

**Supplementary Table S1: Summary of 98 subjects receiving mRNA-mRNA prime-boost vaccination with Comirnaty® (BioNTech-Pfizer, Mainz, Germany/New York, United States)**

Patient ID	Age (years)	Sex	SARS-COV-2 WNTAI ELISA Baseline			SARS-COV-2 WNTAI ELISA 1M post 2nd vaccination			1M post 2nd vaccination ID ₅₀	Time between 1. and 2. vaccination (days)	Time between 2. vaccination and blood sample (days)
			OD _{450nm}	Ratio (S/N)	Ab	OD _{450nm}	Ratio (S/N)	Ab			
V-01	75	Male	0.02	0.2	Negative	3.88	168.7	Positive	2114	36	28
V-02	67	Male	0.01	0.1	Negative	3.59	156.3	Positive	101	33	31
V-03	46	Male	0.00	0.0	Negative	4.06	176.6	Positive	3704	34	30
V-04	54	Male	0.01	0.0	Negative	3.99	173.5	Positive	722	31	36
V-05	41	Female	0.03	0.3	Negative	3.91	170.2	Positive	2031	34	32
V-06	58	Female	0.03	0.2	Negative	3.95	172.0	Positive	4941	33	31
V-07	36	Female	0.05	0.4	Negative	3.94	171.6	Positive	2599	27	38
V-08	66	Female	0.05	1.0	Negative	4.00	173.9	Positive	547	36	39
V-09	55	Female	0.01	0.0	Negative	3.87	168.2	Positive	2734	33	33
V-10	33	Female	0.00	0.0	Negative	4.03	175.3	Positive	1920	33	41
V-11	48	Female	0.04	1.0	Negative	4.07	58.0	Positive	6643	34	31
V-12	37	Female	0.00	0.0	Negative	3.96	172.5	Positive	1716	33	32
V-13	49	Female	0.00	0.0	Negative	3.98	173.0	Positive	1259	34	31
V-14	36	Male	0.00	0.0	Negative	3.79	164.8	Positive	8243	33	41
V-15	42	Female	0.00	0.0	Negative	3.86	168.0	Positive	1105	33	41
V-16	38	Male	0.01	0.0	Negative	3.89	169.3	Positive	1978	33	41
V-18	62	Female	0.04	0.1	Negative	3.99	173.4	Positive	11872	33	35
V-19	48	Female	0.00	0.0	Negative	3.93	170.9	Positive	4709	34	30
V-20	52	Female	0.00	0.3	Negative	4.00	173.9	Positive	1840	36	28
V-21	36	Male	0.01	0.0	Negative	4.09	178.1	Positive	10536	36	31
V-23	58	Female	0.00	0.0	Negative	3.94	171.5	Positive	1713	34	34
V-24	49	Female	0.01	0.1	Negative	3.90	169.7	Positive	1926	34	33
V-26	60	Male	0.01	0.0	Negative	3.97	172.8	Positive	1215	33	33
V-27	48	Female	0.10	0.1	Negative	4.02	175.1	Positive	4356	30	35
V-28	60	Female	0.02	0.1	Negative	4.08	177.6	Positive	12316	36	30
V-29	58	Female	0.00	0.9	Negative	3.93	171.0	Positive	3718	34	30
V-30	33	Female	0.00	0.1	Negative	3.99	173.6	Positive	1438	34	31
V-31	49	Male	0.00	0.0	Negative	3.99	173.7	Positive	2653	33	34
V-32	31	Female	0.01	0.0	Negative	3.99	173.8	Positive	2498	33	54
V-33	55	Male	0.01	0.0	Negative	3.83	166.8	Positive	743	33	31
V-34	65	Male	0.04	0.6	Negative	3.91	55.0	Positive	239	19	48
V-35	53	Male	0.01	0.1	Negative	3.92	170.5	Positive	3740	34	32
V-36	33	Female	0.01	0.1	Negative	3.92	170.6	Positive	3872	33	32
V-37	64	Female	0.01	0.1	Negative	3.97	172.8	Positive	6831	31	34
V-38	52	Female	0.01	0.1	Negative	3.91	170.2	Positive	15142	31	35
V-39	53	Female	0.01	0.1	Negative	4.00	174.2	Positive	2523	34	30
V-42	33	Male	0.09	0.1	Negative	3.95	171.7	Positive	4632	32	39
V-43	29	Male	0.01	0.1	Negative	4.02	174.8	Positive	2615	31	40
V-44	62	Male	0.03	0.8	Negative	3.81	165.7	Positive	1519	31	33
V-45	66	Male	0.05	0.1	Negative	3.95	171.9	Positive	3165	31	33
V-46	34	Male	0.03	0.3	Negative	3.98	173.2	Positive	5138	34	31
V-47	73	Male	0.01	0.5	Negative	4.00	173.9	Positive	1809	31	33
V-48	38	Female	0.00	0.3	Negative	4.10	178.2	Positive	4582	32	37
V-49	25	Female	0.05	0.1	Negative	4.06	176.4	Positive	11633	31	40
V-50	35	Female	0.07	0.0	Negative	4.04	175.7	Positive	6872	31	38
V-51	43	Male	0.07	0.5	Negative	4.00	174.1	Positive	1539	32	30
V-52	39	Female	0.04	0.6	Negative	4.11	57.0	Positive	5384	31	35
