Reviewer's report

Title: In vitro behaviour of endothelial cells on a titanium surface

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Reviewer: Günter Lauer

Reviewer's report:

In this paper the behaviour of human endothelial cells on a titanium surface is evaluated. Especially the attachment via #5#3 integrin is very specific and close to reality. The question arised in this study seems to be of high importance to every surgeon who wants to use titanium implants in any region of the body. I have comments, which should be discussed by the authors a little more:

1. In vivo endothelial cells tend to build up tubular structures so they have to detach from the surface and attach to each other and fix themselves in the matrix. Do you think, that the strong attachment to titanium is due to the fact that there is no physiological matrix in cell culture or do you think that this will happen also in vivo?

2. Did you see any signs of apoptosis in the cell culture?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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