Reviewer's report

Title: MAK-4 and -5 supplemented diet inhibits liver carcinogenesis in mice

Version: 1 Date: 14 April 2007

Reviewer: Takuji Tanaka

Reviewer's report:

General
The manuscript by Penza et al. describes that two herbal mixtures of Maharishi Amrit Kalash (MAK), MAK-4, MAK-5, and mixture of both, are effective for suppression of ras-induced cell transformation and for inhibiting the development of urethane-induced mouse liver nodules. They suggest that inhibition of excessive oxidative damage and up-regulation of connexin 32 expression are responsible to the effects of these products. The procedures of in vitro and in vivo experiments are straightforward and the findings are of interest. Although there are several concerns listed below that must be resolved, the manuscript can be accepted in the journal.

----------------------------------------------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. Is there any evidence that ras activation is responsible to human liver cancer development? If so, describe and discuss.
2. The rationale for investigation of the effects of a mixture of MAK-4 and MAK-5 should be described and discussed.
3. The authors describe the ingredients of MAK-4 and MAK-5. Which ingredient(s) are most important for the biological effects observed in the study? This should be briefly described and discussed.

----------------------------------------------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

----------------------------------------------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)
None

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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.