Reviewer’s report

Title: Protective effects of Arctium lappa L. Root Extracts (AREs) on High Fat Diet Induced Quail Atherosclerosis

Version: 2
Date: 22 October 2015
Reviewer: Julio B Daleprane

Reviewer’s report:

Major Compulsory Revisions

In the present work using atherosclerosis Quail model, the authors aim to investigate different extraction of Articum in atherosclerosis markers. Although several data are presented in the manuscript, some points should be clarified to consider it to publication in BMC Complementary and Alternative Medicine.

Line 63 to 67: Atherosclerosis is a very complex event. In the introduction section the authors should explore more this event in detail.

Line 90: Although several works use Quail model, it is not very establish as a animal atherosclerosis model. In this paragraph this sentence should be remove. And please, include information about the quail model, citing others works that used this model. In the histology analysis I was not able to identify atheroma plaque, this model is really able to develop atherosclerosis? Please use oil red staining to identify fat deposits in aorta. Why the authors did not use mice, example LDL-/- or ApoE mice?

Line 111: What kind of compounds there are in the AEE, AAE, ACE and AFE? Some analysis should be done in the extracts. Additional necessary experiments must be add to clarify this point. There is any information in the literature? If yes, should be included in the discussion.

Line 138: There is no information regarding animal weight and diet consumption. This information should be included. Weight can be used as a primary toxicological indicator.

Line 151: Why the authors use 4.5th and 10 weeks?

Line 163: MDA is a pro-oxidative assay.

Line 170: Which part of aorta was dissected? Aortic arches?

Line 172: Hematoxylin and eosin seems to be not very useful to demonstrate lipid accumulation in intima.

Statistical analysis should be provided and included in the Material and Methods section.
Line 303: In my opinion it is not clear the establishing model of atherosclerosis using quail. It was impossible to see atheroma plaques. There is no molecular marker of atherosclerosis. If the authors are not able to demonstrate it, the pictures must be removed, and the aim of the article should be reviewed.

Pictures legend should be rewritten to be more concise and clear.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

There is no competing interest.