

The antimicrobial activity of silver acetate against 1 *Acinetobacter baumannii* in a *Galleria mellonella* infection model (#55546)

This communication performed by Mannix-Fisher and McLean address an important issue regarding bacterial infections and antimicrobial resistance to antibiotics. As an alternative, they proposed silver acetate as antimicrobial agent against *Acinetobacter baumannii* using *Galleria mellonella* as infection model.

Acinetobacter baumannii and other ESKAPE pathogens are considered greatest threat to human health so, it is necessary to search for alternative treatments.

I consider this work interesting, well conducted and solid in its assertions. However, for it to be considered for publication, I consider that some aspects that I quote below can be improved:

1. On the discussion section, The authors pointed out the possible synergy between beta-lactam antibiotics and silver as antimicrobials. It would be important to mention that depending on the therapeutic target of the antibiotic (if it acts intracellularly, for example on ribosomes, or if it acts on the cell membrane), it is possible to find synergy with silver or not, since silver would facilitate the entry of antibiotics into the cell, favoring the activity of antibiotics. (Vazquez-Muñoz et. al.; 2019. PLOS ONE <https://doi.org/10.1371/journal.pone.0224904>).
2. In Figure 1, *A. baumannii* growth is shown. On growth control curves as well as those with lower silver concentrations, is shown only marginal growth. After 24 h of growth, an increment of 0.3 to 0.6 of OD is shown. Mueller Hinton is a suitable medium for *A. baumannii* growth? Is there another medium to improve *A. baumannii* growth yield?

3. The bactericidal activity of silver acetate is concentration-dependent, as shown in figure 2. It is noteworthy that bactericidal activity is also time-dependent, as shown in the same figure 2. Author can expand the discussion regarding this topic. I suggest reviewing Jaime-Acuña et al. PLOS ONE 2016 <https://doi.org/10.1371/journal.pone.0166205>.

Minor changes:

4. Line 147-148. Why control larvae group was inoculated with water and not with PBS?
5. Line 264. Getinge AB, 2020?.
6. Colored graphics could be better to observe differences between treatments.
7. Please check the references.