

## Supplementary Material

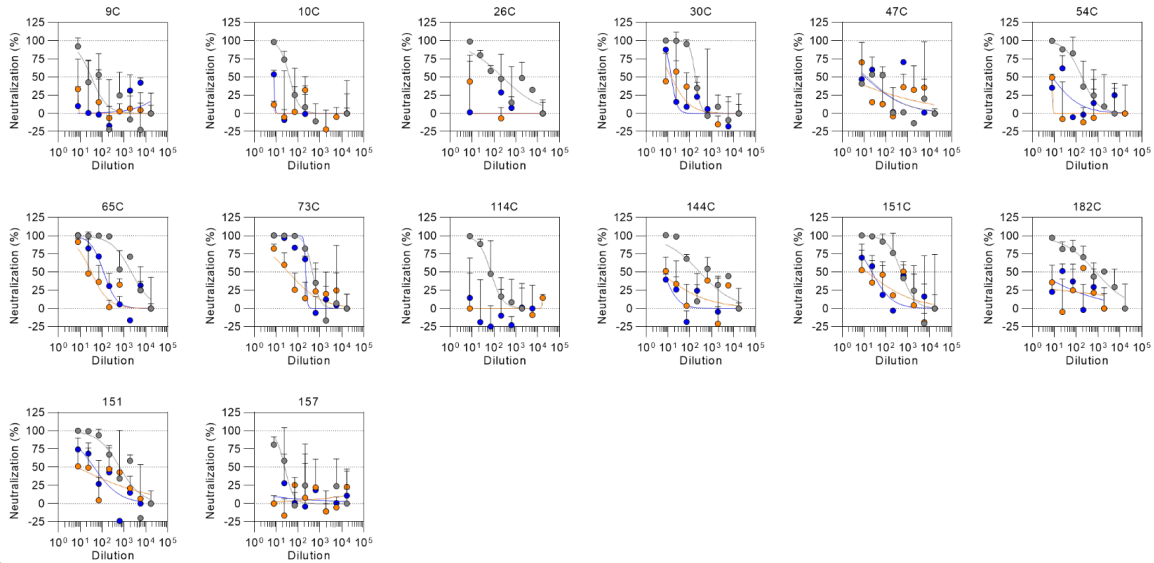
**Table S1.** SARS-CoV-2 BA.1 and BA.2 spike mutations as compared to Wuhan-Hu-1.

BA.1	Both	BA.2
A67V, del69/70, T95I, del143/145, N211I, del212/212, S371L, G496S, Q498R, T547K, N856K, L981F	G142D, G339D, S373P, S375F, S477N, T478K, E484A, Q493R, Q498R, N501Y, Y505H, D614G, H655Y, N679K, P681H, N764K, D796Y, Q954H, N969K	T19I, L24S, del25/27, V213G, S371F, T376A, D405N, R408S, K417N, N440K

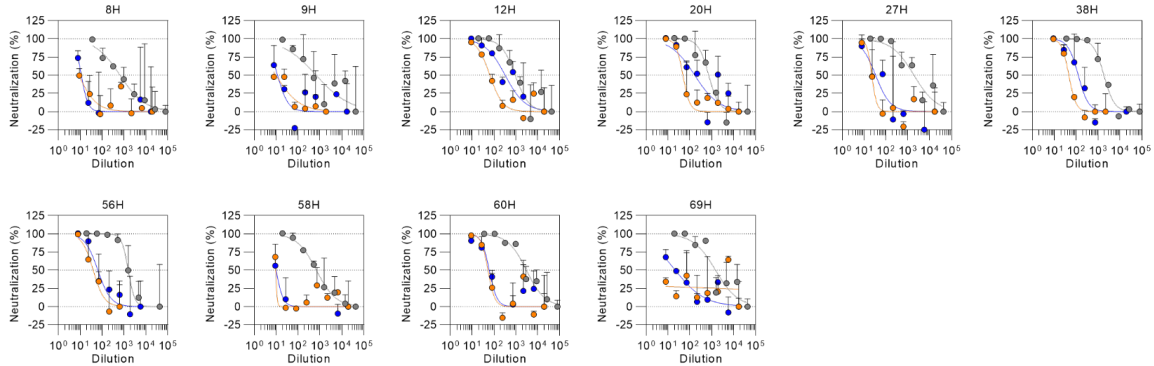
**Table S2.** Demographics data of enrolled plasma donors.

Vaccine	Sample	Sex	Age	Days Since Last Dose	Vaccine	Sample	Sex	Age	Days Since Last Dose	Vaccine	Sample	Sex	Age	Days Since Last Dose
1x Ad26.COV2.S	46H	M	60	15	2x AstraZeneca	38	F	29	47	3x mRNA-1273 & 3x BNT162b2	8H	M	79	78
	82H	M	28	57		40	F	51	47		12H	F	42	18
	85H	M	29	102		41	F	39	46		15H	M	52	13
	86H	F	26	90		43	M	47	47		29H	M	64	13
	87H	F	28	100		45	F	48	43		35H	M	60	47
	88H	F	30	100		47	F	31	40		51H	F	50	25
	89H	M	31	102		48	F	37	47		53H	F	38	14
	90H	M	38	142		49	F	36	46		54H	F	34	15
	91H	F	26	105		51	F	29	47		55H	F	52	18
	92H	F	33	102		52	M	46	47		56H	M	46	97
1x Washington-1 Infected	9C	F	41	41	53	F	37	46	72H	F	35	15		
	10C	F	31	31	54	F	29	46	76H	F	38	14		
	26C	F	28	28	0884-000341D0-001	F	72	14	80H	F	35	25		
	30C	F	35	42	0884-00033A00-001	M	38	14	8H	M	79	11		
	47C	F	41	35	0884-00036K00-001	F	43	12	9H	F	75	7		
	54C	M	36	41	0933-0004FG00-001	M	51	14	12H	F	42	10		
	65C	M	42	36	0933-0004KC00-001	F	26	14	20H	F	33	6		
	73C	M	49	42	0932-00064B00-001	F	60	13	27H	M	59	11		
	114C	F	41	49	0884-0003WD00-001	M	54	13	37H	F	57	7		
	144C	M	48	41	0897-0001SB00-001	F	41	15	38H	F	26	10		
2x BBIBP-CorV	151C	F	41	48	0889-0004WJ00-001	F	48	14	56H	M	46	15		
	182C	M	78	78	0889-0004FG00-001	F	28	16	58H	F	50	15		
	2	M	36	78	0889-0004KC00-001	F	36	13	60H	F	42	8		
	3	F	41	9	0889-0002SD00-001	M	43	14	69H	F	68	13		
	4	F	25	74	31H	F	49	13	10H	M	33	14		
	5	F	26	71	46H	M	60	16	14H	F	67	9		
	6	F	34	82	P142				15H	M	52	9		
	7	M	29	76	P297				16H	F	46	6		
	8	F	34	15	P284				17H	M	76	17		
	9	F	33	15	P643				23H	F	34	15		
2x Sputnik V	10	M	27	84	P354				26H	F	41	11		
	11	F	28	102	P116				77H	F	28	14		
	12	M	36	22	P948				78H	M	22	15		
	13	F	26	102	P033				79H	F	27	20		
	1				P622				5840	F	73	165		
	2				P399				6082	M	21	103 or 160		
	3				P4042				6090	F	36	90 or 165		
	4				P232				6096	M	18	55 or 160		
	5				P4608				6097	M	18	68 or 173		
	6				P6049				6099	M	20	78 or 159		
2x AZD1222 1x BNT162b2 / mRNA-1273	7				38	F	30	87	6259	F	42	78 or 155		
	8				40	F	52	114	6261	M	60	77 or 191		
	9				41	F	40	88	6322	F	41	168		
	10				43	M	48	92						
	11				45	F	49	83						
	12				47	F	32	81						
					48	F	38	81						
					51	F	30	88						
					52	M	47	87						
					53	F	38	88						
					54	F	30	88						
					57	F	46	94						
				58	F	29	90							
				59	M	48	84							
				62	F	41	79							
				67	F	42	90							
				68	M	26	123							
				71	F	27	89							

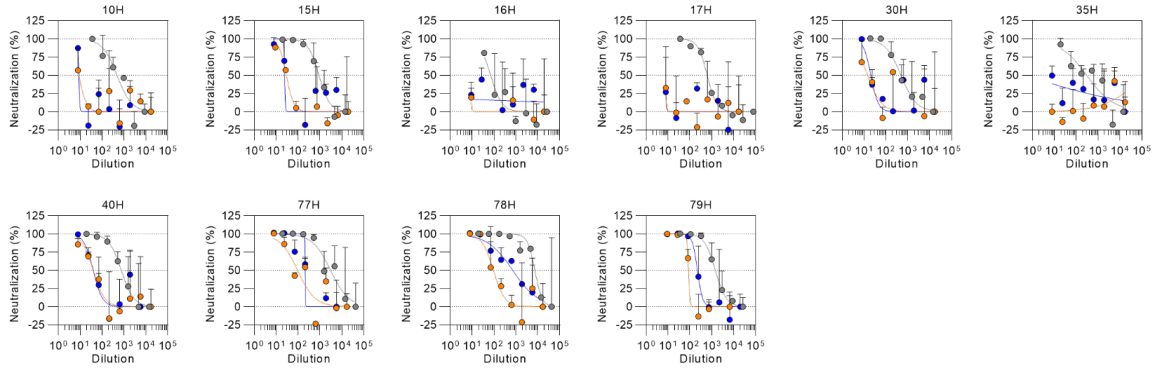
### A 1x WA-1 Infected



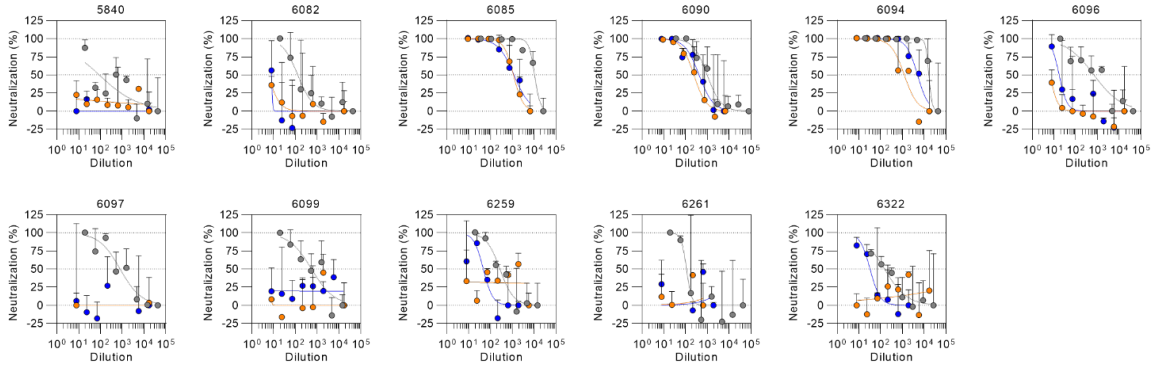
### B 2x mRNA-1273



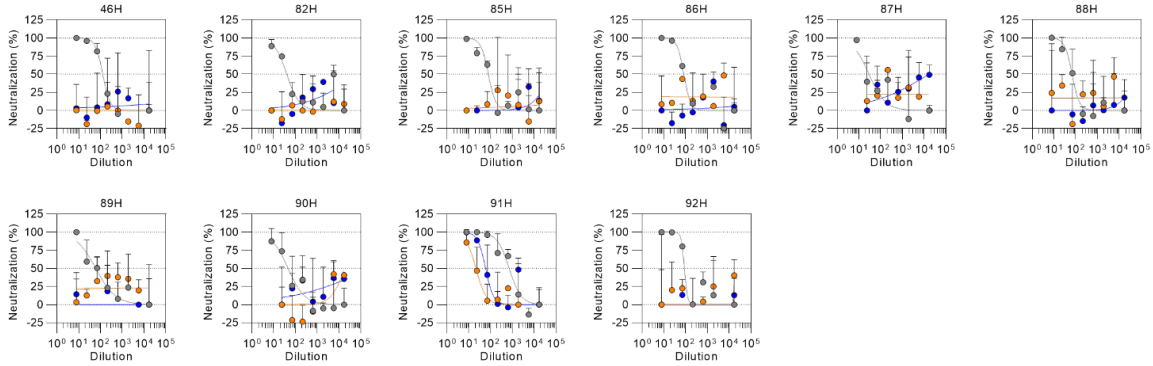
### C 2x BNT162b2



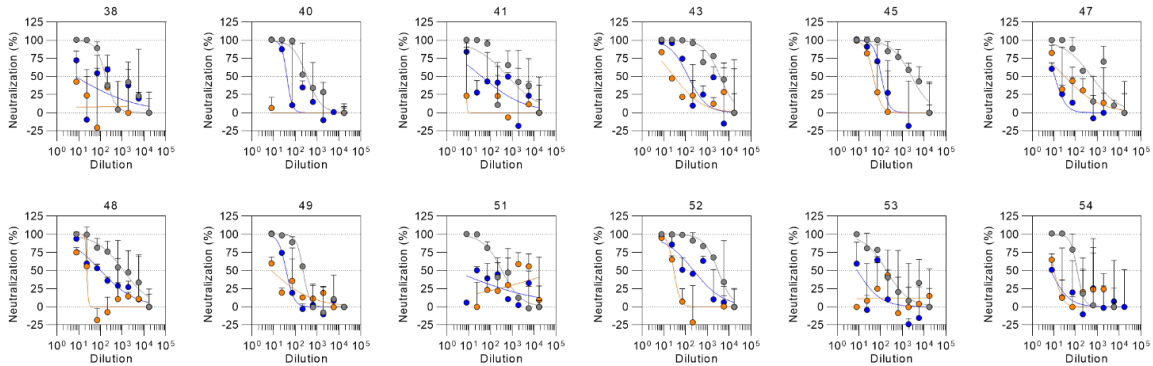
