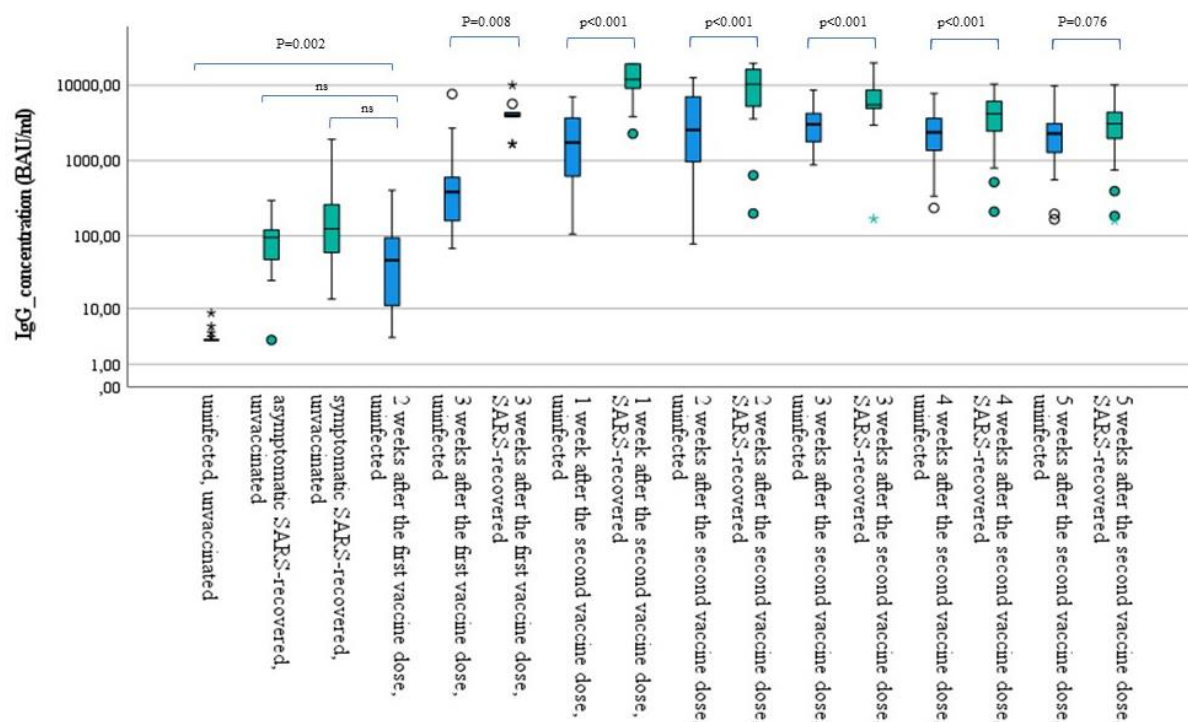


Table S1. Detailed characteristics of the sex and age of the study participants, taking into account the division into subgroups

SARS-CoV-2 and vaccination status	N	Female					Male				
		Age category (years)									
		<=35	36-45	46-55	56-65	65+	<=35	36-45	46-55	56-65	65+
uninfected, unvaccinated	24	4	2	3	5	0	2	4	2	1	1
asymptomatic SARS-recovered, unvaccinated	15	2	0	2	1	1	2	1	4	2	0
symptomatic SARS-recovered, unvaccinated	82	11	14	12	15	6	2	6	4	5	7
2 weeks after the first vaccine dose, uninfected	8	2	1	1	0	1	0	1	0	1	1
3 week safter the first vaccine dose,uninfected	11	4	1	0	2	1	0	1	0	1	1
3 weeks after the first vaccine dose, SARS-recovered	9	1	1	3	3	0	0	0	0	0	1
1 week after the second vaccine dose, uninfected	17	4	1	4	2	2	1	2	0	1	0
1 week after the second vaccine dose, SARS-recovered	10	1	2	2	3	0	0	0	0	0	2
2 weeks after the second vaccine dose, uninfected	39	7	3	6	7	7	1	1	1	3	3
2 weeks after the second vaccine dose, SARS-recovered	22	3	4	4	3	4	1	0	0	0	3
3 weeks after the second vaccine dose, uninfected	24	5	4	4	1	2	1	2	2	2	1
3 weeks after the second vaccine dose, SARS-recovered	36	3	14	7	7	1	2	1	1	0	0
4 weeks after the second vaccine dose, uninfected	55	7	12	16	9	2	1	3	1	2	2
4 weeks after the second vaccine dose, SARS-recovered	31	6	10	3	5	1	2	3	1	0	0
5 weeks after the second vaccine dose, uninfected	68	9	18	10	17	0	1	4	5	3	1
5 weeks after the second vaccine dose, SARS-recovered	26	1	5	7	6	2	1	0	1	3	0
Total	477	70	92	84	86	30	17	29	22	24	23

