Reviewer's report

Title: Natural Prevalence of Antibodies to Spike Proteins of Four Non-SARS Human Coronaviruses Among a General Population in Beijing

Version: 4 Date: 25 February 2013

Reviewer: Cavan Reilly

Reviewer's report:

Major Compulsory Revisions

The description of the statistical approach is incorrect: the authors appear to just compare proportions and report p-values from that rather than using an ANOVA. However only significance is reported, not the actual p-values, so this makes it difficult to check the results.

Minor Essential Revisions

line 160-the authors probably mean "Tukey's" test, not "Turkey's" test, but it is not clear they have done this

line 170-how can 36.63% be described as a "majority"? Use a different term.

Discretionary Revisions

The data analysis should have used logistic regression to systematically test for an effect of gender and age group on seropositivity status.

Level of interest: An article of importance in its field

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.