**D** 2x NVX-CoV2373



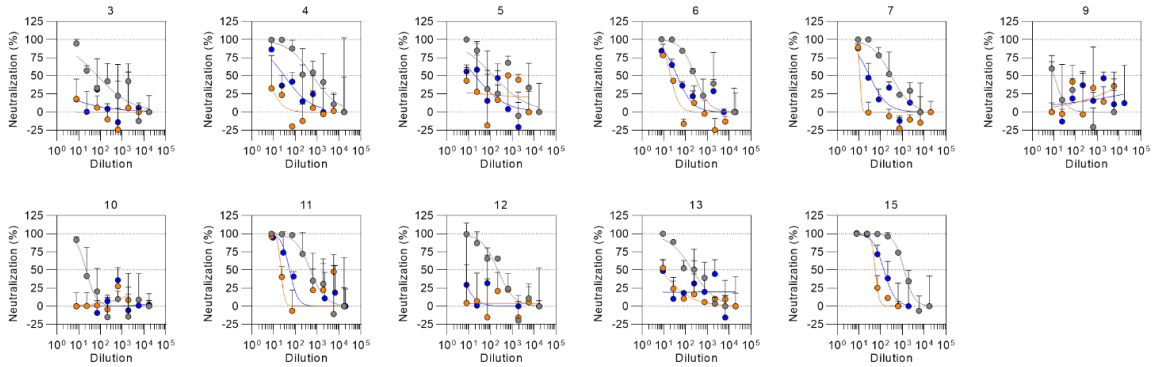
**E** 1x Ad26.COV2.S



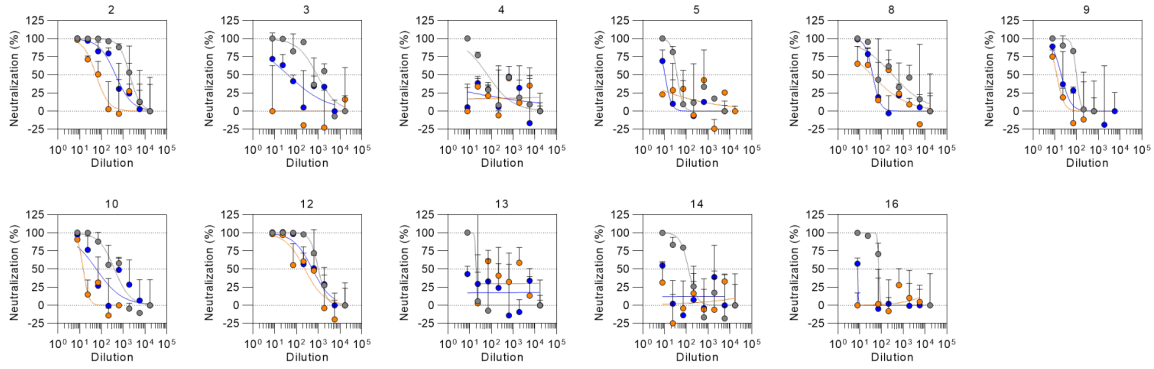
**F** 2x AZD1222



**G** 2x Sputnik V

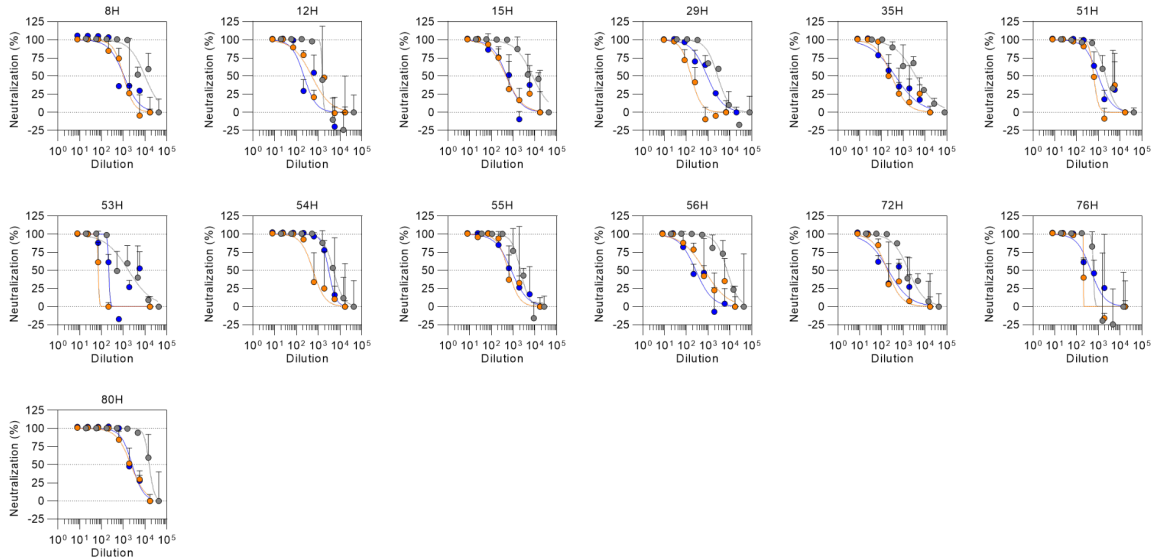


## H 2x BBIBP-CorV

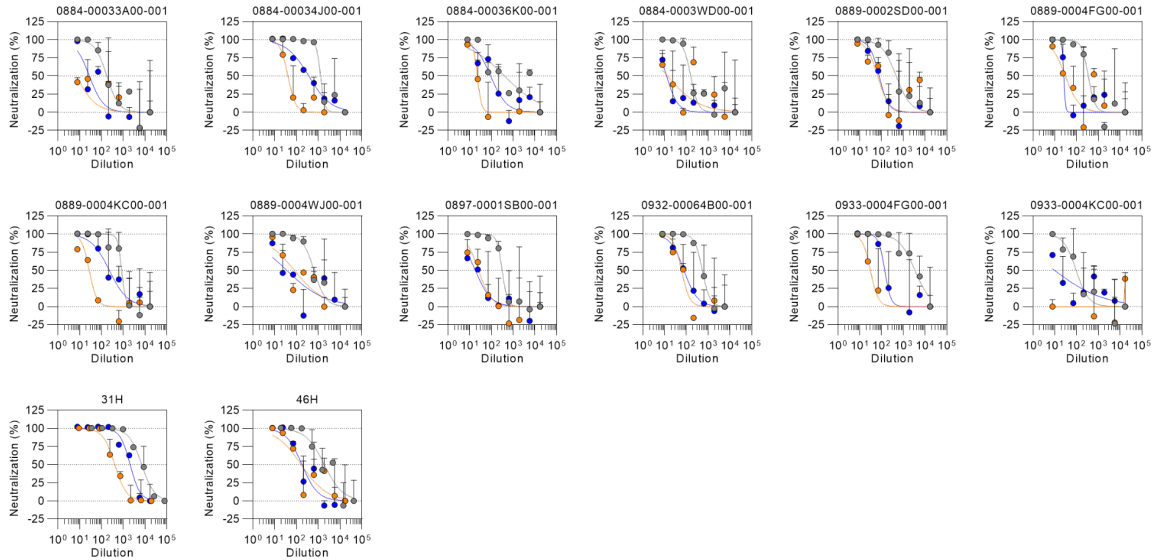


**Fig. S1.** Normalized neutralization curves using VSV pseudovirus containing the SARS-CoV-2 G614 spike (gray), BA.1 spike (orange), or BA.2 spike (blue) on VeroE6-TMPRSS2 cells using plasma from subjects after their primary vaccine series.

