

## Supplementary appendix

Supplementary table 1: Cross-tabulation of S-gene target status and variant as identified by whole genome sequencing

Variant	S-gene			Total
	positive	negative	unknown	
No sequencing result	356	1,574	439	2,369
B.1.1.7	2	5,099	278	5,379
B.1.1351	19	0	4	23
B.1.617.2	666	0	56	722
P.2	7	0	0	7
B.1.617.1	28	0	9	37
B.1.617.3	3	0	0	3
B.1.525	0	12	0	12
B.1.1.318	9	0	1	10
Low quality (likely B.1.617.2)	1	0	1	2
Not VOC/VUI	26	3	3	32
<b>Total</b>	<b>1,117</b>	<b>6,688</b>	<b>791</b>	<b>118,157</b>

Supplementary table 2: Cross-tabulation of S-gene target status and variant as identified by whole genome sequencing after dropping non B.1.1.7 or B.1.617.2 variants and reassignment based on sequencing results

Variant	S-gene			Total
	positive	negative	unknown	
No sequencing result	356	1,574	439	2,369
B.1.1.7	0	5,379	0	5,379
B.1.617.2	722	0	0	722
<b>Total</b>	<b>1,117</b>	<b>6,688</b>	<b>791</b>	<b>118,157</b>

Supplementary table 3: Odds ratios for detection of B.1.617.2 relative to B.1.1.7 in vaccinated individuals compared to the <14 days post dose 1

Vaccination status	Number of cases		Ratio B.1.617.2 to B.1.1.7	aOR
	B.1.1.7	B.1.617.2		
Days 0-13 post dose 1	551	32	0.058	base
Any vaccine				
Dose 1	2237	272	0.122	1.30 (0.82-2.08)
Dose 2	81	25	0.309	1.52 (0.72-3.18)
Dose 1 or 2	2511	322	0.128	1.33 (0.83-2.11)
Vaccine type (dose 1 or 2)				
BNT162b2	720	68	0.094	1.10 (0.64-1.90)
ChAdOx1	1791	254	0.142	1.39 (0.87-2.23)

Supplementary table 4: Matched case control analysis

Vaccination status	Number of cases		Ratio B.1.617.2 to B.1.1.7	aOR compared to unvaccinated	aOR compared to <14 days post dose
	B.1.1.7	B.1.617.2			
Unvaccinated	2799	534	0.191	base	
<14 days post dose 1	133	21	0.158		base
Any vaccine					
Dose 1	621	173	0.279	1.19 (0.93-1.54)	1.29 (0.74-2.22)
Dose 2	33	13	0.394	1.44 (0.70-2.95)	1.55 (0.65-3.70)
Dose 1 or 2	710	198	0.279	1.18 (0.93-1.51)	1.27 (0.74-2.19)

Matched on Ethnicity, Region, age(10 yrs), week of sample

Figure 1: Cumulative proportion of those with 2 doses more than 14 days after dose 2 vaccinated by each time point after the second dose

