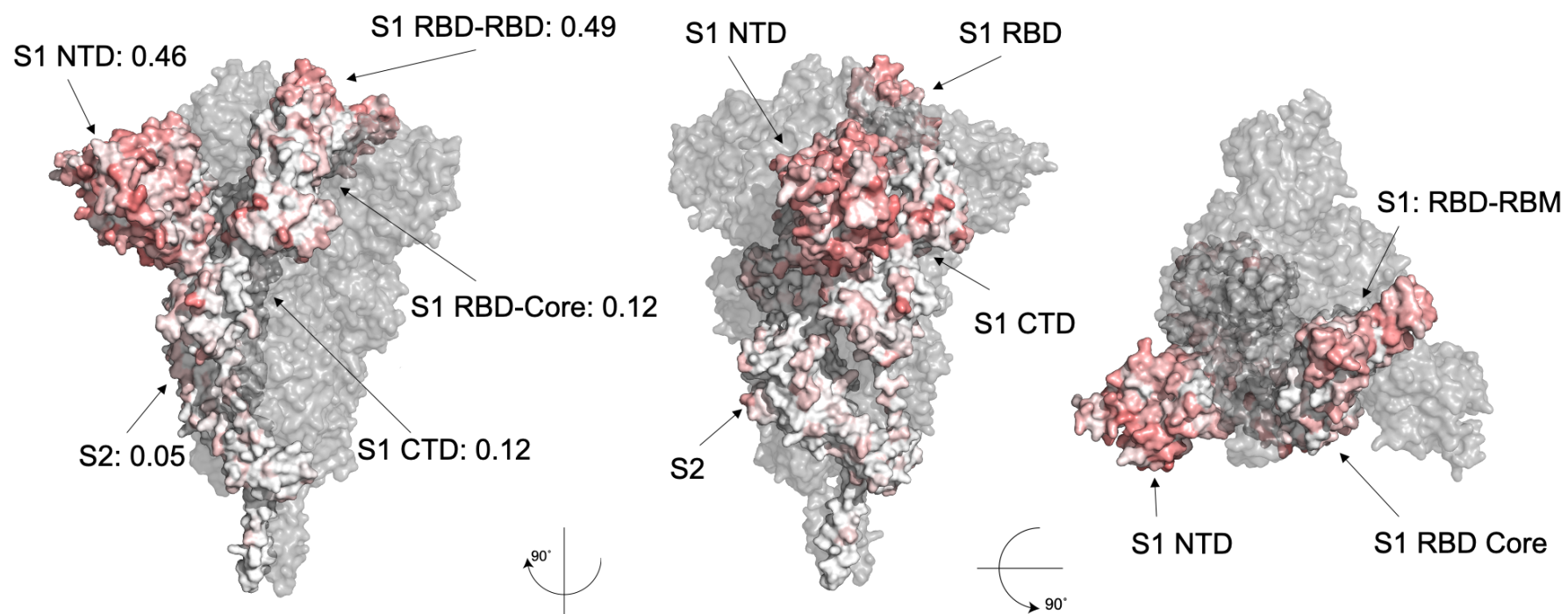


FIGURE 1

