

**Table S1.** Emergence of VOCs and haplotypes and their mutant constellations. Time of origin is given in a scale of relative appearance. Data from ref. [14].

Haplotype/VOC	Mutations	Time of Origin
<b>Omicron</b>	P13L, E31-, R32-, S33-, R203K, G204R, S413R	10
<b>H16</b>	S413R	9
<b>H18</b>	E31-, R32-, S33-	8
<b>H15</b>	P13L	7
<b>Delta</b>	D63G, R203M, G215C, D377Y	6
<b>H6</b>	G215C	5
<b>H7</b>	D63G, R203M, D377Y	4
<b>Alpha</b>	D3L, R203K, G204R, S235F	3
<b>H1</b>	D3L, S235F	2
<b>H2</b>	R203K, G204R	1
<b>Wuhan</b>	—	0