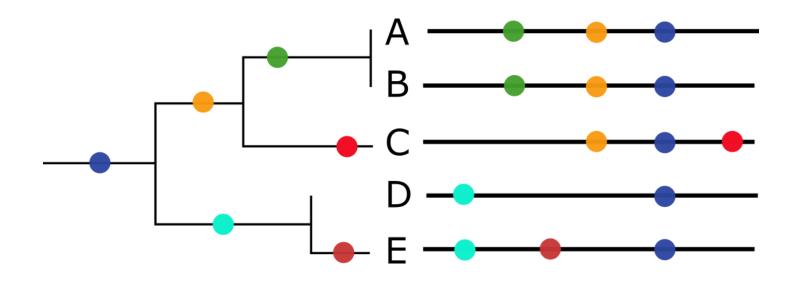
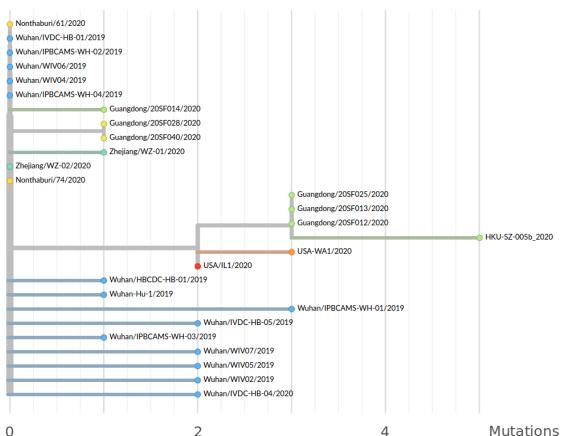
# Varianten und Impfung

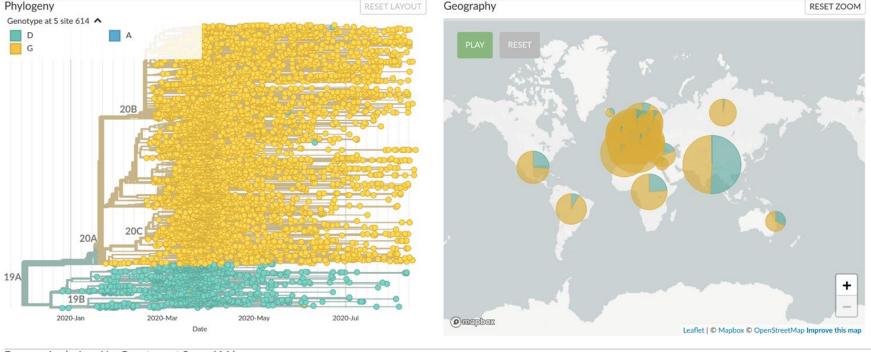
### Genom-Sequenzen und Evolution



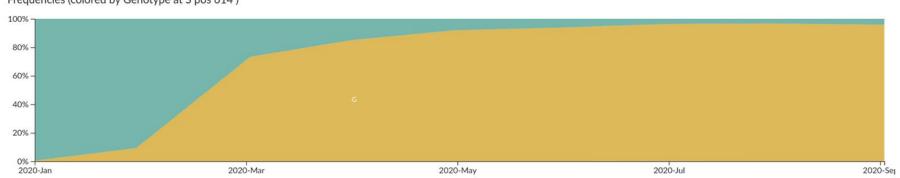
- Anhand von Mutationen lassen sich Verwandtschaftsverhältnisse rekonstruieren
- Mutationen geben uns Hinweise auf mögliche Veränderungen

