THE LANCET

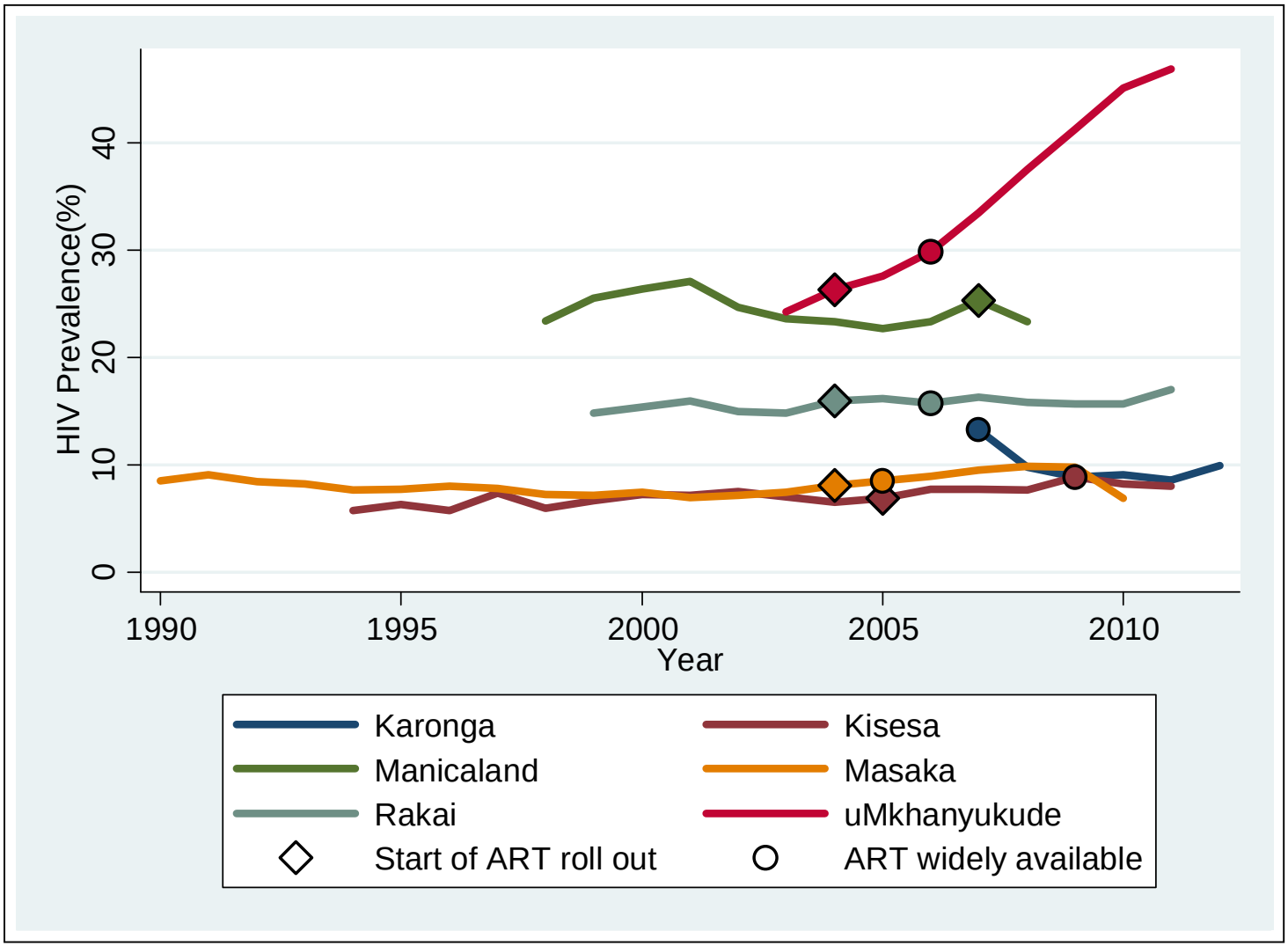
Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Zaba B, Calvert C, Marston M, et al. Effect of HIV infection on pregnancy-related mortality in sub-Saharan Africa: secondary analyses of pooled community-based data from the network for Analysing Longitudinal Population-based HIV/AIDS data on Africa (ALPHA). *Lancet* 2013; **381:** 1763–71.

