Reviewer’s report

Title: Association of the smoking status with parameters of vascular structure and function in adults. Results from the EVIDENT study.

Version: 4 Date: 6 November 2013

Reviewer: Grzegorz Bilo

Reviewer’s report:

In the revised version of the paper the Authors have addressed and/or acknowledged most issues raised in the reviews of the original submission. I still have a few minor comments:

Major Compulsory Revisions: None

Minor Essential Revisions

1) For major clarity please include also the N (1553) for Alx and ABI in Tables 2 and 3
2) The means in Figure 2 – please indicate if these are adjusted (least square) means (likely so, since unadjusted means go the other way, but this should be stated).
3) Figure 2 legend. Replace “Statistical significant” with either “Statistically significant” or “Statistical significance”

Discretionary Revisions

1) I would suggest the inclusion of additional Tables provided in the Authors’ response to reviewers in the published material (as supplementary material, if possible).
2) As far as Table 2 (multivariate models) is concerned, it would be useful to provide not just the information on primary variables of interest but also the information on the contribution of covariates to the models and the general statistics of each model. I leave it to the Editor to choose whether the data should be shown as a graph or as a table (my feeling is that a table, expanded with the above information should be shown to give more complete information).
3) Since the quantitative estimate of smoking burden is available (package-years), it would be of interest to verify if it correlates with vascular parameters (independently of age, of course).
4) The contrasts in figure 2 – I feel that they could be shown directly on the graph for more clarity

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.