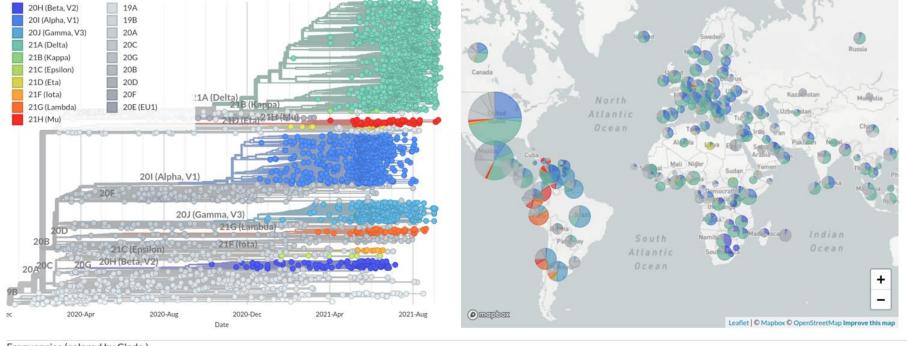
#### Daten im Januar 2020



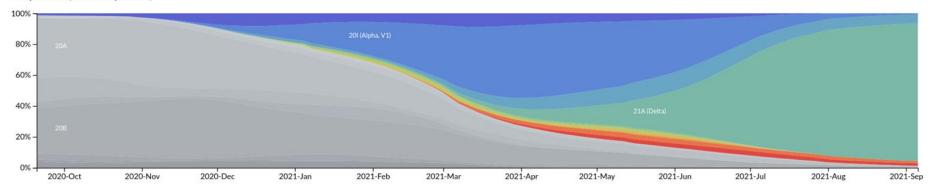




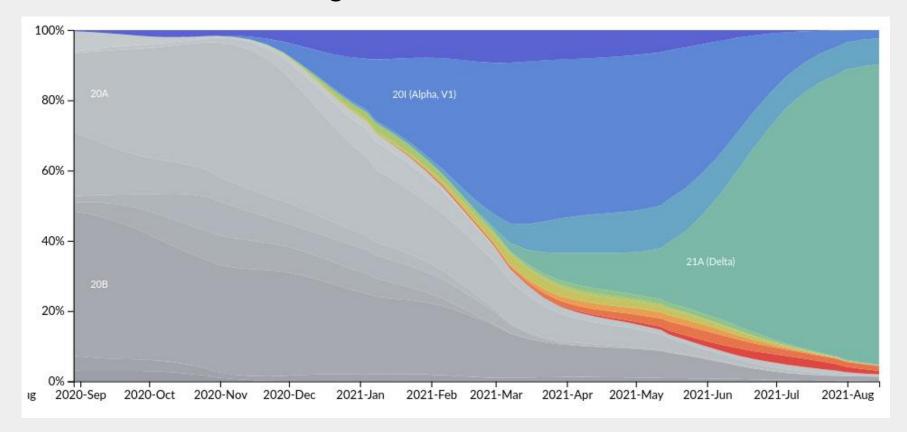


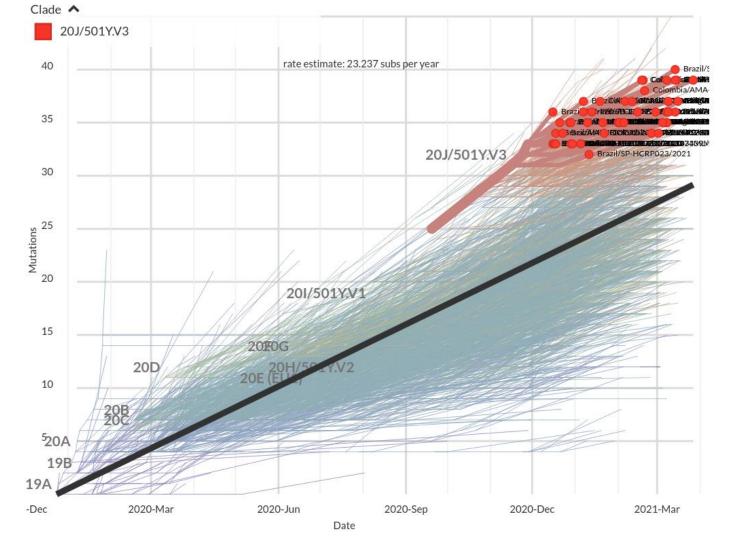




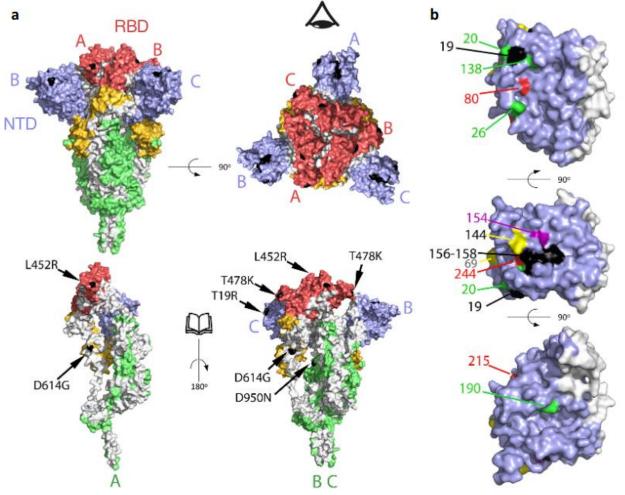


## Die Delta Variante ist global dominant



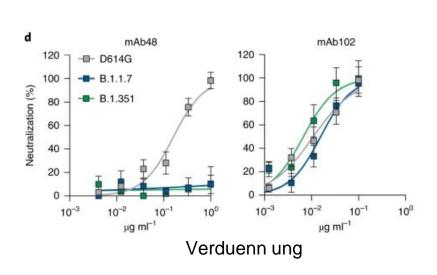


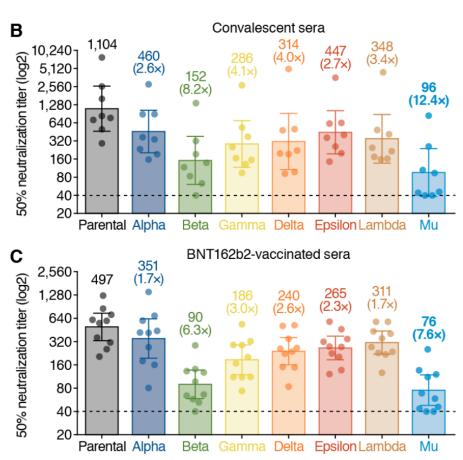
20l (Alpha, V1) (B.1.1.7)	20H (Beta, V2) (B.1.351)	20J (Gamma, V3) (P.1)	21A (Delta) (B.1.617.2)	21B (Kappa) (B.1.617.1)	21C (Epsilon) (B.1.427/9)	21D (Eta) (B.1.525)	21F (lota) (B.1.526)	21G (Lambda)	21H (Mu) (B.1.621)	20A/S:126A (B.1.620)	
, (,	, (,	12,(,	(=				(=:::==,	(C.37)	(2	(2111227)	
Shared mutations											
	Sort by: Commonness Position										
	S: L 18 F	S: L 18 F									
		S: P 26 S								S: P 26 S	
S: H 69 -						S: H 69 -				S: H 69 -	
S: V 70 -						S: V 70 -				S: V 70 -	
							S: T 95 I		S: T 95 I		
S: Y 144 -						S: Y 144 -			S: Y 144 S	S: Y 144 -	
	S: L 241 -									S: L 241 -	
	S: L 242 -									S: L 242 -	
	S: A 243 -									S: A 243 -	
