

## Peer Review Report

# Review Report on Closure of iterative laparotomy in patients with previous mesh reinforcement a cohorts' study. Short-term results.

Original Research, j. of abdom. wall surg.

Reviewer: René Fortelny

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

This study aims to assess the value of prophylactic mesh versus non prophylactic mesh in iterative laparotomies with comparing 4 different closure techniques. The results detected a significant higher risk for incisional hernia after previous prophylactic mesh whereas after previous suture closure the closure with new mesh (PreSm) obtained no incisional hernias in a follow up of six month.

#### **Q 2** Please highlight the limitations and strengths.

This study design was performed prospectively. Due to 4 different treatment groups with enrolling of 10 up to 39 patients in each group any kind of statistical analysis has a high risk of selection bias.

The follow up time was only 6 month and only of 84% of the patients.

The assessment regarding the incidence of incisional hernia was done by physical examination and only in case of suspected hernia by additional sonography or CT (detection bias)

#### **Q 3** Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Regarding the methods a crucial shortcoming in terms of statistical calculation of the sample size, which was not reported, has to be considered. Additional the follow up time of only 6 month is not applicable to assess any evidence of incisional hernia.

### Check List

#### **Q 4** Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)

Several flaws have to be considered:

Missing statistical calculation of sample size

Missing any detailed information which kind of mesh, size and fixation was use previously and in the treatment.

Follow up of only 6 month with detection bias

Selection bias

#### **Q 5** Is the English language of sufficient quality?

No.

#### **Q 6** Is the quality of the figures and tables satisfactory?

No.

**Q 7** Does the reference list cover the relevant literature adequately and in an unbiased manner?

No.

**Q 8** Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

No.

**Q 9** Are the methods sufficiently documented to allow replication studies?

Yes.

**Q 10** Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

Yes.

**Q 11** Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Yes.

**Q 12** Have standard biosecurity and institutional safety procedures been adhered to?

No.

#### QUALITY ASSESSMENT

**Q 13** Originality

**Q 14** Rigor

**Q 15** Significance to the field

**Q 16** Interest to general audience

**Q 17** Quality of the writing

**Q 18** Overall quality of the study

