Supplementary Material

Figure S1. Comparison of distributions of preterm birth by gestational age categories in simulated data (orange lines) and published data used to inform preterm birth hazard (blue dashed line). The ten simulations presented in this figure included 5,000 pregnant women, and assumed no effect of Group B Streptococcus colonisation status on preterm birth. Note (i) that the x-axis represents a categorical variable, (ii) that the y-axis represents the proportions of all preterm births by the values of the categorical variable (rather than probabilities of preterm birth during each period), and (iii) that lines are used to allow identification of the different proportions corresponding to the same simulation.

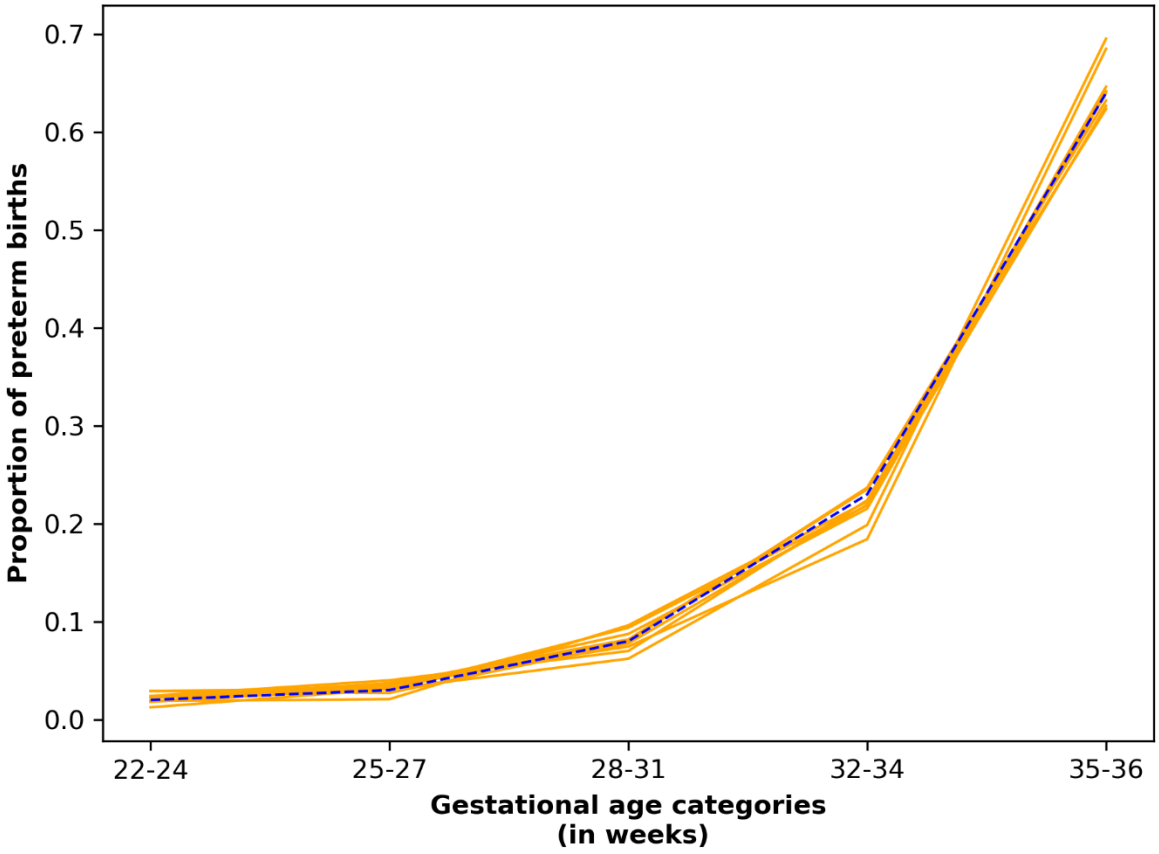


Figure S2. Comparison of frequencies of Group B Streptococcus (GBS) colonisation trajectories in simulated data (orange lines) and published data used to inform simulation parameters (blue dashed line). The data and simulations presented here refer to Study B, where GBS colonisation was assessed in four study visits. The methodology used estimates GBS acquisition and clearance rates (see detailed description of methods and assumptions in (1)). Note that lines, rather than for example bars, were used to distinguish the relative frequencies of different categories (sequences of culture results) that are part of different simulations. Each x-axis tick label is to be read from the lowest character; for example, the second x-axis coordinate corresponds to three initial study visits when GBS colonisation was detected, and a final visit when it was not detected. The ten simulations in this figure included 5,000 pregnant women.

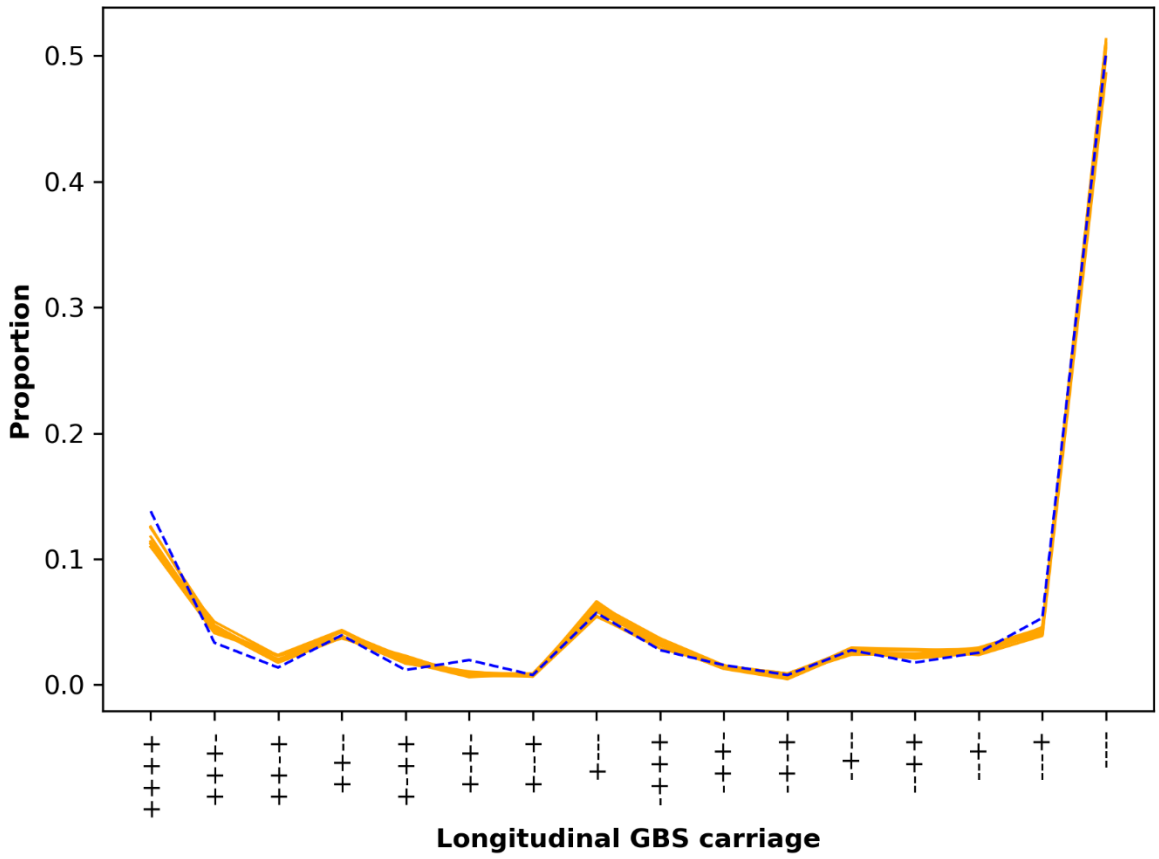


Figure S3. Sensitivity analyses. The structure of the panels in this figure is similar to that of the panels in **Figure 1**. Here, additional scenarios are presented that assume 10% higher or 10% lower culture sensitivity, and higher (double) or lower (half) colonisation acquisition rates.

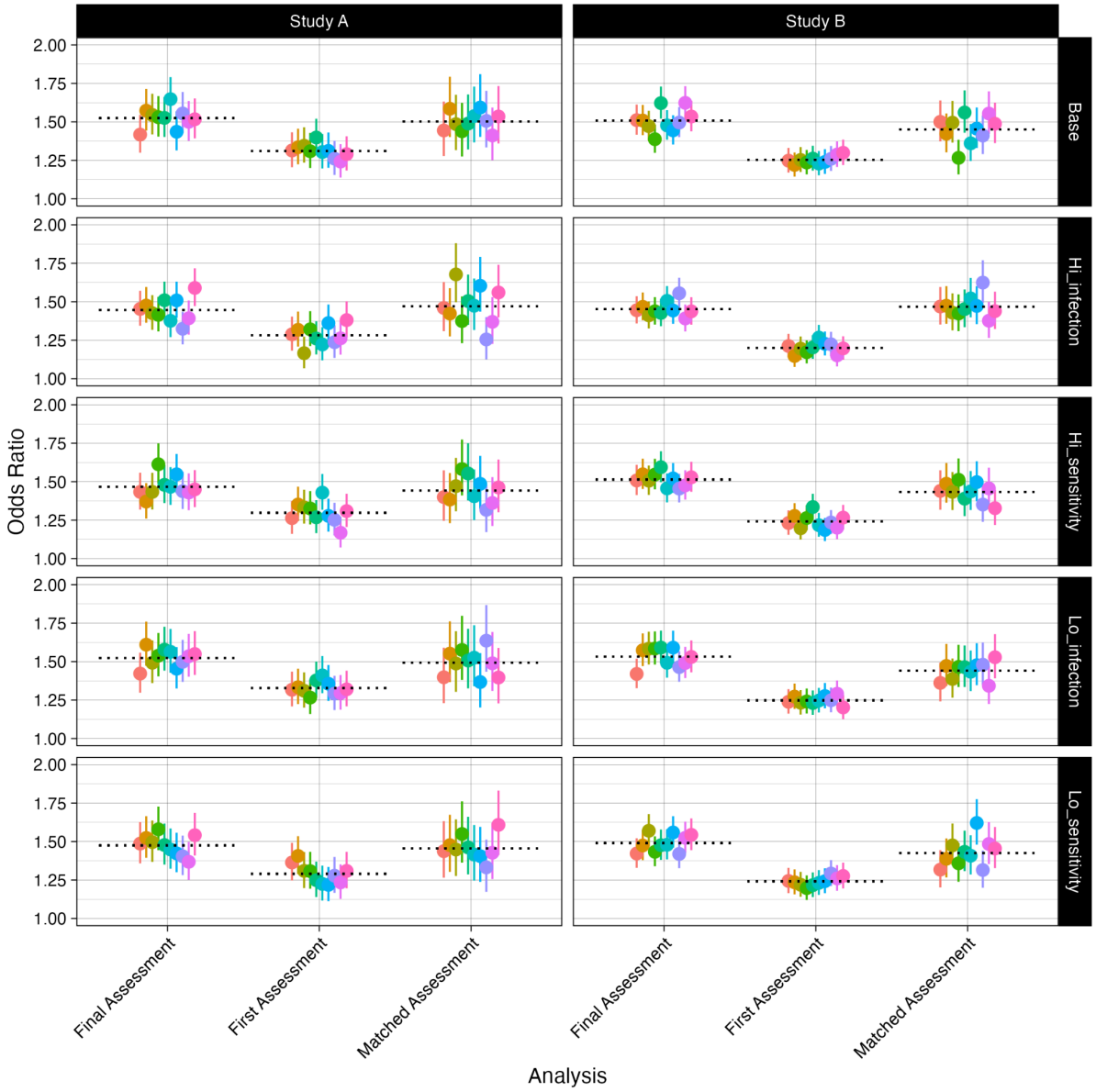
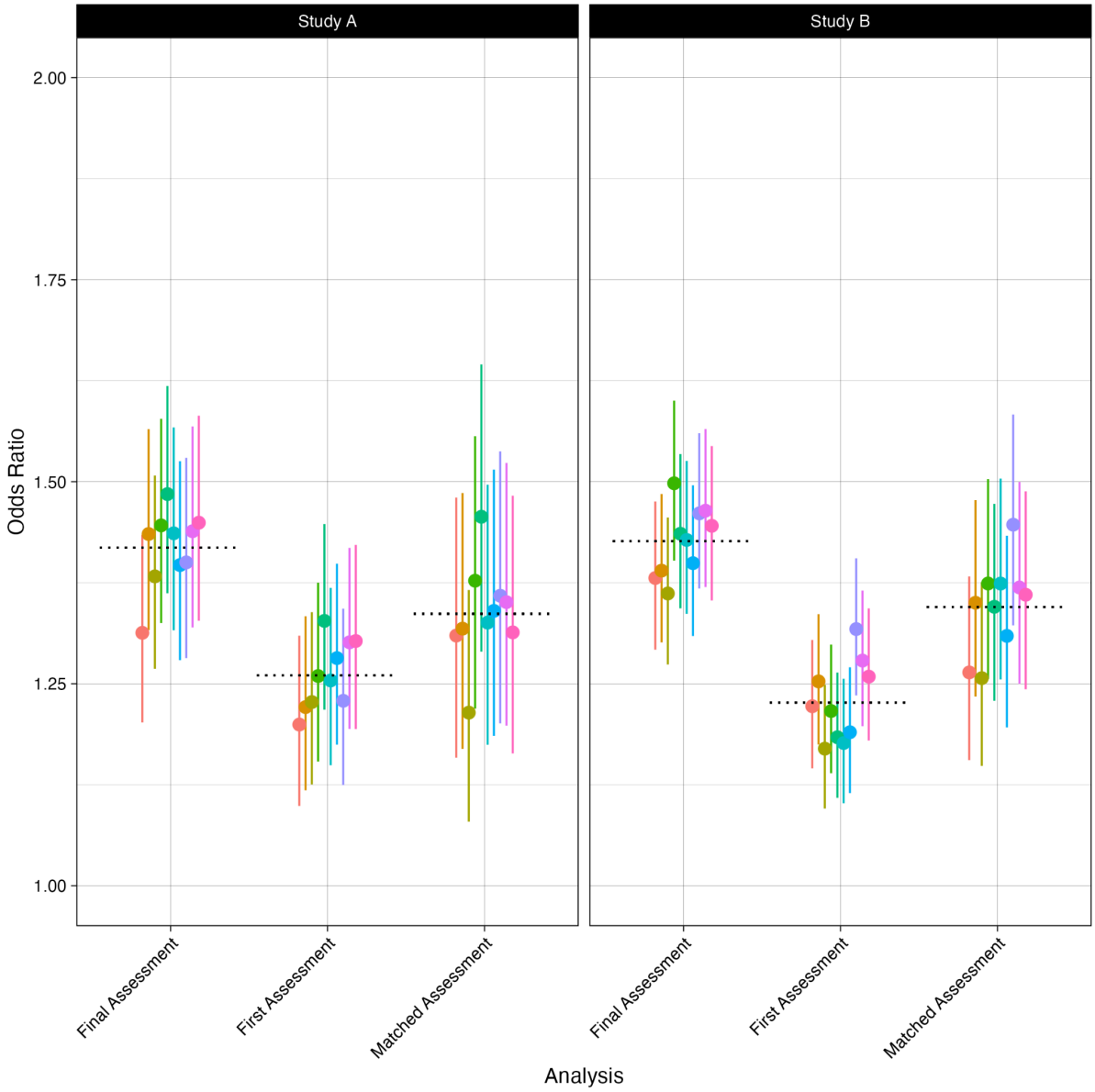


Figure S4. Sensitivity analyses where Group B Streptococcus colonisation was assumed to affect preterm birth hazard from week 32 of gestation onwards. The description of axes in **Figure 2** in the main text is also valid for this figure.



References

1. Goncalves BP, Poyraz O, Paul P, Lawn JE. Inferring longitudinal patterns of group B Streptococcus colonization during pregnancy. iScience. 2023;26(7):107023.