Reviewer’s report

Title: Effect of green tea on the gastrointestinal absorption of amoxicillin in rats

Version: 0 Date: 14 May 2019

Reviewer: Kathleen Job

Reviewer's report:

This manuscript describes results from a study evaluating pharmacokinetic changes in rats receiving amoxicillin-clavulanate compared with those also receiving polyphenols (found in green teas). Results suggest polyphenol consumption may result in a delay in amoxicillin absorption. This is interesting as it is an understudied topic, green tea is a commonly consumed item, and there is some discussion on results from in vivo versus in vitro work, some of the latter suggesting there may be some benefit to catechin consumption. I do recommend changes before publishing this manuscript (see below). This manuscript would benefit from editing by a native English speaker.

The introduction section may be improved by increasing focus on amoxicillin, current research regarding green tea and antibiotics, and the likelihood of this antibiotic and green tea being taken concurrently.

The results section may benefit by inclusion of a table summarizing animal characteristics. Additionally, information on calculation of AUC and Cmax should be described. Please include units in figure 2.

The discussion should also be expanded to provide more details or implications of past research, include information regarding general antimicrobial resistance and the use of green tea, and suggest future research.

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:

Needs some language corrections before being published

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