Reviewer's report

Title: Induction of selective cytotoxicity and apoptosis in human T4-lymphoblastoid cell line (CEMss) by Boesenbergin A isolated from Boesenbergia rotunda rhizomes involves mitochondrial pathway, activation of caspase 3 and G2/M phase cell cycle arrest

Version: 2 Date: 4 December 2012

Reviewer: Sudhakar Raja

Reviewer's report:

The Manuscript 'Induction of selective cytotoxicity and apoptosis in human T4-lymphoblastoid cell line (CEMss) by Boesenbergin A isolated from Boesenbergia rotunda rhizomes involves mitochondrial pathway, activation of caspase 3 and G2/M phase cell cycle arrest' is well designed and excellently executed. The study results are interpreted and discussed in detail.

There are some minor comments:

The English language throughout the manuscript must revised carefully

ABSTRACT

First lane (family Zingiberaceae).............must be Family: zingiberaceae since there is no animal study involved the word "anti-cancer" must be removed and can be substituted with "cytotoxic" or "anti-proliferative" throughout the manuscript.

Since the authors knows the molecular weight of the compound microgram per ml must be changed to micro molar.

There are many inconsistencies........south-east or south east................anti-cancer or anticancer

BACKGROUND

2nd para ...............anti-Helicobacter pylori............must be italics
3rd para ............Boesenbergin A.............must be boesenbergin A
3rd para.............. Panduratin A in second last line must be panduratin A

Keep lowercase to start the compounds names throughout the manuscript

CELL CUCLTURE CONDITION

The first lane..............Estrogen receptor positive MCF-7 cells and cervical cancer cells Hela were obtained fgro........Must be ......................Estrogen receptor positive cells (MCF-7) and cervical cancer cells (Hela) were obtained from.....
There is no uniformity in writing the company names of kits and instruments........follow an order........for example company name, city, country
Some places milliliter is 'ml' and in some 'mL'..........'MCF-7 or MCF7'correct it

CYTOTOXICITY OF BOESENBERGIN A ON PROLIFERATED PRIMARY HUMAN BLOOD LYMPHOCYTES
This paragraph is out of format.

ANNEXIN V ASSAY
The second last line propidium iodide can be written as PI

DNA LADDERING
Last line .................visualized with a UV light transilluminator and photographed.........................include the brand name

COLOURIMETRIC ASSAY OF CASPASE-3/7, 8 AND 9
This assay is a colurimetry assay. But in the end of the experiment authors have used luminescence microplate reader........why?

IN RESULTS

CELL GROWTH CYTOXOXIC ASSAY
line 3.....no need italics

ANNEXIN V ASSAY
Last line must rephrase
the figure 6 must include the molecular weight of marker
the figure 9 must give the description about the dots with corresponding proteins which it represents.

Level of interest: An article of importance in its field
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