**FIGURE 2**

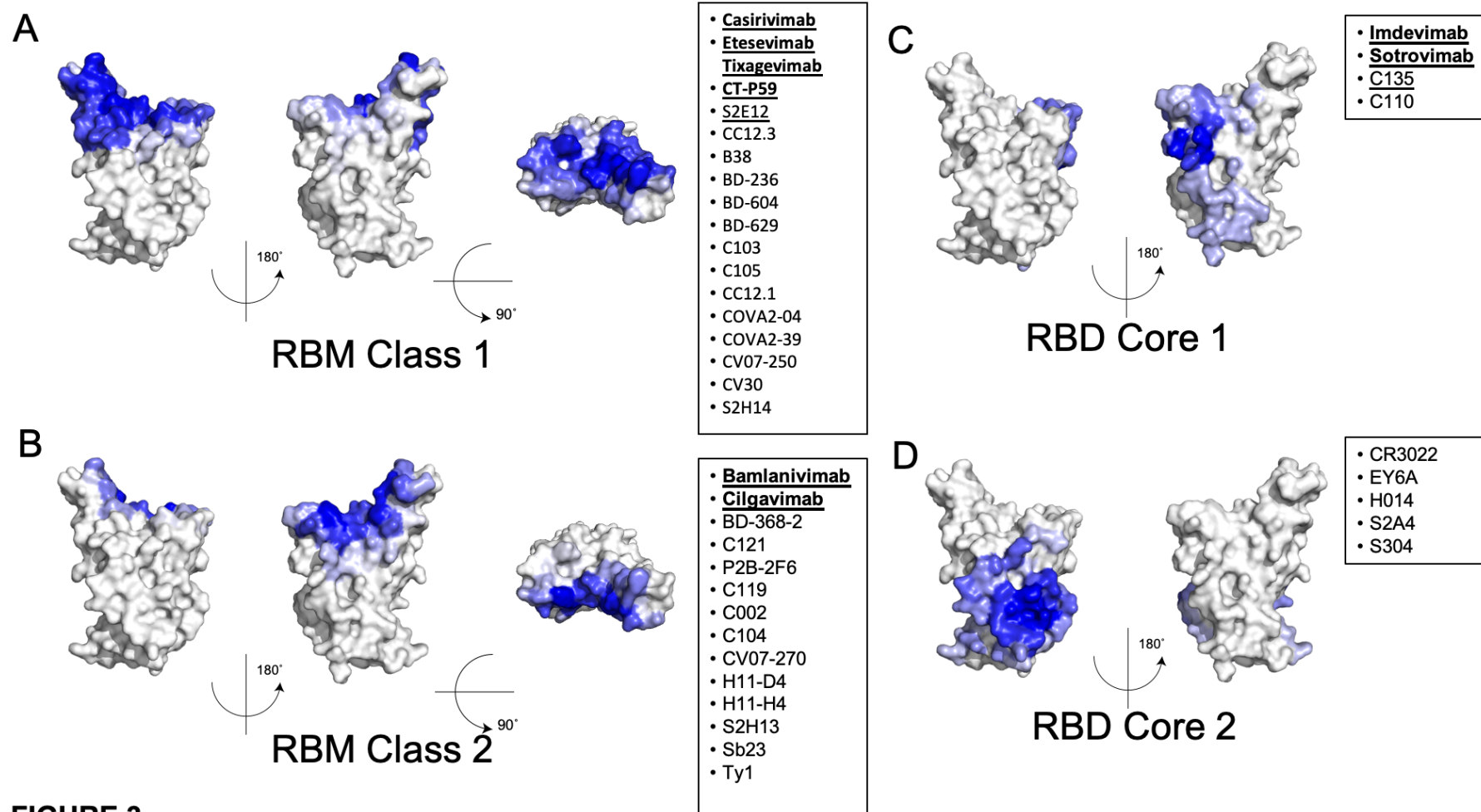