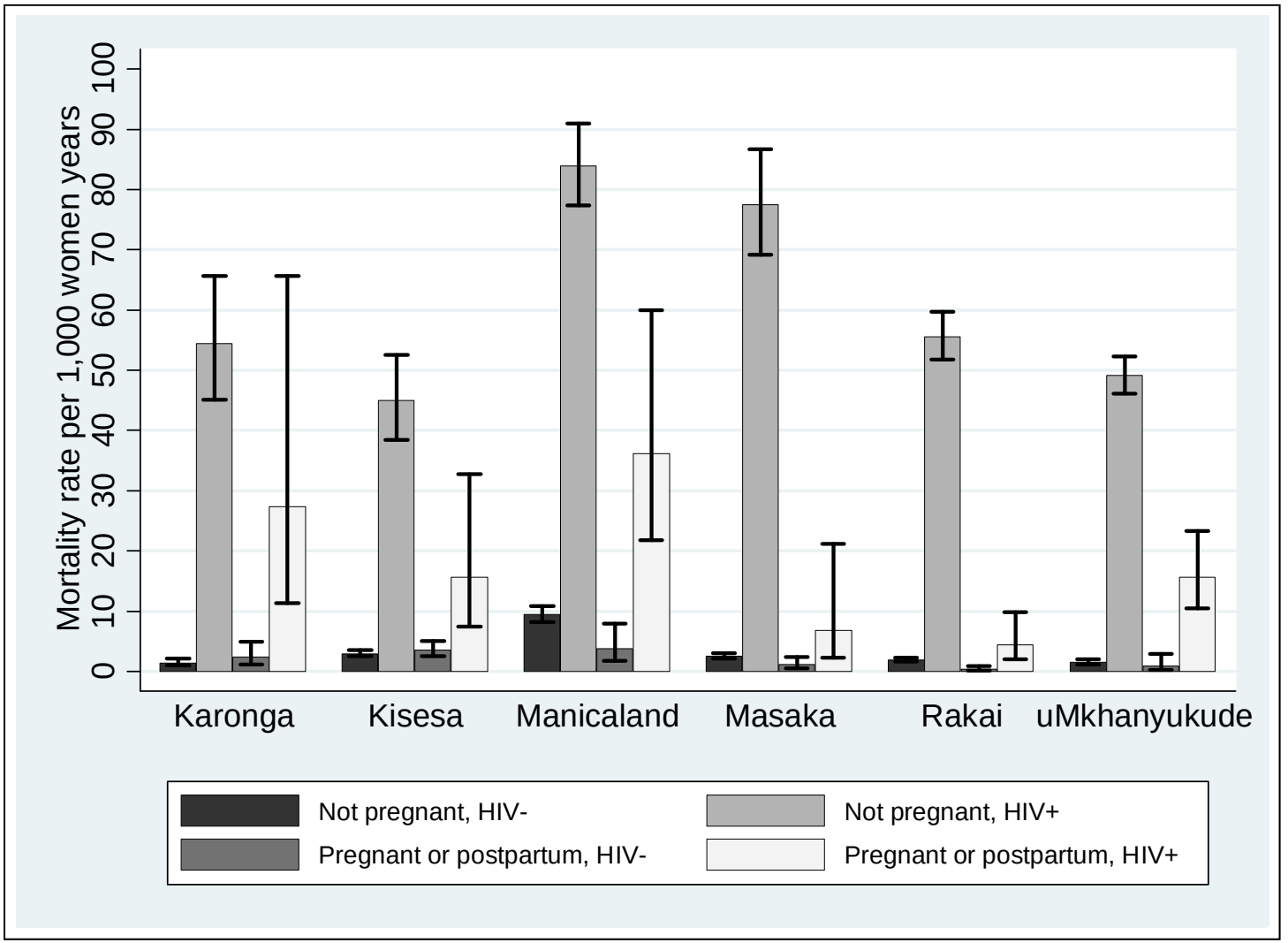
Appendix A:

Figure W1. Calendar-year time trends in average HIV prevalence amongst women of repoductive age by study site



Appendix B:

Figure W2. Mortality rates in HIV infected and uninfected women by pregnancy status and study site



Appendix C:

Figure W3. Effect of varying the post-negative HIV test assumptions on the rate ratio comparing mortality in HIV infected and HIV uninfected women by pregnancy status