Figure S1. Analysis of the mean concentrations of G class antibodies against the S1 subunit of SARS-CoV-2 in the SARS-recovered and vaccinated subgroups



Comparisons of antibody levels between the analysed patients subgroups. Blue colour indicates the concentration of anti-SARS-CoV-2 IgG antibodies in seronegative individuals before vaccination. Individuals with confirmed SARS-CoV-2 infection prior to receiving the mRNA vaccine dose, as well as seropositive unvaccinated individuals, are marked in green.

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
IgG_concentration (BAU/ml)	Based on Mean	22,709	15	461	,000
	Based on Median	15,241	15	461	,000
	Based on Median and with adjusted df	15,241	15	164,019	,000
	Based on trimmed mean	21,057	15	461	,000

ANOVA

IgG_concentration (BAU/ml)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3908014005,181	15	260534267,012	35,305	,000
Within Groups	3402009785,832	461	7379630,772		
Total	7310023791,012	476			

Figure S2. Means Plots for convalescent and vaccinated subgroups.

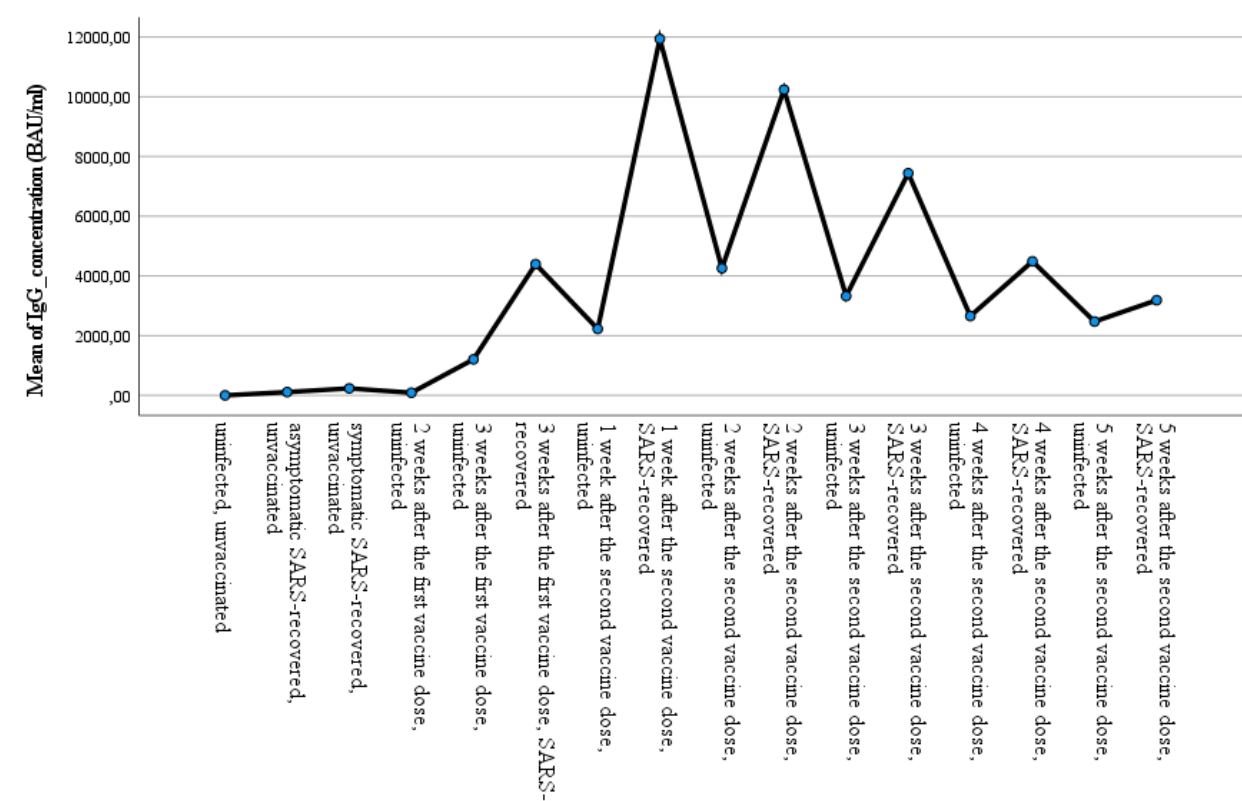


Table S2. One-way ANOVA for comparisons between subgroups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46242,329	1	46242,329	11,214	0,002
Within Groups	123707,811	30	4123,594		
Total	169950,140	31			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2351,804	1	2351,804	0,208	0,653
Within Groups	237991,400	21	11332,924		
Total	240343,204	22			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	503047953,900	1	503047953,900	22,496	0,000
Within Groups	1319339964,442	59	22361694,313		
Total	1822387918,342	60			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	593860671,424	1	593860671,424	37,843	0,000
Within Groups	392319196,395	25	15692767,856		
Total	986179867,819	26			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	255855376,104	2	127927688,052	8,277	0,001
Within Groups	911932802,458	59	15456488,177		
Total	1167788178,562	61			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	67422256,608	1	67422256,608	14,115	0,000
Within Groups	391675211,452	82	4776526,969		
