Reviewer's report

Title: Timing of progression of Chlamydia trachomatis infection to pelvic inflammatory disease: a mathematical modelling study

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Reviewer: Lesley Wallace

Reviewer's report:

There are a few notes that I have although I appreciate that you need a full review for these to be valid.

1. The question is an important one and the authors address a key issue in the natural history of chlamydial infection; that is the rate of progression to PID (and thus the implications for chlamydia control)

2. The methods appear to be comprehensive and are clearly explained and logical however, this is not my area of expertise and thus, I am unable to comment on the statistical modelling approach used and therefore my report may be of limited use to the journal and the authors as the outcomes of the research are dependent on the technical issues and appropriateness of the model used.

3. The data are taken from a previous study and thus there is no reason to suspect that the data are not sound.

This is a well written paper and the authors note the limitations of the study and are clear on their conclusions and make clear argument to support these.

4. The main issue for me is ensuring that the approach is modelling the progression to PID as direct effect of genital chlamydia and not other microorganisms... - this is mentioned in the results. The authors also briefly mention repeat infections - we know this can influence progression and I note their argument for not including but I would want to be re-assured that this is sufficiently robust?

Kind regards