V-53	61	Female	0.04	0.6	Negative	4.10	56.9	Positive	670	31	35
V-54	49	Female	0.05	0.6	Negative	4.06	56.4	Positive	1680	34	28
V-56	42	Male	0.06	0.9	Negative	4.05	56.3	Positive	8002	31	35
V-57	25	Male	0.05	0.7	Negative	3.90	54.1	Positive	3029	34	31
V-59	26	Male	0.07	1.0	Negative	4.04	56.0	Positive	3530	32	32
V-60	57	Female	0.04	0.6	Negative	3.97	55.2	Positive	5489	31	31
V-61	63	Female	0.04	0.6	Negative	3.96	55.0	Positive	2315	31	32
V-62	34	Female	0.11	1.5	Negative	4.07	58.0	Positive	3928	22	41
V-63	48	Male	0.05	0.7	Negative	4.04	56.0	Positive	2780	31	34
V-64	24	Female	0.04	0.6	Negative	4.19	60.0	Positive	3238	31	39
V-65	40	Female	0.04	0.6	Negative	4.12	57.3	Positive	2577	31	34
V-66	34	Female	0.05	0.6	Negative	4.05	56.3	Positive	14976	32	30
V-67	32	Female	0.07	0.9	Negative	4.06	56.4	Positive	2503	31	32
V-68	34	Female	0.07	0.9	Negative	3.93	54.6	Positive	1609	34	44
V-69	29	Female	0.04	0.6	Negative	4.05	56.3	Positive	1302	32	31
V-70	27	Female	2.64	59.0	Positive	4.05	56.3	Positive	10195	34	30
V-71	29	Female	0.08	1.1	Negative	4.01	55.6	Positive	5222	34	31
V-72	48	Female	0.05	0.7	Negative	4.12	57.2	Positive	4389	34	31
V-73	50	Female	0.06	0.8	Negative	4.15	57.6	Positive	1218	34	29
V-76	37	Female	0.04	1.0	Negative	4.19	58.2	Positive	3210	31	30
V-78	38	Male	0.04	1.0	Negative	4.17	58.0	Positive	4330	33	30
V-79	48	Female	0.08	1.0	Negative	4.03	55.9	Positive	1957	33	32
V-80	54	Female	0.04	1.0	Negative	4.10	57.0	Positive	1455	32	33
V-82	33	Female	0.04	1.0	Negative	4.11	57.0	Positive	2190	31	37
V-83	34	Female	0.04	0.6	Negative	4.04	56.1	Positive	1012	30	33
V-84	27	Female	0.08	1.1	Negative	4.12	57.2	Positive	1464	30	32
V-85	37	Male	0.09	1.3	Negative	4.05	56.3	Positive	4262	33	32
V-86	37	Female	0.05	0.6	Negative	4.04	56.1	Positive	1840	30	34
V-87	70	Male	0.05	0.7	Negative	3.85	53.4	Positive	140	31	33
V-88	63	Female	0.05	0.8	Negative	3.99	55.4	Positive	753	31	30
V-89	34	Female	0.04	0.6	Negative	4.03	55.9	Positive	4052	33	31
V-90	56	Female	0.08	1.0	Negative	4.05	56.2	Positive	1663	33	30
V-91	43	Female	0.05	0.7	Negative	3.99	55.4	Positive	851	31	32
V-92	33	Female	0.04	0.6	Negative	4.11	57.0	Positive	2991	31	38
V-93	50	Female	0.06	0.9	Negative	4.08	58.3	Positive	3079	33	36
V-94	23	Female	0.04	0.6	Negative	4.09	56.8	Positive	11612	44	28
V-95	26	Female	0.05	0.6	Negative	4.05	56.3	Positive	4753	34	33
V-96	26	Female	0.06	0.8	Negative	3.92	54.5	Positive	3241	30	31
V-97	52	Female	0.08	1.1	Negative	4.04	56.1	Positive	3167	30	31
V-98	32	Male	0.04	1.0	Negative	4.05	56.2	Positive	1748	30	34
V-99	57	Male	0.06	0.8	Negative	4.05	56.2	Positive	2103	30	35
V-100	55	Female	0.05	0.7	Negative	4.28	59.4	Positive	2210	31	33
V-101	25	Male	0.04	1.0	Negative	4.08	56.7	Positive	754	27	30
V-102	58	Female	0.04	1.0	Negative	4.16	57.8	Positive	3314	36	51
V-103	40	Male	0.04	1.0	Negative	4.17	107.0	Positive	2334	33	47
V-104	59	Male	0.04	1.0	Negative	4.10	104.9	Positive	2182	30	31
V-105	30	Female	0.04	1.0	Negative	4.10	105.2	Positive	2526	32	32
V-106	27	Female	0.04	1.0	Negative	4.00	102.2	Positive	1041	34	39
V-107	38	Female	0.04	1.0	Negative	4.00	101.5	Positive	1940	33	33
V-108	46	Male	0.04	1.0	Negative	4.00	101.0	Positive	832	34	34
V-109	23	Female	0.04	1.0	Negative	4.00	103.5	Positive	2038	36	32
Mean (SD)	44.3 (13.3)	Male 32 (33%)	Negative 97 (99%)						3518.5 (3145.1)	32.3 (2.8)	34.0 (4.8)
Median (IQR)	43 (33 - 55)	Female 66 (67%)	Positive 1 (1%)						2525 (1667.3 - 4313.0)	33 (31 - 34)	33 (31 - 35)

