Reviewer’s report

Title: A New Method to Induce Nonalcoholic Steatohepatitis (NASH) in Mice

Version: 2 Date: 28 Feb 2019

Reviewer: Reviewer 2

Reviewer's report:

REVISION ASSESSMENT FROM THE ACADEMIC PEER REVIEWER:

Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution?

No

Reviewer comments: The study described by the authors sounds but is unfortunately based on a non-novel approach and contains limited measurements. In detail:

1. Statistically significant results should be described and commented. Non-significant results mean the number is probably too low to highlight a difference, or there is no difference at all. A trend is not informative.

2. The paragraph "effect of different diets feeding on liver enzymes" is actually only focusing on transaminases. Such enzymes are an indirect proof of an hepatic damage/necrosis. Fat diet and cigarette smoke are well-know to effect several additional parameters. Functional enzymes such as cytochrome P450 (i.e. 1A2 forms) should be investigated and evaluated. The inducible effect on metabolic enzyme by the diets described by the authors are not leading to any conclusion or relevant observations. Analysis on hepatic parameters, including CYP450 enzymes and phase II metabolism as well as urea cycle enzymatic activity are highly encouraged.

3. Histopathological evaluation has been largely described in literature for NASH/NAFLD models. Without any additional biomolecular measurements, there is no way to draw any important and relevant conclusions that has not been described yet.

The authors should consider a short communication in some experimental journal. In particular, due to the fact that the Material and Methods section is so detailed.

Statistical analysis are not clear (how p values are calculated and why SEM instead of SD for a n=8?).

Finally, the authors should carefully check and editing the English language.
Minor issue: all the data should have the same amount of digit after the comma to compare. A graph (histogram with dot plot and mean+SD) could help the reader to understand and the authors to be more organized during the results description.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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