Reviewer’s report

Title: Homocysteine and education but not lipoprotein (a) predict estimated 10-Year risk of cardiovascular disease in blood donors. A community based cross-sectional study

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Reviewer: Marcin Ufnal

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Vadini and collaborators evaluated the correlation between homocysteine, lipoprotein A, education level and a 10-year risk of CVDs in blood donors.

This is an interesting study in a unique population. I have no significant remarks about the methodology. However, it is not clear why patients aged between 18 and 69 years were enrolled in this study if CRS is not applicable for subjects under the age of 35 years.

In the opinion of the reviewer the most interesting conclusion of the study is an unexpectedly high CV risk in blood donors. This topic should be more elaborated in the discussion section, more studies involving blood donors should be discussed. The relatively high CV risk in this population could also be reflected in the title of the paper.

On the other hand, it seems not surprising that higher education was associated with lower CV risk, as it is usually associated with "a healthier lifestyle".

Finally, speculations on the cognitive reserve volume and its possible mechanism responsible for the reserve, should be shortened as this is not the topic of the study.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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