

Peer Review File

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Reviewer A

I have carefully reviewed your manuscript titled "Preparation and characterization of a rat uterine decellularized scaffold" which you submitted for consideration in Gland Surgery. I appreciate the effort you have put into this work and recognize the significance of your chosen topic. To increase the quality of the article, I mention some things, consider them.

1. Please use the word decellularization or acellularization in the text of the article. Some readers may mistakenly think that these two methods are different.

Reply: Thanks for your suggestion, we have modified our text as advised (see line 162,282,317,344,356,359,360,377,397,400,424,442).

2. In the decellularization protocol section: was the tissue immersed in detergent and enzyme, or was it subjected to a shaker along with immersion?

Reply: The tissue was immersed in detergent and enzyme when the detergent and enzyme was sequentially perfused through the artery of the uterus using a peristaltic pump to complete decellularization, we have modified our text (see line 164-165).

3. Did mice survive after thiopental injection and surgery? Why was potassium injected?

Reply: Mice still survived after thiopental injection and surgery; they did not die immediately. Injecting high potassium was to induce cardiac arrest and euthanize them.

Changes in the text: None

4. All the methods you wrote in the method should also be included in the abstract. Make sure that the results are the same as the method, especially in the abstract.

Reply: Thanks for your suggestion, we have modified our text as advised (see line 42,43,44,49).

5. In Figure 5, you didn't mention CD cases? It seems that the cell is still visible in the tissue.

Reply: Sorry, we made a mistake in labeling the image, and we have modified it (see line 584).

6. The description of Figure 6 is not complete. Interpret the coloring.

Reply: Thanks for your suggestion, we have modified our text as advised (see line 589,590,591).

Reviewer B

The MS "Preparation and characterization of a rat uterine decellularized scaffold" aimed to prepare a uterine decellularized scaffold, that retain the ECM and the vascular microenvironment. Based on triton x-100 supplemented by SDS, the authors perfused the rat uterine artery after physical freezing and enzymatic hydrolysis. In order to characterized the decellularized tissue, they evaluated by general observation, histological analysis, quantitative gDNA, SEM, TEM, cytokine determination and collagen detection and identification.

Their conclusion were related the characterization of the scaffold, followed by bioactivity evaluation of it.

Discussion is very well done. The figures really showed the effects of the decell and the vascular integrity.

Reply: Thanks for your Comments.