Reviewer’s report

Title: Clonal spread of Acinetobacter baumannii CC92 in a teaching hospital in Guangzhou and amlodipine reverses its imipenem-resistance in vitro

Version: 7 Date: 19 August 2013

Reviewer: Howard H Xu

Reviewer’s report:

The manuscript is an important study to evaluate synergistic effects of amlodipine and imipenem on 42 clinical isolates of multidrug resistant Acinetobacter baumannii. The study is timely due to emergence and spread of MDR strains in hospitals and communities. After the initial review, the authors performed critical additional experiments to significantly improve the manuscript. However, this reviewer still noted several important issues that need to be addressed by the authors:

Major Compulsory Revisions:

(1) The manuscript contains many grammatical errors and poor English, thus needing extensive editing. For examples: “Antibiotic disc (Oxoid) were obtained….”; Year and Month descriptions of “2011.4” or “2012.2” were not standard in English; Locus is for single while loci are plural; “In our study, we assumption that…."

Minor Essential Revisions:

(1) The new title does not appropriately reflect the emphasis of the study. Clones other than those belonging to CC92 were also found. In addition, an objective to investigate “cloning spread” implies systematic analyses of how individual clones were disseminated in a temporal and spatial manner, which the researchers did not do. I suggest a title similar to the following: “Effects of combination of amlodipine and imipenem on 42 clinical isolates of Acinetobacter baumannii obtained from a teaching hospital in Guangzhou, China”.

(2) Descriptions about the antimicrobial susceptibility testing were contradictory and confusing. For example, the method description in Abstract only mentioned broth microdilution, while the Methods section included both disc diffusion and (broth) microdilution procedures. It is unclear if the authors only used broth microdilution for AML and imipenem. Clear clarifications are needed, so is an explanation why both procedures (if authors indeed used both methods) are necessary.

(3) It is apparent that many other ST data were used to generate Figure 1. However, no citations of where these STs (other than their own) came from were found in the figure legend besides a weblink. These references should be included in the reference list.

(4) Table 4 should be on its own page in landscape format. As is, it is unclear if
additional results are missing because the right side of the table reaches the right margin of the page. Additionally, Table 4’s title should be “Potency of imipenem in the absence ....”; 

(5) The relationship between STs and antibiotic resistance is not well defined in general. With limited isolates and small sample size, it is difficult to draw any conclusions. Thus Table 6 and its description in Results section should be deleted.

(6) The last paragraph of Discussion about the speculated mechanism of action of AML (or exclusion) is not appropriate in light of little results on mechanism of action in the study. This paragraph should be deleted.

Discretionary Revisions:
(1) Figure 2’s color lines are confusion and they imply some kind of relation between isolates. I suggest presenting the same results in bar charts with different color bars of define heights.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests