Reviewer's report

Title: Adverse Childhood Experiences are Associated with the Risk of Lung Cancer: A Prospective Cohort Study

Version: 2 Date: 8 September 2009

Reviewer: Mieke Joanna Jean Van Hemelrijck

Reviewer's report:

Dear authors,

I appreciate the time and effort that you have put into your responses. You are right that some of my comments are more style related. I read all of this through the eyes of a clinical epidemiologist and focused a little bit too much on the numbers. You have made valid comments/arguments and therefore I accept your paper in the current stage. However, I would like to make two suggestions regarding my previous comments because I think they will add value to your paper which is of importance for the field of smoking and cancer prevention. Nevertheless, it is up to you to add these or not.

1. Table with descriptive statistics of your study population. I still think that this would add value to your paper as almost all epidemiological papers have a table like this. It helps the reader when they try to understand your study population. Also for people who try to get an overview of the literature regarding this topic, it is a helpful tool to compare different studies.

2. Smoking as an intermediate in the pathway between ACE and lung cancer. As you have written, there was a lot of misunderstanding about your methods section regarding this intermediate variable. I did understand/read that this is an intermediate variable in your analysis, but in the methods section it looks like you are treating it as a confounder -- even though this is not what you have done nor what you were trying to say. Maybe I have focused too much on this issue, but it might be good to check your methods section again and make sure that the reader gets the following message:

Controlling for smoking (an intermediate) results in over-adjustment and attenuates the association (because it partly explains it) so the bias is towards the null. You are trying to see whether smoking explains all of it or not. If after controlling for smoking the association was null then you could have argued that all of the effect of ACE is mediated through smoking, but based on model B there is more going on, because there remains an effect after controlling for smoking. (You have explained this well in your response letter, and might want to consider adding something like this to your paper).

In addition, I think that it would add a lot of value to your paper if you also did a stratified analysis (as also suggested by reviewer 3) in addition to what you have already did in model B. Then you could try to see whether ACE is related to lung
cancer among never smokers (if you have this information of course).

**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.