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## Letter to the Editor

# Reply to: Risk factors associated with cardiac arrest



To the Editor,

We are most grateful for the comments provided by Dr. Zhou and Dr. Tang regarding our paper "Risk prediction of future cardiac arrest by evaluation of a genetic risk score alone and in combination with traditional risk factors".

Anemia was not associated with cardiac arrest in our cohort ( $p=0.736$ ) when plasma hemoglobin (g/L) was analyzed as a continuous variable. Nor could a significant association be seen when dichotomized to a plasma hemoglobin value  $<100$  g/L ( $p=0.090$ ).

Concerning the possible multicollinearity of the traditional risk factors such as smoking, diabetes mellitus, hypertension, serum lipids and obesity, the fact that most all of these covariates were significantly related to cardiac arrest strongly argues against multicollinearity. We have confirmed this by assessing the variants inflation factor (VIF) values that ranged from 1.022 to 1.140 indicating that no multicollinearity was present.

Only three patients (out of total 23,300) had an office blood pressure  $<90$  mm/Hg in our cohort. None of these patients had a cardiac arrest during the follow-up. The reason for the low number is probably due to the fact that our cohort is a community-based cohort consisting of fairly healthy individuals. Also, variables such as blood pressure were recorded upon inclusion into the study and due to the long follow-up time (median 18.9 years), an episode with hypotension preceding a cardiac arrest could therefore easily be missed.

Regarding the comments about the need for external and internal validity procedures, we certainly agree with Dr. Zhou and Dr. Tang that more studies are needed to confirm our findings.

## Conflict of interest

Nothing declared.

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