Reviewer’s report

Title: In vitro Activities of Eravacycline against 336 Isolates Collected from 2012 to 2016 from 11 Teaching Hospitals in China

Version: 1 Date: 11 Feb 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Not sure - key details are missing from the manuscript

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

Statistics - Is the use of statistics in the manuscript appropriate?

N/A - there are no statistics in this study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues
OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Probably - with minor revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: The manuscript is very well written and the methodology used to evaluate the antimicrobial susceptibility, as well as the variability of isolates used are correct. The manuscript however lacks of novelty as there are other published paper were a higher collection of isolates and bacterial species is evaluated. It is very well known that Eravacycline is two- to fourfold more active than tigecycline versus Gram-positive cocci and two- to eightfold more active versus Gram-negative bacilli.

REQUESTED REVISIONS:

No quality control has been performed in the AST, or at least it is not explained in the Material and Methods section.

It is not clear to me the meaning of the sentence "Considering the relative small number of each organism with certain resistance mechanism, sampling error is inevitable, and additional studies are needed to clarify the potential application of eravacycline as substitutes for carbapenems and tigecycline in the treatment for some infection caused by resistant strains and to reduce the dissemination of resistant strains in the future." What is the meaning of "sampling error" in the sentence? Why eravacycline should substitute carbapenem or tigecycline?

Not clear to me the sentence "In addition, the total number of Staphylococcus. sp strains is relatively small, which may be caused by random errors and need to be clarified in subsequent studies with more study objects" Why random errors may affect the total number of staphylocci?

In general, some sentences in the discussion section point out that the results obtained in the study indicate that eravacycline could be the treatment of choice for infections caused by multidrug resistant bacteria. However, this assertion can not be taken from the results of this study. Authors should focus on the in vitro activity against the tested bacteria rather than in concluding about its clinical efficacy. Additional studies are needed to determine its role in the treatment of infectious diseases.

Note: This reviewer report can be downloaded - see attached pdf file.
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.

No

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

No

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.

Not relevant to this manuscript

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

Acceptable

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