Reviewer's report

Title: Increase in transmitted resistance to non-nucleoside reverse transcriptase inhibitors among newly diagnosed HIV-1 infections in Europe

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Reviewer: Gillian M Hunt

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The article serves to analyse HIV-1 drug resistance patterns in newly-diagnosed European patients using data from the European Spread program. The analysis shows that NNRTI resistance doubled during the period analysed, whilst NRTI resistance remained constant, and level of PI resistance decreased.

The article is concise, thorough and well written. The question asked is well-defined and appropriate methods utilised to answer it. The sequence data is available on Genbank. Limitations in specimen collection are appropriately discussed and conclusions well-balanced. The article is worthy of publication. There are some discretionary revisions for further improvement:

1. The abstract conclusion refers to the ‘last decade”; however data analysed were collected between 2002 and 2007. Data from the second half of the last decade (2008 – 2013) is not available. This is an unfortunate omission in the paper and the absence of more recent data is not explained by the authors.

2. In the discussion, the authors refer to changes in NNRTI prescribing practices as a possible reason for increased rates of transmitted NNRTI mutation but provide no explanation or evidence for this statement, as they have for the PI drug class. The article would benefit from such supporting documentation.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests.