

## **Reviewer's report**

**Title:** Effect of statin therapy on the progression of coronary atherosclerosis: new insights through meta-analysis

**Version:** 3 **Date:** 8 March 2012

**Reviewer:** Gregory Makris

### **Reviewer's report:**

Peer review commends regarding the paper by Tian J, et al "Effect of statins on the progression of coronary atherosclerosis"

I would like to thank Dr Tian and his colleagues for their effort. Before I start my report I would like to mention a few general issues that need the attention of the authors:

-Despite the interesting subject the authors fail to link it properly with the current clinical needs and identify the clinical implications of their findings. We generally know that the pleiotropic effects of statins have a beneficial role on plaque stabilization however the underlying mechanism and how we will take advantage of this property remain an issue of debate.

-The entire manuscript needs editing and probably rewriting in some parts by a native English speaker. I strongly encourage authors to carefully revise the grammar and syntaxes before resubmitting.

I wouldn't generally recommend the acceptance of this paper unless major revision is performed along the following lines:

Title: Needs shortening: "new insights through metanalysis" is unnecessary

Abstract: Needs shortening as well and restructuring including a Method section-include limitations of research and that further research is needed. It also needs rephrasing at some points

Background: 2nd paragraph needs rephrasing

Explain why this research is necessary and how is clinically relevant

Methods: For some reason it appears after the conclusions. Please bring this section after introduction. Needs editing as well

Why search date ranges from 1990 to 2010 and not 2012. please update search

Inclusion criteria need to be more specific. Please define what you mean by plaque components. Where are the exclusion criteria? Improve the flow chart?

"Financial situation ...hidden" this doesn't have to be here

In the study selection all the reasons for the excluded studies can be summarized in the flow chart.

End points: Need to be carefully defined

Statistical analysis: please describe how you did the subgroup analysis and the

stratification you mention later on in the results section.

RESULTS: A second table summarizing the study finding needs to be added. At the moment you only have one table with the table characteristics. Please also include quality scoring for the included studies.

First paragraph is too long.

Funnel plots are mentioned but are not included anywhere in the manuscript or the graphs.

The type of statin was not studied? If not why and if yes what where the results?

Discussion (AND NOT DISCUSSIONS)

The whole section needs editing by native speaker.

Commend a bit more on relative literature and on the clinical implications of your research

No suggestions for further research are mentioned

Explain the various plaque components and their potential significance on plaque stability. Please expand on this using relevant literature.

"The results of this meta are robust" please rephrase! The whole 2 paragraphs after that need rewriting.

The limitation section needs rewriting as well.