Reviewer's report

Title: In vitro evaluation of antibiotics' combinations for empirical therapy of suspected methicillin resistant Staphylococcus aureus severe respiratory infections

Version: 2 Date: 24 July 2007

Reviewer: Stefania Stefani

Reviewer's report:

General

The AA did not accept the elimination of table 4 and 5.

The AA justified this decision saying that the frequency of mutation measured under selective pressure of antibiotics is an important feature for studying antibiotic resistance. I can agree with them in general, above all when we are talking about new antibiotics, when we look at specific genes or the results are highly significative.

The problem here is that the significativity of these results is not really clear, and for this reason I asked to eliminate this part.

In both tables, the Authors reported a very low frequency of mutation with single drugs (only in two strains for FQs and three strains for IMP with frequency ranging from 10 - 5 to 10- 6, and for amikacin with a lower frequency) and no mutation when these drugs (it is not possible to understand from the table which were the combinations) are used in double (tab 4) and triple (table 5) combinations, without details for each combination. All the other strains and other antibiotics are negative.

What I am saying is also demonstrated by the fact that this huge amount of work was commented by the Authors in 5 lines (page 8 Mutational frequency).

The only thing that the AA could due is to describe better in the text the results obtained and eliminate two tables.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of
a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after discretionary revisions

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

Quality of written English: Acceptable

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