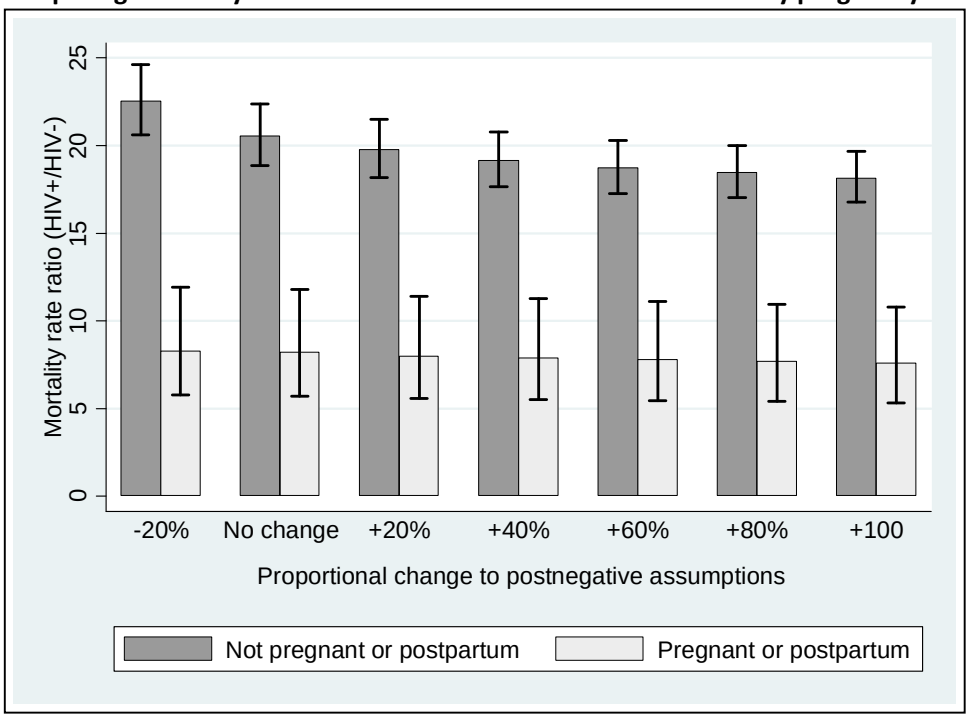
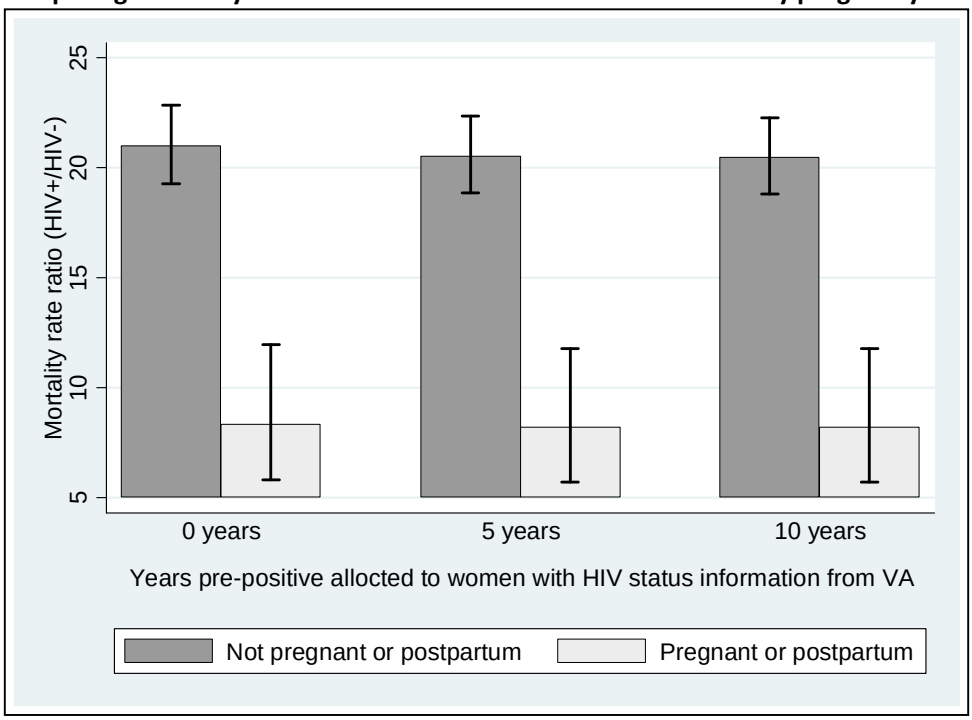