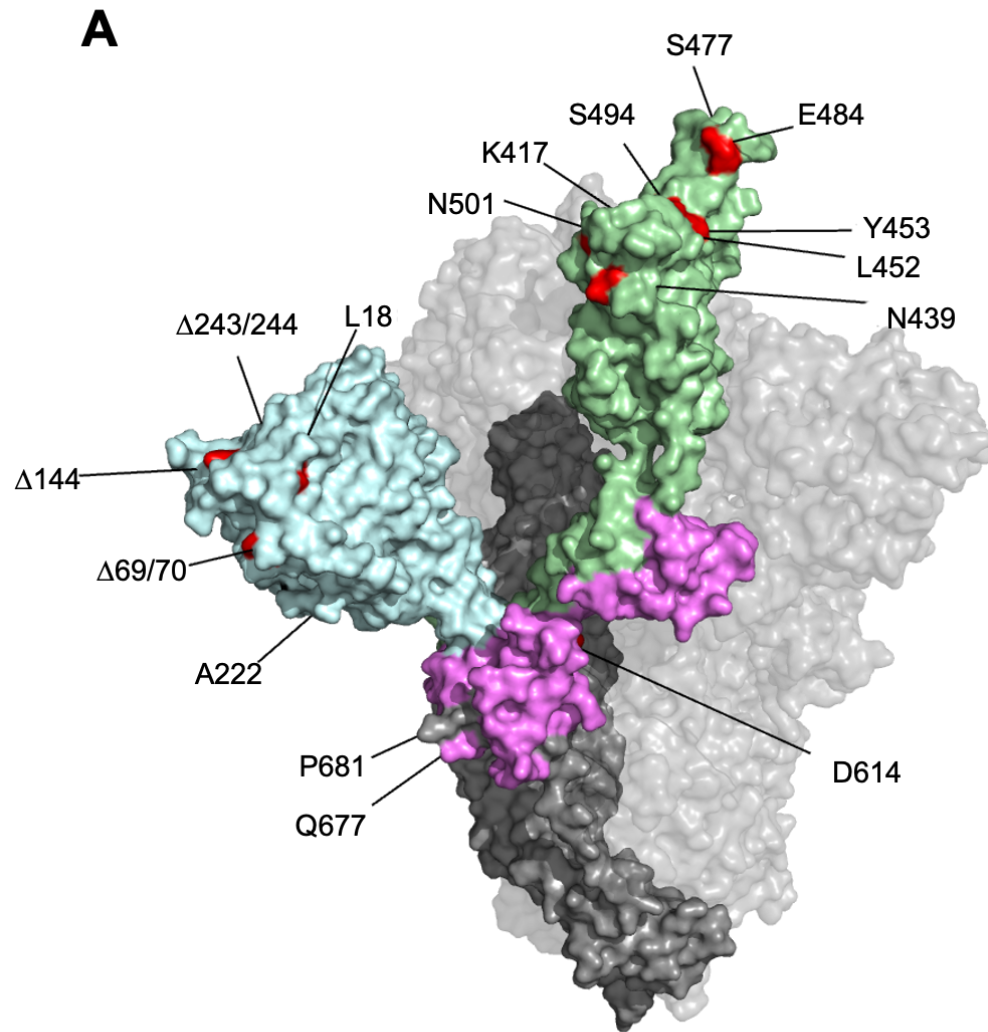


