Author's response to reviews

Title: Detection of a novel avian influenza A (H7N9) virus in humans by multiplex one-step real-time RT-PCR assay

Authors:

Jian Fan (3319fanjian@163.com)
David Cui (davidcui101@163.com)
Siu Ying Lau (sylau926@hkucc.hku.hk)
Guo Liang Xie (ytxiegouliang@163.com)
Xi Chao Guo (guoxichao926667@126.com)
Shu Fa Zheng (zsfzheng@163.com)
Xiao Feng Huang (stevehxf@hku.hk)
Shi Gui Yang (ysgcdc@163.com)
Xian Zhi Yang (yayayang1984@sina.com)
Zhao Xia Huo (huozhaoxia8253@163.com)
Fei Yu (yf0101@live.cn)
Jian Zhou Lou (justljz@gmail.com)
Li Tian (grapetian@163.com)
Xue Fen Li (zylixf@126.com)
Yue Jiao Dong (candy242313@163.com)
Qiao Yun Zhu (akuzhu@163.com)
Yu Chen (chenyu_zy@163.com)

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Author's response to reviews: see over
Dear Neil,

Thank you for your good comment. We carefully checked the manuscript (MS: 6753742771243645), and provide a cover letter giving a point-by-point response to the concerns.

Line 40: Please update numbers of A(H7N9) infections and victims.

**Answer:** A novel avian influenza A (H7N9) virus emerged in eastern China in February 2013. 413 confirmed human cases, including 157 deaths, have been recorded as of July 31, 2014.

Line 62: should read: ?? subtypes ARE not ??

**Answer:** subtypes are not pathogenic in poultry.

Lines 71/72: Reference #4, a review article, does not support the claim that the pathogenicity of the A(H7N9) virus is low. Please adjust.

**Answer:** the reference #4 has been adjusted in the revised manuscript.


Line 90: Please re-phrase to improve sentence structure: ?According to diagnostic criteria of China for the detection of avian influenza A(H7N9) virus highly virulent in humans, ??

**Answer:** according to your suggestion, the sentence was revised. “According to diagnostic criteria of China for the detection of avian influenza A (H7N9) virus highly virulent in humans,”

Line 126: It is probably meant: ?pandemic H1N1-2009 influenza A virus? (?)

**Answer:** pandemic H1N1-2009 influenza A virus.
Line 160: Please refer to the data of the earlier (eliminated) Fig. 1 as data not shown.

Answer: As expected, viral RNA samples extracted from novel human H7N9 isolates (A/Zhejiang/DTID-ZJU01/2013) were detected by the multiplex assay (data not shown).

Line 173: Can you please double-check that in fact seasonal H1N1 influenza virus was detected by your method? Seasonal H1N1 viruses circulating until the pandemic in 2009/2010 have not been reported for years to WHO. It would be highly interesting news if these viruses would still circulate in China.

Answer: we carefully checked our data. “In addition, these 11 FluA subtypes consisted of three pandemic H1N1-2009 influenza A viruses, seven seasonal H3N2 viruses, and one seasonal H1N1 virus, and were certified by other real-time RT-PCR assays in previous reports [1-2].” The seasonal H1N1 virus was certified by reference#2, and the Ct value of seasonal H1N1 virus was 33.5, but was not tested by our method. In addition, seasonal H1N1 viruses were tested in clinical out-patients and in-patients in our laboratory ever year.

Line 208: Please replace ?? firstly occurred in three PERSONS in Shanghai of China ??

Answer: we have revised the word.

It is regretful that the revised manuscript is not uploaded to the journal "BMC Infectious Diseases", so that we address to you.

We expect that the revised manuscript can be considered for acceptance.

Please don't hesitate to contact me if you have any problems or questions regarding your manuscript.

Best regards,

David Cui