Open peer review report 1

Reviewer: Filip Petkovic, Universitat Autonoma de Barcelona, Spain.

Comments to the authors:

The strength of the manuscript is that provides some novel data, so it is of interest. The main issue is in vivo 'preliminary experiment', which they mention but do not include in the manuscript nor they provide any reference. If these results had been included the manuscript would have been much better, especially because these are in vivo data. As it is it is not clear why they have not included it. Perhaps they want to split the results it into two papers, which I find unacceptable, especially considering relatively few data in the present manuscript.

In this short report, the authors are showing that folic acid, in the concentration of 100 mg/l, stimulates proliferation, migration and NGF production by Schwann cells, in vitro. Additionally, they show that the same concentration of folic acid increases neurite outgrowth in PC12 cell line. These results are suggesting a potential mechanism of how folic acid may improve repair of the injured peripheral nerves.

Major comments:

- 1. The authors are mentioning their "preliminary experiment" in the Abstract, on the page 2 line 19, page 8 line 17, as if this paper is continuation of the "preliminary experiment". However, there is no reference regarding this. This must be corrected. Is it a previously published work or an unpublished work? If this is an unpublished work, this result must be added to this manuscript. That is the paper should start with this result and then continue with what they are showing here.
- 2. The Discussion section is not written very well. In the present form, it looks like repetition of the Results section. This section must offer some more explanations for the obtained results and their critical comparison with previously published work on this subject.
- 3. The authors do not offer any explanation of why the higher concentrations of folic acid, that is $150 \, \text{mg/l}$ and $200 \, \text{mg/l}$ have not had any effect.

Minor comments:

Figure legends must be written in a more detailed manner.

Fig1. Scale bars are not defined, and each image contains two different scale bars, which is unacceptable. Stained marker must be stated here (S-100 β).

Fig2. The reader has no idea which image (A,B,C...) corresponds to which treatment (10, 50, 100...) G-The obtained number is per/chamber or mm2?

Fig4. The same as in Fig2. The reader has no idea which image (A,B,C...) corresponds to which treatment (10, 50, 100...). Also, the scale bars are not defined.