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: 20 Jun 2017

Reviewer: Marin Kollef

Reviewer's report:

The authors performed an interesting in vitro study using an antibiotic lock to prevent bacterial biofilm in endotracheal tubes (ETTs).

1. My main problem is the use of standard antibiotics to accomplish this. The reviewers do not test for the emergence of resistance over time when such a lock is in place. Resistance within a biofilm can be more problematic to control for. At a minimum this deserves discussion in regards to the manuscript.

2. I am confused on how this would be accomplished in a real human patient. My experience suggests that once the antibiotic is introduced into the space above the cuff that a significant portion of it will be aspirated into the lungs or expectorated out of the trachea. This is another limitation that in all likelihood would prevent this in vitro phenomenon from being translated to the bedside effectively.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organisation that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments
which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal