Reviewer's report

Title: Behavioral and biochemical effects of pharmacopuncture (ST 36 and ST 25) in obese rats

Version: 3 Date: 27 April 2015

Reviewer: Seungmin Lee

Reviewer's report:

Major Compulsory Revision

1. Although the authors conclude that 'bee venom pharmacopuncture may be recommended as a complement in the treatment of patients with high cholesterol, glucose, and triglyceride levels', the results of this paper is too weak to convince the reader why bee venom pharmacopuncture is even a suitable treatment option for treating obesity. Other treatment modalities such as acupuncture or electroacupuncture can bring about similar effects with only one to two sessions of treatment per week for two to three months. Injecting bee venom on acupuncture points every day for three months along with the risk of side effects doesn't make it a highly meritable or even feasible treatment option. Please further explain the significance of this research paper.

2. The fact that well known substances in bee venom such as mellitin, apamin, and adolapin all possess anti-inflammatory properties, and obesity, is also linked to inflammation, looking further into inflammatory markers would have made an interesting additional experiment. Using electroacupuncture or acupuncture as one of the compare groups would have also made this paper stronger.

Minor Essential Revisions

1. Please proofread your whole manuscript because there are some critical typing errors that affects the quality of this paper.
   - Abstract (line 6): HDP36 and HDP36 -> HDP36 and HDP25
   - Methods (6th paragraph last line): Tianshu (ST36) -> Tianshu (ST25)
   - Results and discussion (line 7): more quickly and conveniently that the original techniques -> more quickly and conveniently than the original techniques
   - Behavioral assessment (Elevated Plus Maze): The first two paragraphs are redundant. Please combine these into one.

2. To increase reproducibility of this paper, the methods section in this paper needs to further describe where the bee venom was provided by, how much mL was inserted into each acupuncture point to approximately what depth, and to
which side of the body (left/right/both), and what they defined a non-acupuncture point to be. Furthermore, although in the beginning of the Methods paragraph, the authors say that they used 'twenty male wistar rats for each acupoint, besides 20 control animals' which makes it 60 animals in total, but in the seventh paragraph, they say there were ten animals each in SDH, SDNO, SDP36, SDP25, HDH, HDNP, HDP36, HDP25 making it 80 in total. Please clarify.

**Level of interest:** An article of limited interest

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

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

**Declaration of competing interests:**

I declare that I have no competing interests.