Reviewer's report

Title: Esculin improves dyslipidemia, inflammation responses and renal damage in streptozotocin-induced diabetic rats

Version: 3 Date: 11 June 2015

Reviewer: unnikrishnan mk

Reviewer's report:

Major Compulsory Revisions

Though each experimental group has 10 animals, the error bar is substantial in most of the results. Please explain why this is so?

AGE reduction is reported as the mechanism, but the authors have not attempted to explain why AGE is reduced.

The mechanism may be discussed in greater detail with reference to the following papers.


How do the results enhance whatever is already known from the following studies? The discussion should focus on this aspect if the paper is to gain credibility


Minor Essential Revisions

1) The text has grammatical errors, typos (abstract sentences 10, 22, etc) and spelling mistakes (manuscript sentences 24). Several sentences (abstract sentences 3, 24-26, manuscript sentences 20, 29 etc) may have to be rephrased.
There is no uniformity in the choice of spellings (US/UK) (eg sentence 2)

2) What is the complete botanical name of the plant? The manuscript mentions only ‘Fraxinus’.

3) How were the doses selected? Has any toxicity studies been performed?

4) What was the standard drug employed for the sake of comparison?

5) Introduction (line 26) says esculin was extracted, while materials and methods section line 8 says it was supplied as a chemical?

Discretionary Revisions

Nrf2 could have a role in AGE reduction. Authors should look for evidence in published literature

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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I have no competing interests