Ab= antibody, OD= optical density, ELISA= enzyme-linked immunosorbent assay, S/N= signal/noise, ID50= 50% inhibitory dilution, SD=standard deviation, IQR= interquartile range, 1M = 1 month.

Supplementary Table S2: Summary of 16 subjects receiving prime vaccination with Vaxzevria® and boost vaccination with Comirnaty® (BioNTech-Pfizer, Mainz, Germany/New York, United States) or Spikevax® (Moderna, Cambridge, United States)

Patient ID	Age (years)	Sex	SARS-COV-2 WANTAI ELISA Baseline			SARS-COV-2 WANTAI ELISA 1M post 2nd vaccination			1M post 1st vaccination ID ₅₀	1M post 2nd vaccination ID ₅₀	Time between 1. and 2. vaccination (days)	Time between 2. vaccination and blood sample (days)	Booster vaccine
			OD _{450nm-620nm}	Ratio (S/N)	Ab	OD _{450nm-620nm}	Ratio	Ab					
V-110	29	Female	0.04	1.0	Negative	3.4	87.9	Positive	153	3589	73	33	BNT162b2/Comirnaty®
V-111	54	Female	0.04	1.0	Negative	3.6	91.1	Positive	134	6102	93	33	Moderna mRNA-1273/Spikevax®
V-112	27	Male	0.04	1.0	Negative	0.4	10.9	Positive	152	1811	68	50	BNT162b2/Comirnaty®
V-115	27	Female	0.04	1.0	Negative	2.5	64.8	Positive	133	4744	89	34	BNT162b2/Comirnaty®
V-116	28	Female	0.12	2.7	Positive	3.8	98.5	Positive	862	10466	80	32	BNT162b2/Comirnaty®
V-117	40	Male	0.04	1.0	Negative	3.4	86.2	Positive	235	3228	83	28	BNT162b2/Comirnaty®
V-118	28	Male	0.04	1.0	Negative	3.8	98.7	Positive	609	8498	48	37	BNT162b2/Comirnaty®
V-119	30	Male	0.04	1.0	Negative	1.6	40.1	Positive	311	3409	71	45	BNT162b2/Comirnaty®
V-120	59	Male	0.04	1.0	Negative	3.7	94.9	Positive	127	5211	78	34	BNT162b2/Comirnaty®
V-123	31	Female	0.04	1.0	Negative	1.6	40.7	Positive	67	7297	89	31	BNT162b2/Comirnaty®
V-124	27	Male	0.05	1.1	Negative	1.4	36.8	Positive	21	4651	76	54	BNT162b2/Comirnaty®
V-126	35	Male	0.04	1.0	Negative	1.4	36.7	Positive	67	730	68	40	BNT162b2/Comirnaty®
V-127	35	Male	0.04	1.0	Negative	3.3	85.5	Positive	54	3192	93	28	BNT162b2/Comirnaty®
V-128	44	Female	0.04	1.0	Negative	2.6	68.1	Positive	132	5895	81	33	BNT162b2/Comirnaty®
V-129	35	Female	0.05	1.1	Negative	4.1	106.4	Positive	375	12257	77	33	BNT162b2/Comirnaty®
V-130	46	Female	0.04	1.0	Negative	1.4	36.2	Positive	169	8141	93	22	BNT162b2/Comirnaty®
Mean (SD)	36 (10.06)	Male 8 (50%)			Negative 15 (94%)				225.1 (224.0)	5576.3 (3121.8)	78.75 (11.9)	36.69 (9.3)	
Median (IQR)	33 (28 - 41)	Female 8 (50%)			Positive 1 (6%)				143 (112 - 254)	4977.5 (3363.8 - 7508.0)	79 (73 - 89)	34 (32 - 41)	

