Reviewer's report

Title: Identification of low penetrance alleles for lung cancer: The GEnetic Lung CAncer Predisposition Study (GELCAPS)

Version: 1 Date: 26 January 2008

Reviewer: emanuela taioli

Reviewer's report:

This paper describes the population enrolled in GELCAPS, a nationwide UK study on lung cancer susceptibility.

I have several comments:

MAJOR COMMENTS:

The description of this large effort is interesting, and would contribute publicity to the study. However, several details are missing. For example, how many patients refuse to participate, and what was their profile in terms of age and gender? It is not clear why partners are chosen as controls. Given that the cases are mostly smokers, the partner are likely exposed to passive smoking. Is this information collected? It is important that Table 1 includes such data.

The only analysis reported, i.e. survival, is not adjusted for year of recruitment or other important factors such as therapy, age at diagnosis etc. This is a mandatory step.

MINOR REVISIONS:

It is not clear what the contribution of female controls will be. There is a vague explanation of the future plans, but it is not convincing.

The literature is outdated. There are several meta analyses on genes/lung cancer, for example at least two on GSTM1 and lung cancer, that are not mentioned. This reference list has to be updated.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Acceptable

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

Declaration of competing interests:

'I declare that I have no competing interests'