Reviewer's report

Title: Homocysteine and Cardiovascular Disease

Version: 1 Date: 7 December 2014

Reviewer: Srinivasa Raju Datla

Reviewer's report:

The review article entitled “Homocysteine and Cardiovascular diseases” is a well-structured article and covered all the aspects of homocysteine in cardiovascular diseases. However, it may need little editing to accept for publication as mentioned below.

Major:
1. Abstract: The abstract gives an impression that the author is focusing on neuronal effects of homocysteine, however, the title and the major content of this review is about various cardiovascular diseases. Please modify the abstract such that it could provide actual focus of the review.
2. Mainly the author pointed the controversies of homocysteine levels and relation to cardiovascular diseases. This point needs to be highlighted in the abstract.
3. Page 23 – Experimental data from author – The figures doesn’t have the direct comparison. Make a single figure if they are done on the same study and provide the significant data and ligands.
4. The experimental data provided in this study by the authors in the figures may not support the conclusion. Provide additional data or remove this from the review.

Minor:
5. In page 4 the title “what is hyperhomocysteinmia ?” may not necessary.
6. The paragraph in page 5 starts with homocysteine metabolism but it covers the synthesis part also. Try to separate them if possible.
7. At multiple places author said “this paper”, which could be replaced by author names.
   a. Page 5 – Paragraph 2 – lane 7
   b. Page 15 — lane 13
   c. Page 16 – Paragraph 2 – lane 1
8. Similarly, author says that “some factors” or “some of the symptoms”, which could be replaced with actual factors and effects.
**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.

**Declaration of competing interests:**

No interests exits