Ab= antibody, OD= optical density, ELISA= enzyme-linked immunosorbent assay, S/N= signal/noise, ID50= 50% inhibitory dilution, SD=standard deviation, IQR= interquartile range, 1M = 1 month.

Supplementary Table S3: Summary of 38 subjects included with mild COVID-19

Patient ID	Age (years)	Sex	SARS-COV-2 WANTAI ELISA Baseline			Baseline timepoint (days post symptom onset)	ID ₅₀ at baseline timepoint
			OD _{450nm-620nm}	Ratio (S/N)	Ab		
M-01	25	Female	2,84	15,0	Positive	23	395
M-03	29	Female	1,51	8,0	Positive	30	252
M-04	56	Male	3,09	16,3	Positive	28	12013
M-10	26	Female	3,13	16,4	Positive	29	1045
M-11	20	Male	3,05	16,0	Positive	42	166
M-12	29	Male	3,00	15,8	Positive	33	699
M-13	35	Male	2,92	15,4	Positive	42	366
M-16	49	Female	3,20	16,6	Positive	37	2435
M-17	42	Male	3,06	16,1	Positive	24	937
M-19	64	Female	0,76	4,0	Positive	26	309
M-30	44	Female	2,89	15,2	Positive	27	10634
M-32	56	Female	0,52	2,7	Positive	28	112
M-34	27	Female	3,04	16,0	Positive	25	310
M-38	33	Female	1,45	7,6	Positive	29	406
M-47	34	Male	0,69	3,7	Positive	42	158
M-57	34	Female	3,10	16,3	Positive	42	797
M-65	42	Male	3,92	100,4	Positive	35	1001
M-66	53	Female	4,13	105,9	Positive	36	951
M-67	23	Male	3,88	99,4	Positive	40	118
M-68	24	Male	3,65	93,6	Positive	42	583
M-69	48	Female	1,04	26,8	Positive	33	98
M-73	33	Female	3,36	86,1	Positive	22	705
M-77	45	Male	4,05	103,9	Positive	33	6254
M-78	30	Female	3,88	99,6	Positive	28	269
M-79	44	Male	2,84	72,7	Positive	29	203
M-80	49	Female	3,25	83,4	Positive	21	276
M-88	25	Female	3,40	48,5	Positive	31	709
M-90	34	Female	1,68	37,6	Positive	36	1679
M-91	41	Male	1,41	20,2	Positive	24	394
M-92	19	Female	0,38	5,4	Positive	29	37
M-93	46	Male	1,59	22,7	Positive	21	130
M-94	48	Female	2,97	42,4	Positive	34	313
M-95	35	Female	3,03	43,2	Positive	36	357
M-96	24	Female	3,85	55,0	Positive	31	418
M-97	35	Female	3,05	43,5	Positive	28	376
M-98	35	Female	4,07	58,1	Positive	30	777
M-100	57	Female	3,81	54,4	Positive	31	509
M-102	61	Female	3,64	52,0	Positive	21	737
Mean (SD)			38.5 (11.9)	Female 26 (67%)		31.1 (6.3)	1229.4 (2594.3)
Median (IQR)			30 (28 - 36)	Male 13 (33%)		30 (28 - 36)	395 (261 - 787)

Ab= antibody, OD= optical density, ELISA= enzyme-linked immunosorbent assay, S/N= signal/noise, ID50= 50% inhibitory dilution, SD=standard deviation, IQR= interquartile range.