Reviewer's report

Title: In situ Molecular Identification of the Influenza A (H1N1) 2009 Neuraminidase in patients with severe and fatal infections during a pandemic in Mexico City

Version: 6 Date: 15 September 2012
Reviewer: Jeannette Guarner

Reviewer's report:

1. (Major compulsory revision) Although the authors comment that the specimens were studied by a pathologist, no person from a pathology department is listed as a coauthor. Suggest making this clear in the text (materials and methods) by adding the initials of the pathologist that reviewed the slides.

2. (Major compulsory revision) Abstract, revisions made the abstract more complex and difficult to follow and read.

Materials and Methods:

3. (Minor revision) The sentence: "... 8 lung biopsies were taken post mortem by surgery during autopsy from patients who..." is confusing. These are autopsy samples, thus “post mortem” and “surgery” are redundant and not applicable respectively.

4. (Major compulsory revision) The authors still did not define how many samples and the size of central lung and peripheral lung. In other words, during an autopsy one can take both central and peripheral lung from the same patient and the size can vary as the authors comment from 2 cm to 8 cm. At this point the reader does not know if 50% or 90% of the samples were central lung (where the virus is usually found) or peripheral lung (where the virus is less frequently found). Also, the more tissue studied the more possibility you have of finding the virus. And this information is still not available to the reader. This information is important to add, as it will define where the biopsies for diagnosis should be obtained and how much tissue to take if one wants to replicate what the authors present.

Results:

5. (Major compulsory revision) At this point the reader knows that 100% of the samples were positive, but no information is available regarding where the biopsies were from. As stated earlier, in the same patient the authors could have had peripheral and central lung. Suggest adding a table with this information: in the rows list the patients, in the columns list the location of the tissue obtained (central, peripheral) and size of each one of the samples.

6. (Major compulsory revision) Figure 3 is of better quality; however, it would be best to delete the row showing the 20X magnification and substituting it with the
consecutive tissue section from each one of the cases that did not get primer (basically the negative control of that same patient to see how much background is present in each case).

**Level of interest:** An article whose findings are important to those with closely related research interests

**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 not competing interests.