Investigating sampling bias in S-gene target results among Covid-19 test-positive cases

Epiforecasts

16 December 2021

0.0.1 Methods

- We compared all test-positive cases to test-positive cases with any SGT result
- We used data for all England test-positive cases. We used only the most recent three weeks of data between 2021-11-01 and 2021-12-12.
- We estimated a daily growth rate and allowed weekly piecewise constant variation. We used a uniform prior for the initial growth rate advantage of SGT-result cases compared to no-SGT-result cases. We estimated the transmission advantage as the difference in growth rate between the two sets of cases on a daily scale.

0.0.2 Results

- On average, 40% cases had an SGT result.
- We found a median advantage for SGT-result cases of 1.01 (95% credible interval 0.96 - 1.07), scaled against cases without an SGT result.
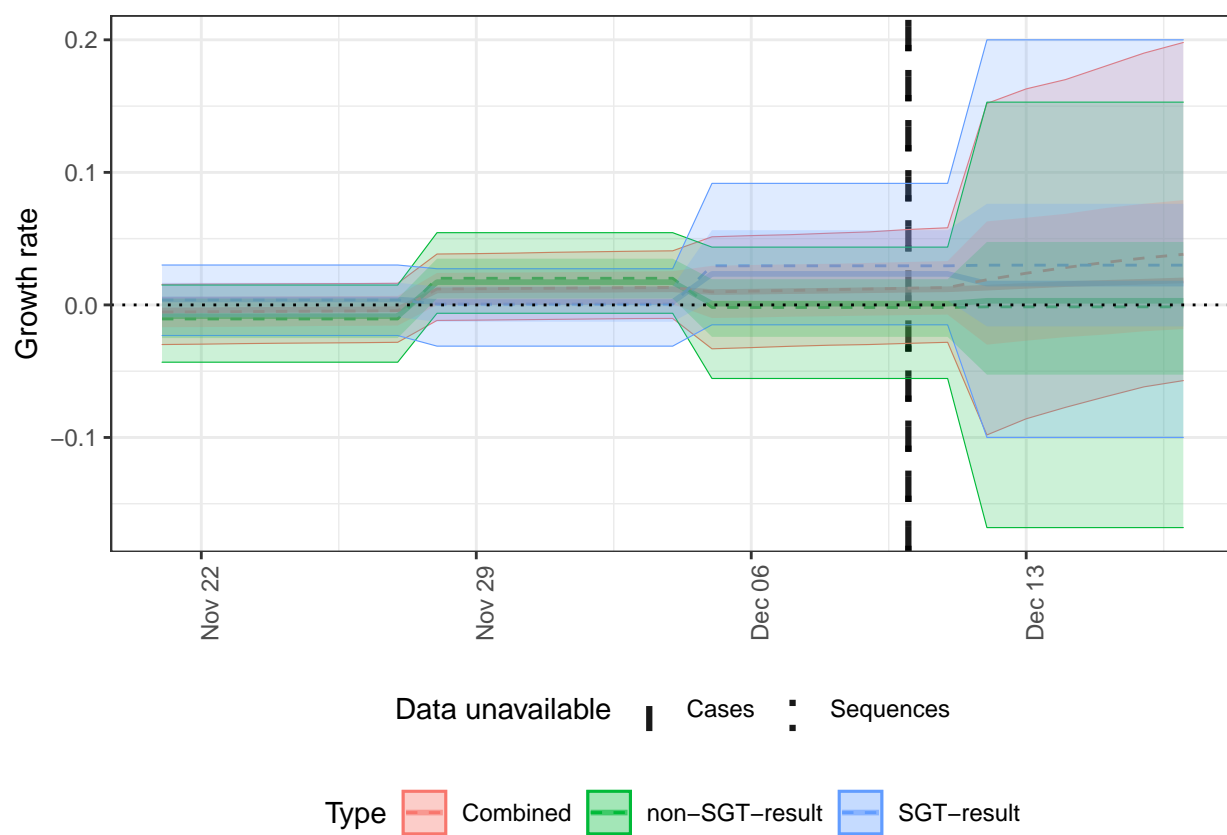- We also estimated the growth rate (figure 1).

Figure 1: Growth rate for all cases (Combined), those with an S-gene target result (SGT-result) and those without