Reviewer’s report

Title: Eradication of P. aeruginosa Biofilm in Endotracheal Tubes Based on Lock Therapy: Results From an In Vitro Study

Version: 0 Date: 25 Sep 2017

Reviewer: Mette Kolpen

Reviewer's report:

Comments to the authors:

Eradication of P. aeruginosa biofilm in endotracheal tubes based on lock therapy: Results from an in vitro study. Pérez-Granada et al.

Summary

The authors investigate whether antibiotics added to the external surface of the subglottic space increase the killing on attached P. aeruginosa biofilms. The paper frames this work as a potential prophylactic treatment for VAP in patients under mechanical ventilation. They find that a 5-day therapy model significantly decrease the viability of P. aeruginosa biofilm in endotracheal tubes. This was demonstrated by CFU count and live/dead analysis together with CLSM and SEM imaging.

Impression

In some of the material and methods text it would be helpful with a better explanation of the experimental design. It is recommended to re-draw figure 1 to clarify were exactly the bacterial solution is placed and where the biofilm is attached to the tube.

The choice of antibiotics should also be highlighted in the introduction.

Minor concerns

- Figure legends are missing and should be added for all figures.
- Line 13 page 4: Revise the sentence
- Line 13 page 5: make sure that the concentration solution unit is similar for the three used drugs.
- Line 24 page 10: Correct to: This is the first…..
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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