Reviewer’s report

**Title:** Annona muricata Leaves Induced Apoptosis in A549 Cells through Mitochondrial-Mediated Pathway and Involvement of NF-kB

**Version:** 1  **Date:** 18 July 2014

**Reviewer:** Shih-Shun Chen

**Reviewer’s report:**

In this study, the authors investigated the detailed mechanism of A. muricata leaves ethyl acetate extract (AMEAE) in antiproliferative effects against lung cancer A549 cells. However, there are several concerns in the manuscript.

**Major concerns:**

1. In figure 4A-D, the max value of Y-axis (number) is inconsistent. The authors should unify this value or these data would be misleading. Furthermore, the image resolution is too low, the symbols are barely recognized even zoom to 200%. They should be replaced with better images.

2. It is very confusing in figure 7B. Compared with the data (figure 9) in the reference [19] which the authors mentioned in methods section, the patterns in figure 7B seem not to be typical images for western blot analysis. It is much better to represent as original images if the authors use negative effect in the data.

3. In figure 8, there are only representative bar charts to illustrate the data. The authors should provide original data (images of gel electrophoresis) such as the data in figure 3, 4, 5, and 6. Moreover, the statement of figure 8 in result section is missed. The authors should mention figure 8 in the paragraph “AMEAE induced upregulation of Bax and downregulation of Bcl-2 at the gene expression level”.

**Minor concerns:**

1. On page 14, line 1~2, the authors mentioned that “AMEAE treatment at different time periods (24, 48 and 72 h) resulted…” However, labels on X-axis of figure 3E are “control”, “24”, “47”, and “72”, respectively. The authors should confirm this.

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

**Quality of written English:** Acceptable

**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.