Reviewer's report

Title: Expression levels of the hypothalamic AMPK gene determine the responsiveness of the rats to electroacupuncture-induced analgesia

Version: 1 Date: 9 March 2014

Reviewer: Jianqiao Fang

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- Major Compulsory Revisions

1 Methods, Acute thermal pain behavior, rats were divided into three types by TFL change. Authors defined the rats which TFL increase after EA stimulation was greater than 30% as responders, and less than 20% as non-responders. But it is not clearly what is the type of the rats TLF increase between 20% and 30% and why the subjects were discarded.

2 Same part, the testing of TFL should be corrected. The thermal stimulation should be given by a definite intensity, and 1-min interval time was too short to eliminate the pain memory of rat.

3 It is not clear when the EA stimulation was given.

4 The description about the method of real-time PCR needs to be more detailed, some important information, such as amplification efficiency, standard curve, multiple poles and computing method are lacking.

5 The number of animals in each group need to be more. Now the data was lacking of convincing.

6 In Figure 4, the significant difference was only showed on post-14d. It is not supported the conclusion.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests