Reviewer’s report

Title: Inhibitory Effect of Phyllanthus urinaria L. Extract on the Replication of Lamivudine-Resistant Hepatitis B Virus in vitro

Version: 3 Date: 16 June 2015

Reviewer: Angel Alex

Reviewer’s report:

Major compulsory revision
The authors are expected to quantify the amount of A and B in percentage from total peak area calculation from the LC chromatogram (Figure 1).

Minor essential revisions
1. Neither in the title of the manuscript or in any sub-headings, it is mentioned that the study was carried out using aqueous dried leaf extract of Phyllanthus urinaria koreanis. It is ideal to specify which type of extract is used.

2. Background: 7th paragraph
   a) Here, we showed that Phyllanthus urinaria koreanis extract inhibits HBV DNA synthesis and HBsAg and HBcAg secretion by LMV-resistant HBV mutants in vitro. ...........

   may be rewritten as: The results indicated that (or) the present study revealed that Phyllanthus urinaria koreanis extract inhibits HBV DNA synthesis and HBsAg and HBcAg secretion by LMV-resistant HBV mutants in vitro....... 

   b) We also showed that this did not occur via the inhibition of core particle formation and pgRNA encapsidation.

   may be written as: It was also evident from the result this did not occur via the inhibition of core particle formation and pgRNA encapsidation.

Discretionary Revisions (comments for future work)

a) The aqueous leaf extract was prepared according to the reported method, and quantified using liquid chromatography/quadruple time-of-flight mass spectrometry. The chromatogram shows peaks of two unidentified compounds, marked as X and Y, along with other known compounds. The data and results presented is sufficient for publication of this article, however, further studies to understand the peaks X and Y and their role/activity may be carried out.

b) 2. Why HepG2 cell line which are liver carcinoma cells, used for the study instead of normal cell lines such as THLE-3 (ATCC® CRL-11233™)?
**Level of interest:** An article of outstanding merit and interest in its field

**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