Reviewer’s report

**Title:** Frankincense oil derived from Boswellia carteri induces tumor cell specific cytotoxicity

**Version:** 1  
**Date:** 2 December 2008

**Reviewer:** Yongkui Jing

**Reviewer’s report:**

The resin of boswellia carterii and its components boswellic acids have been shown to have antiproliferative effects in several types of tumor. Although frankincense oil has been used as traditional medicine, its antitumor effect has not been reported. In this manuscript, Frank et al report that frankincense oil induces specific toxicity to bladder cancer cells but not in normal bladder urothelial cells and identify gene regulation using DNA microarray. The data shown are interesting but they do not support the conclusion of that frankincense oil induces specific cytotoxicity without causing DNA fragmentation. The following concerns should be addressed before acceptation for publication.

1. Frankincense oil should be standardized based on, at least, the contents of boswellic acids. Otherwise, it is hard to be repeated due to different preparation.

2. XTT assay only detect attached cells. Based on the data shown it seems that frankincense oil causes detachment of J82 cells without losing viability. This may explain why DNA fragmentation is not detected. The viability of detected cells in the medium should be determined using trypan blue to confirm that frankincense oil causes cell death.

3. DNA fragmentation should be determined in detached cells using more sensitive method such as TUNEL assay.

**Level of interest:** An article of importance 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.