Reviewer’s report

**Title:** Systemic Fluoroquinolone Prescriptions for Hospitalized Children in Belgium, results of a multicenter retrospective drug utilization study.

**Version:** 0  **Date:** 30 Apr 2017

**Reviewer:** Esmita Charani

Reviewer’s report:

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Hi,

Thank you for this study. I understand the underlying reasons why such a study was undertaken. However as we know due to the sensitivity and controversy of conducting trials in children it can be argued that all drug use in children is controversial and not backed by sound and appropriate trials to the extend that it is in adults.

It would have been interesting to have given data on whether the children were dosed based on actual body weight or ideal body weight, obesity in children is an increasing problem. This is important in the context of 'underdosing'.

Were there any local antibiotic prescribing guidelines (paediatric) that informed the prescribers? E.g. in UK we have the Paediatric British National Formulary, in addition to hospital paediatric guidelines.

Line 229-232 Surely use in these cases is justified.

Line 323 - lack of AMS teams does not justify dosing errors, there must be checks and balances in place from a patient safety and governance perspective for all medication being administered, antibiotics should not be an exception

How did you define 'under-dosing'? Adequate dosing is debatable in children and different references will give varying data on this. Often based on anecdotal use and not RTCs.

If FQs were not to be used what would be the alternative antibiotics for these indications? What is the evidence for using these other antibiotics? The issue of using off-label antibiotics in children is one that happens quite frequently, especially in larger more experiences academic
specialist pediatric hospitals. Again goes back to the argument about the lack of RCTs and trials therefore it becomes a risk vs benefit, case by case assessment.

Should the authors have some recommendations?

Do you think an AMS team would make a difference? They would not have access to any more evidence than the practicing doctors. What would be the added value of the AMS team and what should they aim to do?

**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

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