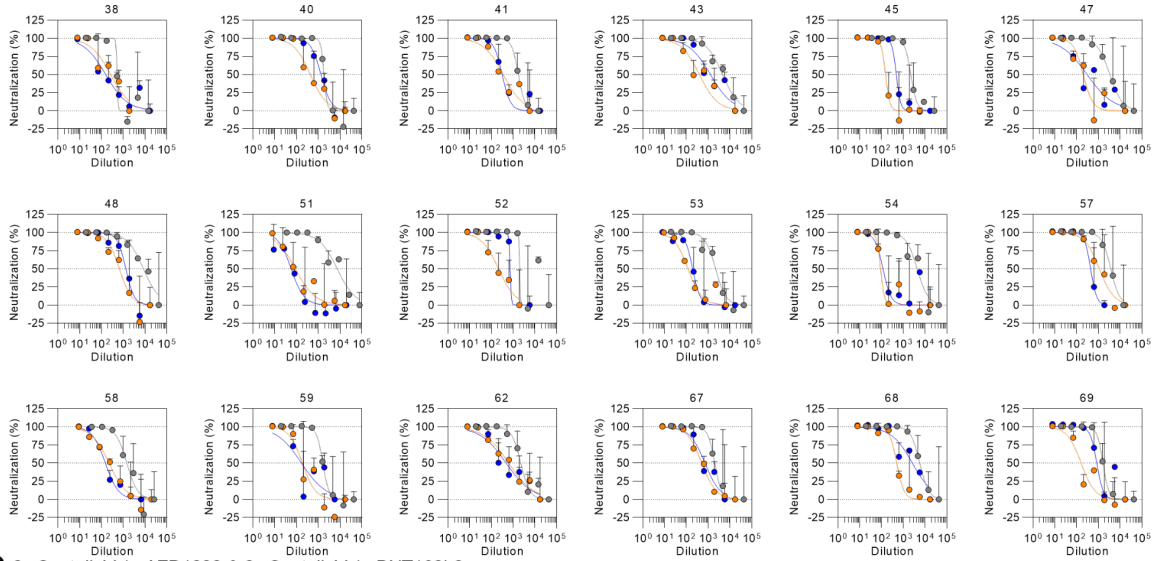
**A** 3x mRNA-1273 & 3x BNT162b2



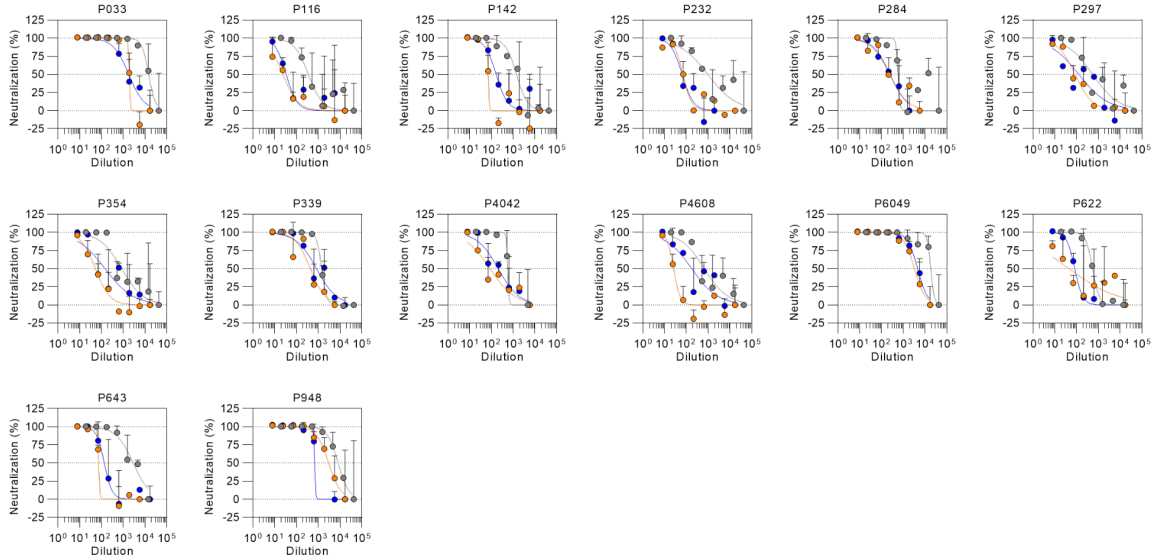
**B** 2x Ad26.COVS.S & 1x Ad26.COVS.S 1x BNT162b2



**C** 2x AZD1222 1x BNT162b2 & 2x AZD1222 1x mRNA-1273



**D** 2x Sputnik V 1x AZD1222 & 2x Sputnik V 1x BNT162b2



**Fig. S2.** Normalized neutralization curves using VSV pseudovirus containing the SARS-CoV-2 G614G (gray), BA.1 spike (orange), or BA.2 spike (blue) on VeroE6-TMPRSS2 cells using plasma from subjects after receiving a booster dose.