Reviewer's report

Title: Smoking decreases the level of circulating CD34+ progenitor cells in young healthy women - a pilot study

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Reviewer: Viviane Conraads

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1. In their introduction, the authors describe that to define EPC, VEGFR2 is used. Why then, was this not replicated in their study?

2. Why express CD34+CD133+ as % of PBMCs and not as numbers/events measured?

3. How comparable were these groups in reality? Tot chol, LDL and triglycerides, as well as age were higher, HDL was lower in smoking women. While only age was significantly lower, total cardiovascular risk is a sum of different components. I would like to see the Framingham risk score for both groups.

4. In relation to remark 3, the authors describe on the last page of their results, last line, that, after correction for age, no influence of “this parameter” was seen. What exactly do they mean? I would like to see multivariable regression analysis for relevant determinants of EPC numbers.

5. For table 3, we need repeated measures ANOVA, time x group effect with post-hoc comparison.