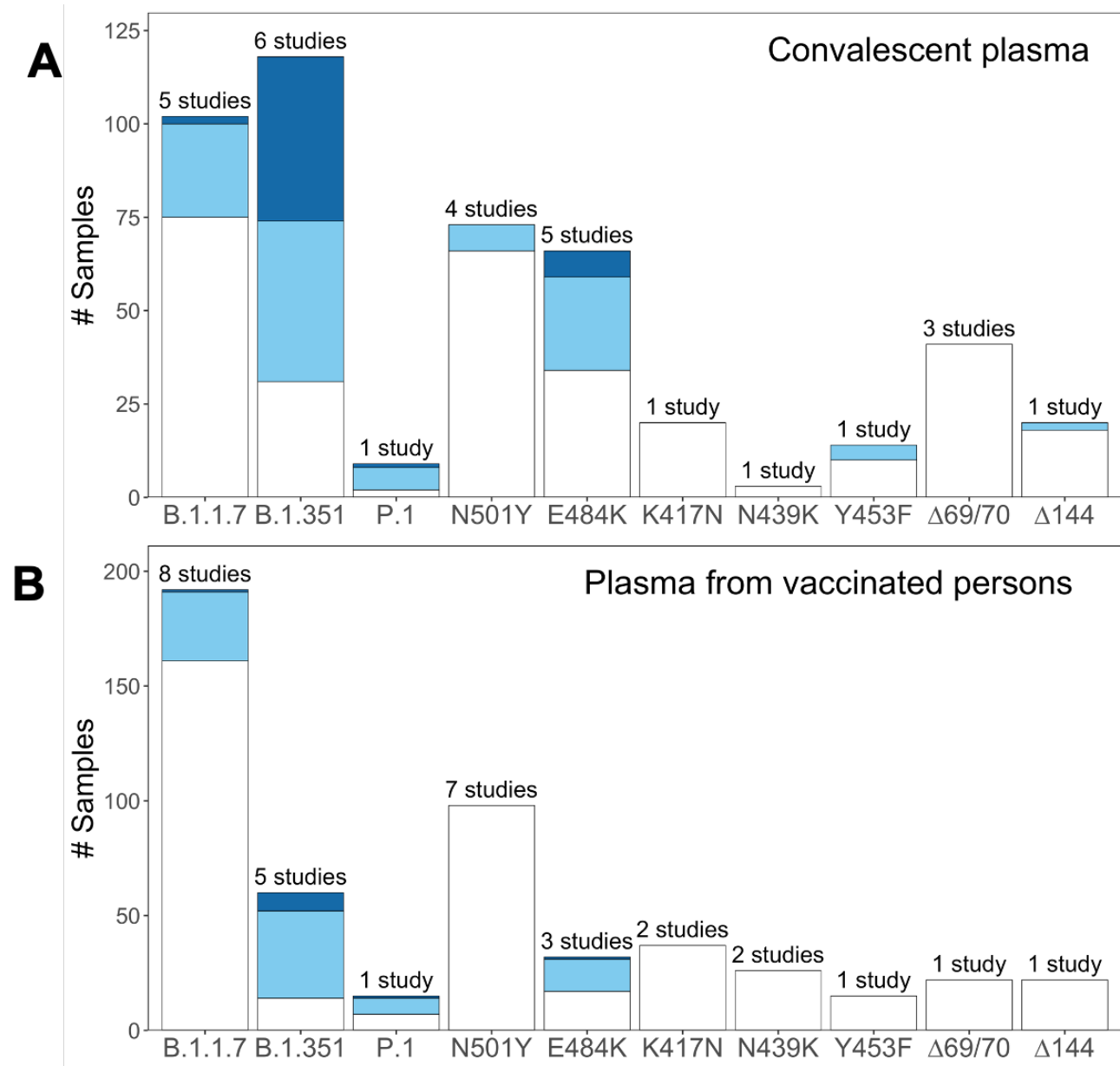
FIGURE 3



**FIGURE 4**

**B**

	July 2020 => February 2021	
	COVID CG	NextStrain
<b><i>Spike mutations present in variants of concern</i></b>		
L18F	0.3 => 9.7	0 => 8.5
Δ69/70	0.01 => 17	0 => 28
Δ144	0.1 => 6.6	0 => 22
Δ243/244	0.02 => 0.01	0 => 4.8
K417N	0 => 0.3	0 => 4.9
K417T	0 => 0	0 => 4.4
E484K	0.01 => 0.6	0.6 => 13
N501Y	0.03 => 16	0 => 32
P681H	0.02 => 16	1.8 => 27
<b><i>Additional emerging RBD variants</i></b>		
N439K	0.4 => 2.3	0 => 4.7
L452R	0 => 0.9	0 => 4.7
Y453F	0.1 => 0.3	0 => 0
S477N	0.4 => 5.2	9.2 => 2.5
T478K	0.01 => 0.1	0 => 0.6
V483A	0.04 => 0.01	0 => 0
F490S	0.01 => 0.03	0 => 0
S494P	0.02 => 0.2	0 => 0.9



**FIGURE 5**