Reviewer's report

Title: Induction of lung lesions in Wistar rats by 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone and their inhibitions by aspirin and phenethyl isothiocyanate.

Version: 1  Date: 5 September 2006

Reviewer: PRAMOD UPADHYAYA

Reviewer's report:

General
The paper describes a new model of Wistar Rats treated with 3-methyl chhoranthene or NNK by a single dose for inducing pre-neoplastic lesions. The authors discuss clearly that this model is better than the other models for lung cancer.
I would like to encourage the authors to carry out long term studies that preneoplastic lesions will indeed lead to adenocarcinoma. This is very important to confirm the above data.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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

Page 2 line 3 include before NNK tobacco-specific lung carcinogen
Page 2 line 7 PEITC as chemopreventive agent on tumor progressing in wistar rat model
Page 7 line 20 quote references
Page 8 line 10 quote references
Page 9 line 3 scoring criteria were similar to those used with human species (Hida, T. et al Cancer Research 58, 3761-3764, 1998) is so please provide the reference
Page 9 line 11 normal diet were used- specify what type of diet was used.
Page 9 line 12 Give body weights and food consumption. Did the rats lose any body weight during the entire experiment.
Page 13 line 9 results summarized in table1 does not match the description. Change group 1,2,3,4, 5 to group A,B,C,D,E, put in the same order as per discussion otherwise it is confuses the reader.
Page 13 line 12-14 include the % decreased atypical dysplasia in table 1.
Page 14 line 21-22 explain briefly what is the application? including blood what does that mean? not clear to follow
Page 33 Table 2 why there was significant reduction of PCNA cells treated with aspirin and PEITC- provide explanation. In the text it was not clearly indicated. Also mention that aspirin inhibits the cox-2 not PEITC when given in combination (group C).

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests