Reviewer’s report

Title: High shear stress suppresses proliferation and migration but promotes apoptosis of endothelial cells co-cultured with vascular smooth muscle cells via down-regulating MAPK pathway

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Reviewer: Jacob Bergsland

Reviewer's report:

This paper may be of interest to cardiac surgeons and biologists as the paper brings up interesting methods and findings. In the present state it is not publishable. The paper is submitted to a surgical journal addressing a surgical issue, but is very difficult to understand from a clinical point of view. First of all the language is not acceptable and must be corrected by somebody with better language abilities. More importantly the methodology must be explained much better. How is the double vein constructed? How is the shear stress measured? How is it explained that shear stress is higher in the double layer graft? Instinctively I would think that it was lower, when we had a supporting external layer. I think it is necessary to have drawings of how this double saphenous vein is constructed and how the shear stress is measured. It is not adequate to refer to previous articles as our readers cannot be expected to look this up. The same applies to the "Parallel chamber flow chamber" which is described, but will be something without meaning for surgeons, I believe. This method must also be described in detail.

The chemicals used to modify the response of the endothelium are not described properly for the journal's readers to understand. This fact makes the whole article more or less unreadable for the regular surgeon. I think that the article must be totally rewritten with the journal's readers in mind or alternatively submitted to a different journal.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited
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