

Peer Review File

Article information: <https://dx.doi.org/10.21037/atm-22-6538>

Reviewer A

Comment 1: It is recommended that you refrain from using abbreviations in both the title and abstract.

Reply 1: The title and abstract has been modified according to the Reviewer's suggestion (see Page 1, line 1-2).

Changes in the text: Page 1, line 1-2.

Comment 2: The introduction and discussion sections of the manuscript do not provide sufficient detail about the materials. The introduction should focus on explaining the benefits of P-SIS, which is rich in proteoglycans, glycosaminoglycans, glycoproteins, and growth factors. The role of NS and PLCL in strengthening the weaknesses of pristine P-SIS should also be introduced in the introduction section. While some of these points are covered in the discussion section, they should be moved to the introduction. The methods section should include detailed information on NS-PLCL-SIS mesh preparation. In the discussion section, authors should focus on comparing the efficiency and benefits of NS-PLCL-SIS mesh compared to other studies.

Reply 2: Information about NS and PLCL has been added to the introduction section (see Page 2-3, line 49-58), The comparison between NS-PLCL-SIS and other materials has been added in the discussion section (see Page 6-8, line 157-204). We feel very sorry that the more details information of the mesh has been approving the patents.

Changes in the text: Page 2-3, line 49-58, Page 6-8, line 157-204

Comment 3: Table 1 results should include error range or standard deviation with p-value to show statistical significance.

Reply 3: The data in Table 1 have been modified to Mean±SD format, and p values cannot be calculated because there is no comparison between the two groups (see Page 15, line 37-38).

Changes in the text: Page 15, line 317-318

Comment 4: To express Table 2 more concisely, I recommend adjusting the line spacing and avoid using overly descriptive language.

Reply 4: The format and language expression of Table 2 have been modified (see Page 15, line 320-321).

Changes in the text: Page 15, line 320-321

Comment 5: It is recommended to add a specific symbol (e.g. an asterisk, ‘ * ’) in graphs to indicate statistical differences (p-value) between groups.

Reply 5: The asterisk has been added in the figure to indicate statistical differences (p-value) between groups. (see Page 10-14, line 278-313)

Reviewer B

1. All abbreviations should be explained when they **first** appear in the main text. Please provide the full name of **SPF, CON, ECM** in the text.

Reply: Thanks for your advice. The full name of SPF (line 80), CON (line 142), ECM (line 174) has been added in the revised manuscript.

2. Please check if any references should be added since you mentioned *studies*.
 - The polypropylene mesh has been shown in some studies to cause deep surgical site infections (18).
 - Due to adhesion tissue implanted with mesh could manifested intense foreign body reaction was observed in other studies (19).
 - Other studies from the literature reported the adverse effects of mesh implantation include delayed wound healing, early postoperative pain, and reduced trunk extension (20).

Reply: Thanks for the editor's warm reminder. Corresponding references have been added to the manuscript (line 287-294).

3. Figures and tables
 - **All abbreviations in figures/tables and legends should be explained.** NS-PLCL-SIS in Figure 1 for example. Please check all abbreviations and revise.
 - Please check if the "0.55" should be "0.56" in Table 1.

Thickness
(mm)

0.55 ± 0.00

"The results showed that the average thickness of the meshes was 0.555 mm,"

Reply: Thanks for the editor's warm reminder. Abbreviations in the legend of all figures have been modified. The legend of tables does not contain abbreviations. The "0.55" in Table 1 has been modified to "0.56".