Reviewer's report

Title: Post-exposure prophylaxis during pandemic outbreaks

Version: 1 Date: 13 November 2009

Reviewer: Walter Emil Philipp E Beyer

Reviewer's report:

This study attempts to assess the role of “antiviral prophylaxis for asymptomatic individuals exposed to infectious cases”, in the first place for the ongoing New Influenza A-H1N1 pandemic, by mathematical modelling. The (many) assumptions to be made for such a model, are well-discussed and plausible, as is the main result: “…when transmissible resistant strains are present, post-exposure prophylaxis can promote the spread of resistance.”

This is a relevant contribution to the elaboration and adjustment of treatment guidelines and should therefore be published.

Minor points:

1. In the Discussion, it should be further emphasized that the seasonal A-H1N1 strains circulating since 1978 virtually all became resistant to Oseltamivir during 2007-2008, just by one single mutation and obviously without drug pressure.

2. A small mistake in Figure 1: influenza infection does not include a phase of viremia.

Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

What next?: Accept for publication in BMC Medicine after minor essential revisions

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests