Reviewer’s report

Title: Bovine pericardium retail preserved in glutaraldehyde as vascular patch

Version: 1 Date: 23 May 2011

Reviewer: William Neethling

Reviewer’s report:

Major Compulsory Revisions
- None

Minor Essential Revisions
1. The following typographical errors have been noted in the Background section:
   - Page 4, Line 3, "...when it was used the autologous vein as arterial substitute." should be changed to "...when an autologous vein was used as an arterial substitute."
   - Page 4, Line 8, "...in the field of bioprosthetic by introducing the..." should be adjusted or changed.
   - Page 4, Line 15, "...it is observed frequently degeneration of biological tissue..." - word order should be rearranged to "...degeneration of biological tissue is frequently observed...".
   - Page 5, Line 8, "In clinical practise it has been usually used the smooth side..." – word order should be changed to "In clinical practise the smooth side is usually used with the smooth side facing the lumen,..."

2. In the Method section the following needs attention:
   - the product name and the supplier of the pericardium should be mentioned under the Methods section instead of mentioning it in the Discussion section
   - Page 5, Line 20, - the Animal Ethics Application number should be provided
   - Page 6, the supplier of the pharmacological agents should be provided in brackets next to the product name
   - Page 6, Line 20, "From each piece it was made 15 cuts merged from 8 to 15 microns." – Wording should rather be changed to “Fifteen sections (8-15 um) were cut from each tissue sample.”
   - Page 7, c), Line 8, "...by assesing extent and thicker." - the term thicker should probably be "...thickness."
   - Page 7, Line 10, remove the wording “..or so..” – not scientific language.
   - Page 8, Line 12, "...in a compact arrange" – should be "...arrangement..."

4. Discussion
- Page 9, Line 18, Remove product manufacturer name and insert under Methods section.
- Page 11, Line 18, “….serous surface..” should be rectified, should be serosal surface…”
- Page 12, Line 11, “….the transformation of fibroblast in osteoblasts..” should be adjusted to “…the transformation of fibroblast into osteoblasts.
- Page 12, Line 18, “These authors point out..” should be written in the past tense such as “…pointed out..” while the rest of that same sentence should be altered e.g. “…has a different functional connotation compared to calcification of valvular prostheses,….”

8. References
- Page 15, Reference No12, - title is incorrect and Journal volume is incorrect.
- Page 16, Reference No 18, - title incorrect.

9. Figure legends
- Figures should be upgraded with detailed arrows or markers to clearly demonstrate and explain legend descriptions. (e.g. Table 1 legend has an asteriks next to the p-value but it is not indicated in the table itself).

9. Table legends
- Table legends are not explanatory in the current format. P-values should be positioned at the bottom of the table with a clear description to explain the statistical application and importance.

Discretionary Revisions
1. The title needs adjustment e.g. Bovine pericardium retail preserved in glutaraldehyde and used as a vascular patch

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

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
I declare that I have no competing interests.