Reviewer’s report

Title: Systematic study of the effects of lowering low-density lipoprotein-cholesterol on regression of coronary atherosclerotic plaques using intravascular ultrasound

Version: 5
Date: 21 February 2014
Reviewer: Matteo Bianco

Reviewer’s report:

Major Compulsory Revisions

1. On page 10, last paragraph, the data presented should be standardized and made more understandable to the reader. I think it is difficult to understand the message that the author wants to bring out.

2. On page 12, third paragraph, the data presented should be standardized and made more understandable to the reader. I think it is difficult to understand the message that the author wants to bring out.

3. In the discussion, the authors should try to explain why statins do not have a class effect and whether this could be explained by too low dosages that were used in the studies analyzed.

4. In the study limitations, I think the fourth point in the meta-analysis should clarify that no account is taken of other cardiovascular risk factors and neither of some demographic characteristics such as age, gender, ethnicity. In my opinion, these data could be closely related with the dynamic changes of atherosclerotic plaque. Future studies should take into account all these data in order to describe more closely to the real world dynamics of plaque.

Discretionary Revisions

1. The included studies were quite heterogeneous, do not think that the use of drugs other than statins may represent a potential confounding factor in the comparison between studies?

2. On page 8, when you cited the study included, sometimes you talk about "background lipid-lowering therapy", can you be more specific on the therapy used?

3. On page 11, and more generally when describing the decrease in plaque size, you may also enter the mean values at baseline and at follow-up, and not just the decline?

Level of interest: An article of importance in its field
**Quality of written English**: Acceptable

**Statistical review**: Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests**: I have no competing interests.