

Supplementary Materials

Table S1. Distribution of respondents according to comorbidities and specific conditions.

Comorbidities and specific conditions	Distribution of respondents according to comorbidities and specific conditions		Comparison of the number of respondents with comorbidities and specific conditions who had COVID-19 after vaccination	
	N	%	N	%
Oncological disease	9	5.3	3	33.3
Autoimmune disease	32	18.7	15	46.9
Asthma	12	7.0	8	66.7
Chronic kidney disease (CKD)	3	1.8	0	0.0
Primary arterial hypertension (PAH)	82	48.0	45	54.9
Chemotherapy	3	1.8	0	0.0
Long-term treatment with glucocorticoids	1	0.6	0	0.0
Oncohematological disease	1	0.6	1	100
Type 2 CD	10	5.8	4	40.0
Chronic obstructive pulmonary disease (COPD)	3	1.8	0	0.0
Heart failure	6	3.5	3	50.0
Pregnancy	4	2.3	2	50.0
Biological therapy	3	1.8	2	66.7
Posttransplant immunosuppression	2	1.2	0	0.0
Total	171	100	83	48.5

Table S2. Study participants with comorbidities and specific conditions who developed COVID-19.

Number of comorbidities and specific conditions	Number of study participants	Detected SARS-CoV-2	Not-detected SARS-CoV-2
0	400 (74.9%)	206 (74.4%)	194 (75.5%)
1	110 (20.6%)	62 (22.4%)	48 (18.7%)
2	16 (3.0%)	5 (1.8%)	11 (4.2%)
3	7 (1.3%)	3 (1.0%)	4 (1.6%)
5	1 (0.2%)	1 (0.4%)	0 (0%)
Total	534 (100%)	277 (100%)	257 (100%)

Table S3. Participants with comorbidities and specific conditions and level of antibodies after 6 months of receiving the vaccination with full vaccination schedule (two doses).

Ab groups										Total
I	II	III	IV	V	VI	VII	VIII	IX		
1–49	50–99	100–499	500–999	1000– 4999	5000– 9999	10 000– 19 999	20 000– 29 999	30 000– 40 000		
Total number of participants, who came for Ab investigation										
0	2	109	168	218	11	4	1	1	514	

	0.0 %	0.4%	21.2%	32.7%	42.4%	2.1%	0.8%	0.2%	0.2%	100%
Number of participants with comorbidities and specific conditions										
Primary arterial hypertension (PAH)	0	0	28	31	22	0	0	0	0	81
	0.0%	0.0%	34.6%	38.3%	27.2%	0.0%	0.0%	0.0%	0.0%	100%
Heart failure	0	0	4	1	1	0	0	0	0	6
	0.0%	0.0%	66.7%	16.7%	16.7%	0.0%	0.0%	0.0%	0.0%	100%
Oncological disease	0	0	2	4	3	0	0	0	0	9
	0.0%	0.0%	22.2%	44.4%	33.3%	0.0%	0.0%	0.0%	0.0%	100%
Oncohematological disease	0	0	0	0	1	0	0	0	0	1
	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%	0.0%	0.0%	100%
Autoimmune disease	0	0	9	9	12	0	0	0	0	30
	0.0%	0.0%	30.0%	30.0%	40.0%	0.0%	0.0%	0.0%	0.0%	100%
Type 2 CD	0	0	6	2	0	2	0	0	0	10
	0.0 %	0.0%	60.0%	20.0%	0.0%	20.0%	0.0%	0.0%	0.0%	100%
Asthma	0	1	0	1	10	0	0	0	0	12
	0.0%	8.3%	0.0%	8.3%	83.3%	0.0%	0.0%	0.0%	0.0%	100%
Chronic obstructive pulmonary disease (COPD)	0	0	2	1	0	0	0	0	0	3
	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Chronic kidney disease (CKD)	0	0	2	0	1	0	0	0	0	3
	0.0%	0.0%	66.7%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	100%
Pregnancy	0	0	0	0	4	0	0	0	0	4
	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%	0.0%	0.0%	100%
Biological therapy	0	0	0	2	1	0	0	0	0	3
	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	0.0%	100%
Long-term treatment with glucocorticoids	0	0	0	1	0	0	0	0	0	1
	0.0%	0.0%	0.0%	100%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Posttransplant immunosuppression	0	0	1	1	0	0	0	0	0	2
	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	0	1	54	53	55	2	0	0	0	165
	0.0%	0.6%	32.7%	32.1%	33.3%	1.2%	0	0	0	100%

Table S4. Participants with comorbidities and specific conditions, and the level of antibodies after 3 months of receiving the vaccination with booster dose.

	Ab groups									Total
	I	II	III	IV	V	VI	VII	VIII	IX	
	1–49	50–99	100–499	500–999	1000–4999	5000–9999	10 000–19 999	20 000–29 999	30 000–40 000	
Total number of research participants, who came for Ab investigation										
	0	0	2	3	128	132	115	49	45	474
	0.0%	0.0%	0.4%	0.6%	27.0%	27.8%	24.3%	10.3%	9.5%	100%
Number of participants with comorbidities and specific conditions										
Primary arterial hypertension (PAH)	0	0	1	0	23	16	15	10	6	71
	0.0%	0.0%	1.4%	0.0%	32.4%	22.5%	21.1%	14.1%	8.5%	100%
Heart failure	0	0	0	0	2	2	0	1	0	5
	0.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	20.0%	0.0%	100%
Oncological disease	0	0	0	0	3	1	3	0	2	9
	0.0%	0.0%	0.0%	0.0%	33.3%	11.1%	33.3%	0.0%	22.2%	100%
Oncohematological disease	0	0	0	0	0	0	1	0	0	1
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%	100%
Autoimmune disease	0	0	0	0	11	8	6	1	1	27

	0.0%	0.0%	0.0%	0.0%	40.7%	29.6%	22.2%	3.7%	3.7%	100%
Type 2 diabetes	0	0	1	0	5	1	1	1	1	10
	0.0%	0.0%	10.0%	0.0%	50.0%	10.0%	10.0%	10.0%	10.0%	100%
Asthma	0	0	0	0	3	3	3	2	1	12
	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	25.0%	16.7%	8.3%	100%
Chronic obstructive pulmonary disease (COPD)	0	0	0	0	1	1	1	0	0	3
	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%	33.3%	0.0%	0.0%	100%
Chronic kidney disease (CKD)	0	0	0	0	1	0	1	0	1	3
	0.0%	0.0%	0.0%	0.0%	33.3%	0.0%	33.3%	0.0%	33.3%	100%
Pregnancy	0	0	0	0	1	1	2	0	0	4
	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%	50.0%	0.0%	0.0%	100%
Biological therapy	0	0	0	0	1	1	0	0	0	2
	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%	100%
Long-term treatment with glucocorticoids	0	0	0	0	1	0	0	0	0	1
	0.0%	0.0%	0.0%	0.0%	100%	0.0%	0.0%	0.0%	0.0%	100%
Posttransplant immunosuppression	0	0	0	0	2	0	0	0	0	2
	0.0%	0.0	0.0%	0.0%	100%	0.0%	0.0%	0.0%	0.0%	100%
Total	0	0	2	0	54	34	33	15	12	150
	0.0%	0.0%	1.3%	0.0%	36.0%	22.7%	22.0%	10.0%	8.0%	100%