Reviewer’s report

Title: The burden of rotavirus gastroenteritis and nosocomial rotavirus gastroenteritis among children aged <6 years in Japan: A multi-hospital, retrospective, epidemiological survey

Version: 2 Date: 31 October 2012

Reviewer: Jonathan Gubbay

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Minor Essential Revisions

Methods
1. page 8. Line 3. It is stated that RVGE was to be “preferably confirmed by RV diagnostic kits” – it should be stated what alternative diagnostic tests were considered acceptable e.g. PCR, electron microscopy. Most importantly, for study purposes there has to have been laboratory confirmation of all cases included in the study.

2. p8. At end of 2nd paragraph data on underlying medical conditions is given. The actual data should be presented in the Results section, not methods. In methods section would just state that data on underlying conditions was gathered.

Results
3. page 10, 2nd paragraph, line 2. How were the ICD10 designated cases confirmed to be valid? It appears that 20 cases (665-645) were diagnosed using ICD10 alone without laboratory testing, which doesn’t seem appropriate.

4. p12. 2nd last paragraph. Please check this sentence, which begins with “Among all RVGE hospitalisations….”. It is not clear what is being communicated here.

5. Table 3. For “Age at the time of hospitalization”, why is the Crude RR 0.41, but adjusted RR 2.16? It appears the RR of 0.41 is given for age #18m, and the 2.16 refers to age <18m.

Discussion
6. p14, paragraph 2, 3rd line. Change “years” to “months”.

7. p.14. The following texts (2nd and 3rd sentences) seem contradictory, and should be revised:

“As determined from the present study, the mean duration of RVGE hospitalizations was 5.3 days. This is a longer period of hospitalization than those previously published [6,15]. Previous findings have also shown a similar duration of hospitalization for RVGE (5.2 days)[6]."
8. P16, line 2. Delete “the” from the text: “may need more attention from the caregivers” so reads “may need more attention from caregivers….”

Discretionary Revisions

9. It is suggested not to use abbreviations in the abstract.

10. p14 2nd paragraph. Other previous studies have found that the rate of nosocomial rotavirus gastroenteritis decreased as nurse to patient ratios went up, and with provision of isolation rooms. This study found the opposite (although was not significant when an adjusted RR was done for patient isolation. Can you suggest any explanation for this finding?

11. P18. Line 1 of Conclusions. Suggest change “largest” to “large”

**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.

**Declaration of competing interests:**

I have previously received a research grant from GlaxoSmithKline to study antiviral resistance in influenza.