Total	459097468,060	83			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9643545,062	1	9643545,062	3,213	0,076
Within Groups	276125620,968	92	3001365,445		
Total	285769166,030	93			

Table S3. Mean anti-SARS-CoV-2 IgG concentrations by gender and age of the study participants.

	Female					Male				
	<= 35	36 – 45	46 - 55	56 – 64	65+	<= 35	36 - 45	46 - 55	56 - 64	65+
uninfected, unvaccinated	3.20	3.20	5.32	3.27	.	4.29	3.20	3.20	3.20	3.20
asymptomatic SARS-recovered, unvaccinated	57.43	.	59.53	94.95	104.32	45.41	115.10	233.41	58.09	.
symptomatic SARS-recovered, unvaccinated	113.49	121.95	287.37	437.77	200.30	101.42	136.60	88.26	155.35	438.51
2 weeks after the first vaccine dose, uninfected	58.83	131.04	43.79	.	3.55	.	4.32	.	26.08	404.45
3 weeks after the first vaccine dose, uninfected	375.49	945.10	.	5192.90	83.82	.	67.62	.	148.40	170.72
3 weeks after the first vaccine dose, SARS-recovered	5685.00	1666.00	3335.67	6125.00	.	.	.	.	.	3840.00
1 week after the second vaccine dose, uninfected	2117.15	1747.20	1251.96	3652.10	2316.65	4449.00	2112.00	.	2050.90	.
1 week after the second vaccine dose, SARS-recovered	9164.00	14182.00	10740.15	14382.17	.	.	.	.	.	8624.25
2 weeks after the second vaccine dose, uninfected	7460.89	8190.83	6441.80	2970.64	2285.33	2010.00	248.00	2354.00	1528.90	1580.67
2 weeks after the second vaccine dose, SARS-recovered	8126.67	9335.13	12698.25	10439.00	10290.17	3840.00	.	.	.	12160.00
3 weeks after the second vaccine dose, uninfected	4799.08	4772.90	2818.60	2929.80	1367.50	2015.50	3836.80	2521.35	1368.10	2369.00
3 weeks after the second vaccine dose, SARS-recovered	4203.33	10009.61	5087.21	7463.86	5376.00	4022.90	8649.50	5255.50	.	.
4 weeks after the second vaccine dose, uninfected	3223.93	3209.92	2484.94	1779.22	2260.75	2506.00	4119.67	1056.50	3264.50	1193.50
4 weeks after the second vaccine dose, SARS-recovered	5575.08	5218.65	3249.83	2165.00	7926.50	5406.25	3062.67	5076.50	.	.
5 weeks after the second vaccine dose, uninfected	2549.78	2515.36	2332.80	2448.29	.	1094.50	2451.63	3254.10	2275.00	1093.50
5 weeks after the second vaccine dose, SARS-recovered	3333.50	2255.25	2968.57	3915.75	2338.25	4809.50	.	3301.50	3760.50	.