substudy of VITATOPS, a randomised placebo-controlled trial

**Version:** 2 **Date:** 27 May 2013

**Reviewer:** Irena Keser

**Reviewer's report:**

The study describes an interesting and clinically relevant topic: the effect of homocysteine on osteoporotic fractures. The study is well designed, with the large number of participants and clearly written. The research question posed by the authors is well defined. The title and abstract accurately convey what has been found. The methods are appropriate and well described. The discussion and conclusions are well balanced and adequately supported by the data. The limitations of the study are clearly stated.

**Major Compulsory Revisions:**
1) **Methods**
   Why homocysteine levels were analyzed in serum and not in plasma? It is not stated which method is used to determine homocysteine levels.

2) **Results**
   Effect of trial medication on homocysteine levels
   The authors did not state were mean homocysteine levels significantly different between the vitamin and placebo groups.

**Minor Essential Revisions:**
1) **References**
   References 6 and 26, title shold be bold.
   Abbreviations of journals should be Italic. Page numbers are not written in a proper way.
   (see Instructions for authors)

**Discretionary Revisions:**
1) **Background, second paragraph**
   Authors stated three randomised controlled trials that have examined the effect of B-vitamins on biomarkers of bone turnover. The following publication could also be cited:
   
   Keser I, Ilich JZ, Vrkić N, Giljević Z, Colić Baric I (2013) Folic acid and vitamin B12 supplementation lowers plasma homocysteine but has no effect on serum bone turnover markers in elderly women: a randomized, double-blind,

2) Discussion
The Discussion should present some more published studies on this topic.
For example:

Level of interest: An article of importance in its field

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.