Reviewer's report

Title: Duration of viral shedding in hospitalized patients infected with pandemic H1N1

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The authors studied the relationship between viral load, duration of virus shedding with illness presentation and antiviral treatment as correlated with days after onset of symptoms.

Of the 39 selected patients with serial samples, 23 were classified as SARI and 16 ILI. Detailed breakdown of demographic variables and clinical presentation including days after onset of symptoms and timing of the 175 samples collected from these patients in the study would provide clearer picture and make interpretation of results easier.

There seems some confusion in the classification of patients: SARI implies ILI with breathlessness or difficulty in breathing requiring hospital admission, yet the authors described only 52.2% of their SARI patients presented with dyspnoea. (P9 and Table 1).

The authors stated the time course of viral load in NPS from ILI and SARI patients was similar while the proportion of PCR positive NPS was significantly higher in SARI compared to ILI patients. However, in Figure 2, Panel B, the proportion of PCR positive patients for ILI cases at 8-9 and >10 days were 21.4% and 0%, similar to the proportion of SARI without pneumonia. (Figure 2 Panel D: 25% and 0% at 8-9 and 10 days respectively). Different pattern of viral loads with days after symptoms onset for SARI with and without pneumonia was also evident in Figure 2, Panel C. It appeared pneumonia is the deciding factor that caused different viral shedding pattern. The authors in fact stated in p11 that prolonged shedding was correlated with the presence of pneumonia. The authors need to re-group the cases according to clinical presentation, re-organize and re-analyse the data taking this into consideration.

Twenty-nine of the 39 patients received anti-viral treatment. Overwhelmingly they were patients with SARI: 21 SARI and 8 ILI cases. The authors stated that oseltamivir was initiated at varying intervals after onset of symptoms and given in different dosages and duration. It was stated that in untreated patients, “the viral load steadily increased from baseline up to 4 – 5 days after symptom onset, then declined” This is not consistent with authors’ statement that viral load correlated negatively with time since onset of symptoms (p8 and Fig 1) and also what was shown in Figure 2, Panel A. Further stratification of the treated and untreated group into ILI, SARI without pneumonia and SARI with pneumonia may help to
clarify the picture.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests