Reviewer's report

Title: Aqueous cinnamon extract (ACE-c) from the bark of Cinnamomum cassia causes apoptosis in human cervical cancer cell line (SiHa) through loss of Mitochondrial Membrane Potential

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Reviewer: Shozo Nishida

Reviewer's report:

The present study demonstrated that Aqueous cinnamon extract (ACE-c) from the bark of Cinnamomum cassia causes apoptosis in human cervical cancer cell line SiHa. The author studies its mode of action and concluded that ACE-c caused up-regulation of intercellular calcium signaling resulting into loss of mitochondrial membrane potential. However, the authors should have used purified single drugs and not the ACE-c in each experiment.

Major compulsory Revisions

1) The authors should use individual drugs for each experiment. It is unclear whether purified single drugs in the ACE-c inhibit cell growth and cause apoptosis.

2) Did the authors confirm that ACE-c and purified single drugs inhibit tumor growth in vivo? The authors must produce evidence.

3) The authors demonstrated that ACE-c inhibits MMP-2 expression. It is unclear that ACE-c inhibit other MMPs expression. The authors should confirm that ACE-c inhibits other MMPs expression, such as MMP-1, MMP-9, and MT1-MMP.

4) Although the paper describes the inhibition of HER-2 expression by ACE-c, it is important to show that another method of HER-2 expression is capable of suppressing MMP-2 such as by using siRNA to achieve knockdown.

5) The authors demonstrated that ACE-c increased intercellular calcium. However, it is unclear the mechanism of ACE-c-induced up-regulation of intercellular calcium. The authors should confirm the mechanism of ACE-c-induced intercellular calcium.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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.