Reviewer's report

Title: No influence of the MDM2 SNP309 on early onset lung cancer in a Caucasian population

Version: 1 Date: 22 October 2007

Reviewer: Leah Mechanic

Reviewer's report:

General

In the manuscript by Mittelstrass et al., the authors examined the association of a functional promoter polymorphism in MDM2 with early-onset lung cancer. In the large Caucasian population, no association of the MDM2 SNP309 with lung cancer was observed overall, when stratified by gender, smoking status, or lung cancer histology. This report is of interest due to the previous inconsistent reports in the literature and the young age of the cases.

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

None.

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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)

1. Authors should comment on additional quality control metrics of the genotyping data. What percent of duplicates were included in the assay? What was the concordance between the duplicates? Was the frequency of the MDM2 SNP similar to that observed in other studies of Caucasians?

2. When conditioning on age, how was the data adjusted (was age continuous, or were the 3 year age categories used)?

3. On page 6, in the last paragraph of the results, authors wrote “Among women, however, we observed a none significantly lower age of diagnosis of eight month in females compared to males (p=0.059).” The meaning of this sentence is unclear. I believe authors are indicating that women were with the MDM2 SNP 309 were diagnosed at a younger age (8 months), but this was not statistically significant.

4. In Table 1, correct the spelling of “unknown” under smoking exposure.

5. In Table 2, the footnotes do not seem to correspond accurately to the models/associations evaluated in the table. For example “*stratified by age and adjusted for by smoking”, corresponds with the analysis by gender. Was this data
stratified by age, in addition to gender? If so, the age stratification should be shown.

Discretionary Revisions (which the author can choose to ignore)

**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:** Yes, and I have assessed the statistics in my report.