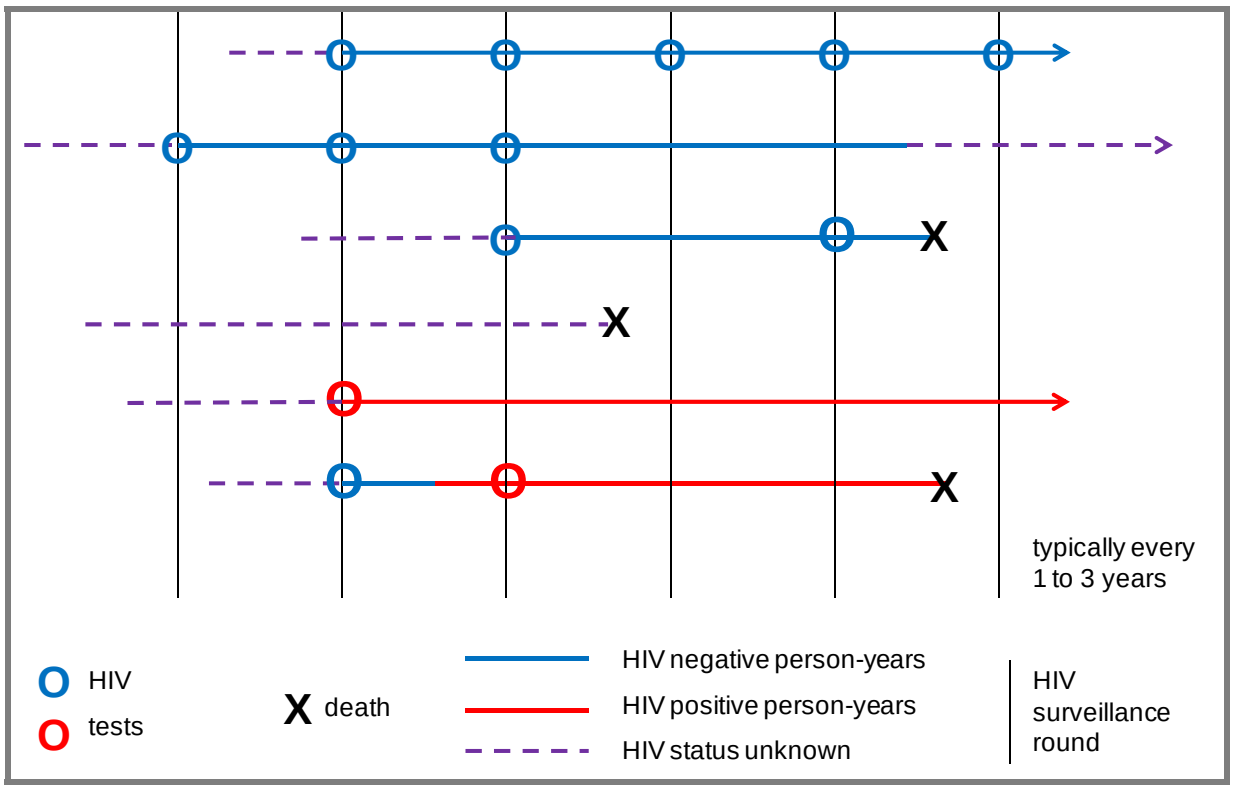


