Reviewer’s report

Title: Intravenous to oral antibiotic switch therapy: a cross-sectional study in critical care units

Version: 1 Date: 27 Mar 2019

Reviewer: Jaap Ten Oever

Reviewer's report:

The quality of the manuscript has much improved. Still there remain some concerns.

Abstract:

in the conclusion the authors state that iv-switch is not associated with reduced mortality. But that is not the aim. The aim is to prove iv-oral switch is safe.

Methods:

I still question this to be a cross sectional study. The stewardship team advises on iv-oral switch and follow the patient for the outcome. It would rather classify as a observational cohort study. The authors should make clear whether it had a prospective or retrospective nature.

The definition of safety (line 114) is missing. Mortality? At what day was the primary outcome assessed?

I think the authors compared two groups that cannot be compared. They compared the group that was not eligible for iv-oral switch to those that were eligible for switch and indeed switched. But these groups are intrinsically different (with respect to factors associated with the primary outcome measure). Unless the reason is unavailability of a suited oral formulation due to resistance, other groups should be compared. Best would be eligible patients that switched with the eligible that did not switch.

Line 163: it seems illogical that nitrofurantoin would be used as step down treatment in septic patients.

Statistical analysis: the subgroup analyses are not mentioned here (Figure 1). Why was APACHE 17 chosen as cutoff?

Table 1: an explanation is missing what was tested with the multivariable analysis. I would add total duration of antibiotic treatment as variable as well.
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.

I recommend additional statistical review

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Needs some language corrections before being published

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