Reviewer's report

Title: MiR-181a contributes to bufalin-induced apoptosis in prostate cancer cell PC-3

Version: 1 Date: 17 August 2013

Reviewer: Jia Fei

Reviewer's report:

The manuscript entitled “MiR-181a contributes to bufalin-induced apoptosis in prostate cancer cell PC-3”

bufalin from traditional Chinese medicine is used in treatment of cancer. Zhai et al screened out a differential expressive miRNA, mir-181a, induced by bufalin using q-PCR. bufalin could induce the expression of miR-181a and promote apoptosis. Furthermore, miR-181a inhibitor rescued bufalin-induced Bcl-2 reduction and caspase-3 activity. This research uncover a novel mechanism of action in bufalin, and have some academic value. However, my concern is the following problem.

1.qPCR ,used to screen miRNA, is low-efficient. Please take about application of miRNA microarray in cancer.

2.Mir-181a have multiple target genes apoptosis-related, such as RalA. It is needed for more target analysis.

3.Why didn’t author try to transfer mir-181a into PC-3?

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.