Figure W4. Effect of varying the pre-positive HIV test assumptions for those who on the rate ratio comparing mortality in HIV infected and HIV uninfected women by pregnancy status



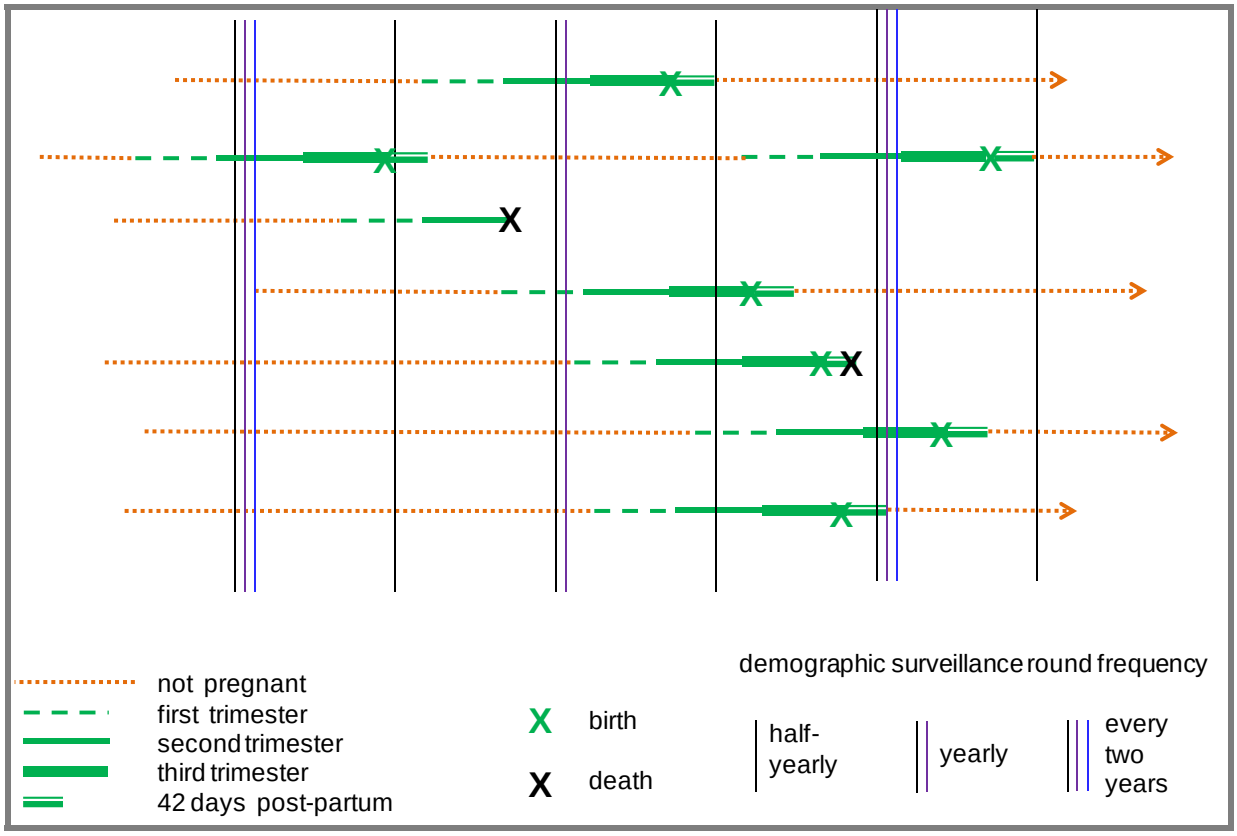
Appendix D

HIV status and deaths: assignment of status unknown



The graphic shows how HIV status is classified for analysis in this study: prior to a first test the person-time observed for each participant living in the study area is classified as unknown, since a death occurring during this time would have HIV status unknown. HIV status is also classified as unknown after a certain number of years have passed following a person's last HIV negative test, corresponding to the time by which 5% of those who tested negative in each study would be expected to become infected. The diagram represents a study in which testing is conducted every other year – the second individual has missed testing in two rounds, and after 5 years is classified as HIV status unknown.

Pregnancies, births and deaths in demographic surveillance



Information on births, pregnancies and deaths is captured during demographic surveillance, which is usually conducted more frequently than serological surveillance. Recording of births and adult deaths is generally accurate and complete. However pregnancy reporting is less complete – partly because many studies allow proxy reporting so it is not the woman herself who provides the information, and partly because demographic rounds may be conducted at longer intervals, which lowers the probability of a surveillance round encountering a woman in the second or third trimester of her pregnancy, when it is more likely to be reported. Births will be reported by other household members even if the mother dies, so post-partum deaths will generally be identified as such, but many of the deaths that occur early in a pregnancy will not be identified as pregnancy related based on prospective pregnancy reporting, especially if DSS rounds are widely spaced.