Reviewer’s report

Title: Two severe H7N9 pneumonia patients with immunoneuroendocrine axis dysfunction and vitamin D insufficiency

Version: 4 Date: 25 November 2013

Reviewer: Miao Lin

Reviewer’s report:

In this case report, Dr. Yao et al. addressed novel immuno- and neuroendocrine dysfunctions in prolong phase of severe H7N9 pneumonia. The following are my comments.

1. The authors should read the instructions for authors by BMC Infectious Diseases and improve their paper accordingly. The two cases can be presented in two paragraphs separately.

2. Detailed methods of avian-origin influenza A (H7N9) virus identification should be included. Detailed information of the patients should also be provided, such as occupation, duration of antiviral agents and exposure to poultry in the last 7 days et al.

3. Is HPA axis failure a common presentation in other influenza? What is the potential mechanism of HPA axis failure in H7N9 virus?

4. Similarly, is vitamin D insufficiency common in other influenza? What is the rationale and dosage of rocalirol treatment in these cases?

5. P3. The author mentioned “First, whether loss of cortisol rhythm, elevated cortisol...Second, whether correction...”. Stronger evidence is required to answer those questions. This should be addressed.

Minor comments:

The manuscript should be read by a native English speaker.

Page 2&3, Rocaltrol was mispelt rocalirol.

Define an abbreviation/acronym at its first use in text such as CDC, PRL, PTH, ARDS et al.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interest.