							S: D 253 G	S: D 253 N			
	S: K 417 N	S: K 417 T									
			S: L 452 R	S: L 452 R	S: L 452 R			S: L 452 Q			
	S: E 484 K	S: E 484 K		S: E 484 Q		S: E 484 K	S: E 484 K		S: E 484 K	S: E 484 K	
S: N 501 Y	S: N 501 Y	S: N 501 Y							S: N 501 Y		
S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	S: D 614 G	
S: P 681 H			S: P 681 R	S: P 681 R					S: P 681 H	S: P 681 H	
	S: A 701 V						S: A 701 V				
			S: D 950 N						S: D 950 N		
		S: T 1027 I								S: T 1027 I	
S: D 1118 H										S: D 1118 H	



https://www.biorxiv.org/content/10.1101/2021.05.26.445838v1.full.pdf

#### Redukti on in Titer



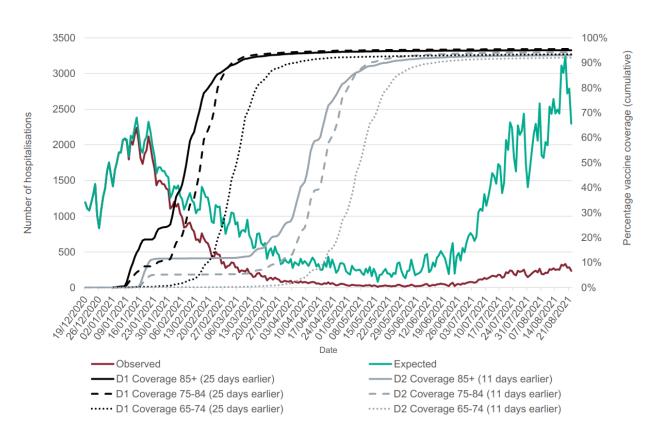


## Impfschutz vor schwerer Erkrankung in den meisten robust

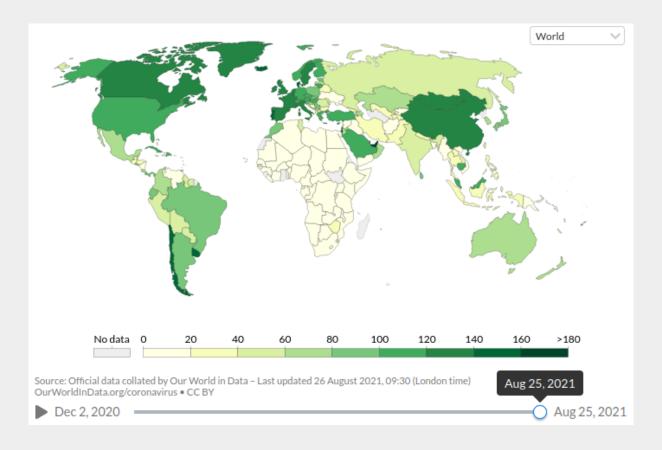


- Pfizer BionTech/Moderna besser als AstraZeneca
- In Risikogruppen lässt der Schutz nach
- Kurzes Intervall zwischen 1. und 2. Impfung führt zu schnellerer Abnahme

## Verhinderte Hospitalisierungen -- Public Health England



## Vaccine doses per 100 people



## Vaccine doses per 100 people

