

Supplemental Table 1

	N	Negative		<1000 BAU/mL		1000-1500 BAU/mL		1500-2000 BAU/mL		>2000 BAU/mL		p*
		n	%	n	%	n	%	n	%	n	%	
At least one												0.715
No	1458	0	0.0	45	3.1	134	9.2	296	20.3	983	67.4	
Yes	428	4	0.9	22	5.1	39	9.1	73	17.1	290	67.8	
Immunosuppression												<0.001
No	1859	0	0.0	63	3.4	172	9.3	361	19.4	1263	67.9	
Yes	27	4	14.8	4	14.8	1	3.7	8	29.6	10	37.0	
Autoimmune diseases												0.694
No	1819	2	0.1	64	3.5	168	9.2	356	19.6	1229	67.6	
Yes	68	2	2.9	3	4.4	5	7.4	13	19.1	45	66.2	
Cardiovascular diseases												0.157
No	1683	4	0.2	53	3.1	152	9.0	331	19.7	1143	67.9	
Yes	204	0	0.0	14	6.9	21	10.3	38	18.6	204	100.0	
Hypertension												0.470
No	1733	4	0.2	56	3.2	160	9.2	340	19.6	1173	67.7	
Yes	155	0	0.0	11	7.1	13	8.4	29	18.7	102	65.8	
Arrhythmias												0.585
No	1864	4	0.2	67	3.6	169	9.1	363	19.5	1261	67.7	
Yes	23	0	0.0	0	0.0	3	13.0	6	26.1	14	60.9	
Hypercholesterolemia												0.891
No	1857	4	0.2	65	3.5	168	9.0	367	19.8	1253	67.5	
Yes	30	0	0.0	2	6.7	5	16.7	2	6.7	21	70.0	
Respiratory diseases												0.296
No	1828	4	0.2	67	3.7	167	9.1	359	19.6	1231	67.3	
Yes	59	0	0.0	0	0.0	5	8.5	10	16.9	44	74.6	
Allergies												0.965
No	1858	4	0.2	67	3.6	169	9.1	363	19.5	1255	67.5	

	Yes	30	0	0.0	0	0.0	4	13.3	6	20.0	20	66.7	
Multiple sclerosis													0.415
	No	1882	4	0.2	67	3.6	172	9.1	367	19.5	1272	67.6	
	Yes	6	0	0.0	0	0.0	1	16.7	2	33.3	3	50.0	
Endocrine diseases													0.155
	No	1784	4	0.2	64	3.6	166	9.3	352	19.7	1198	67.2	
	Yes	103	0	0.0	3	2.9	7	6.8	17	16.5	76	73.8	
Diabetes													0.324
	No	1858	4	0.2	66	3.6	168	9.0	363	19.5	1257	67.7	
	Yes	30	0	0.0	1	3.3	5	16.7	6	20.0	18	60.0	
HIV													0.056
	No	1882	4	0.2	66	3.5	172	9.1	367	19.5	1273	67.6	
	Yes	6	0	0.0	1	16.7	1	16.7	2	33.3	2	33.3	
Hepatitis B													0.444
	No	1884	4	0.2	67	3.6	172	9.1	368	19.5	1273	67.6	
	Yes	6	0	0.0	0	0.0	1	16.7	1	16.7	2	33.3	
Medications													
Estroprogestinic pill													0.710
	No	1746	4	0.2	64	3.7	159	9.1	337	19.3	1186	67.8	
	Yes	55	0	0.0	1	1.8	4	7.3	9	16.4	41	74.5	
ACEi													0.604
	No	1766	4	0.2	59	3.3	163	9.2	349	19.8	1191	67.4	
	Yes	117	0	0.0	8	6.8	10	8.5	19	16.2	80	68.4	

*Mann whitney test

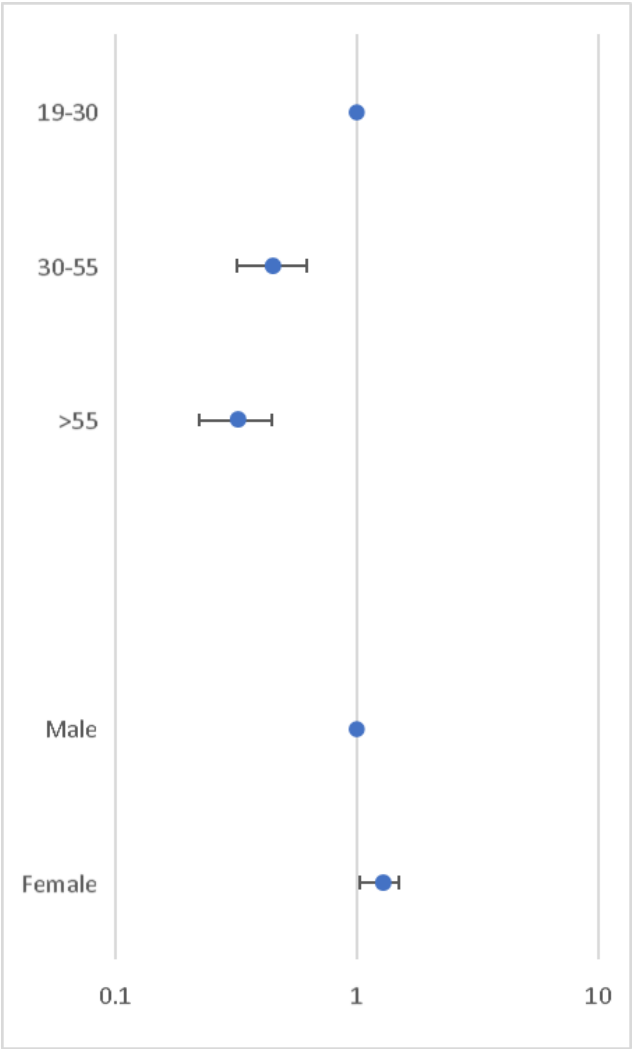
Prevalence of subjects with comorbidities and medications according to classes of anti-S response.

Supplemental Table 2. Characteristics of subjects with breakthrough SARS-CoV-2 infection after vaccination

ID	Gender	Age	Job title	Body mass index (Kg/m ²)	Days from 2 ^o dose to first positive RT-PCR	Nasopharyngeal genomic SARS-CoV-2 RNA load (copies/mL)	Anti-S IgG titers at day-14 after 2 ^o dose (BAU/mL)	Immunosuppressive condition
1	F	49	Other sanitary staff	33	39	>10,000,000	1648	None
2	F	47	Administrative staff	n.a.	47	239,400	n.i.	None
3	F	45	Administrative staff	34	51	>10,000,000	10000	None
4	F	62	Medical staff	21	54	5,420,000	1134	None
5	F	39	Medical staff	n.a.	58	8,040,000	n.i.	None
6	F	44	Nurse staff	n.a.	59	1,195	n.i.	None
7	M	55	Other sanitary staff	27	62	196,933	1394	None
8	M	50	Non-sanitary staff	n.a.	66	1,480	n.i.	None
9	F	28	Nurse staff	20	74	1,838,200	1815	None
10	M	28	Medical staff	n.a.	75	n.a.	n.i.	None
11	M	44	Medical staff	25	76	11,293	4040	None
12	F	57	Administrative staff	n.a.	88	1,937,600	5700	None
13	M	59	Administrative staff	29	90	>10,000,000	20	Solid organ transplant (past)

BAU, binding arbitrary units; n.a., not available; n.i. not included in the study.

Supplemental Figure



Multivariable logistic regression