

## Supplementary Materials

**Table S1.** The GMT, and seropositivity of neutralizing antibodies to SARS-CoV-2 prototype and RBD-specific IgG antibodies at day 14 and at month 6 of people aged 18-59 years and over 60 years.

	Group A	Group B	P value	Group C	Group D	P value
Aged 18-59 years						
Wild-type						
Day 14	n=96	n=102		n=51	n=49	
GMT	197.4(167.6-232.4)	33.6(28.3-40.0)	<0.001	53.4(37.9-78.0)	12.8(9.3-17.5)	<0.001
Seropositivity	100.0(96.2-100.0)	100.0(96.4-100.0)	-	98.0(89.6-100)	87.8(75.2-95.4)	0.057
Month 6	n=90	n=95		n=47	n=44	
GMT	30.6(25.1-37.2)	6.9(5.6-8.6)	<0.001	8.5(6.2-11.7)	2.7(2.3-3.1)	<0.001
Seropositivity	96.7(90.6-99.3)	72.6(62.5-81.3)	<0.001	78.7(64.3-89.3)	27.1(15.3-41.8)	<0.001
Anti-RBD IgG						
Day 14	n=96	n=102		n=51	n=49	
GMT	3090.30(2636.3-2622.4)	369.0(304.2-447.5)	<0.001	941.9(663.9-1336.0)	154.1(116.3-204.3)	<0.001
Seropositivity	100.0(96.2-100)	100.0(96.0-100.0)	-	100.0(93.0-100.0)	100.0(92.7-100.0)	-
Month 6	n=90	n=95		n=47	n=44	
GMT	270.0(226.3-322.1)	60.5(48.6-75.4)	<0.001	41.7(29.9-58.1)	14.6(11.5-18.5)	<0.001
Seropositivity	100.0(96.0-100.0)	100.0(96.2-100.0)	-	93.6(82.5-98.7)	85.4(72.2-93.9)	0.196
Aged over 60 years						
Wild-type						
Day 14	n=102	n=100		n=48	n=47	
GMT	301.2(266.4-340.6)	48.2(39.5-58.7)	<0.001	71.0(49.5-101.7)	9.3(6.2-13.9)	<0.001
Seropositivity	100.0(96.3-100.0)	99.0(94.6-100)	0.321	97.9(88.9-100)	68.1(52.9-80.9)	<0.001
Month 6	n=84	n=86		n=45	n=44	
GMT	49.1(38.0-63.6)	9.4(7.7-11.4)	<0.001	11.6(8.4-16.0)	3.3(2.7-4.0)	<0.001
Seropositivity	100.0(95.7-100.0)	93.0(85.4-97.4)	0.014	91.1(78.8-97.5)	40.9(26.3-56.8)	<0.001
Anti-RBD						
Day 14	n=102	n=100		n=48	n=47	
GMT	3180.5(2609.8-3875.2)	428.4(355.5-516.1)	<0.001	1280.3(794.3-1828.5)	146.5(88.3-243.1)	<0.001
Seropositivity	100.0(96.3-100.0)	100.0(96.4-100.0)	-	100.0(92.6-100.0)	89.4(76.9-96.5)	0.02
Month 6	n=84	n=86		n=45	n=44	
GMT	311.8(240.8,403.7)	47.1(37.4,59.3)	0.005	52.3(37.9,72.1)	17.3(12.7-23.8)	0.0016
Seropositivity	100.0(95.7-100.0)	98.8(93.7-100.0)	0.322	95.6(84.9-99.5)	75.0(59.7-86.8)	<0.001

Data are GMT (95% CI), seropositivity (%; 95% CI). Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants

received one-dose of CoronaVac and another dose of CoronaVac.  
GMT=geometric mean titer.

**Table S2.** The GMT and seropositivity of neutralizing antibodies to the Delta and Omicron(B.1.1.529) variants at day 14 and at month 6 of people aged 18-59 years and over 60 years.

	Group A	Group B	P value	Group C	Group D	P value
Aged 18-59 years						
Delta						
Day 14	n=96	n=102		n=51	n=50	
GMT	55.0(44.5-68.0)	8.2(6.6-10.1)	<0.001	10.8(7.1-16.5)	3.6(2.9-4.4)	0.039
Seropositivity	99.0(88.4-100.0)	78.4(54.1-87.7)	<0.001	70.6(32.3-83.7)	44.9(16.3-67.7)	0.009
Month 6	n=90	n=95		n=47	n=44	
GMT	11.7(9.6-14.1)	5.2(4.5-5.9)	<0.001	4.8(3.8-6.1)	3.0(2.6-3.3)	<0.001
Seropositivity	96.7(90.6-99.3)	85.3(76.5-91.7)	0.007	76.6(62.0-87.7)	52.1(37.2-66.7)	0.013
Rate difference	2.3(-1.9-6.5)	-6.9(-17.6-3.8)		-6.0(-23.4-11.4)	-7.2(-27.4-13.0)	
Omicron(B.1.1.529)						
Day 14	n=30	n=30		n=15	n=15	
GMT	21.6(14.3-32.6)	4.7(3.0-7.2)	<0.001	2.0(2.0-2.0)	2.0(2.0-2.0)	-
Seropositivity	90.0(73.5-97.9)	53.3(34.3-71.7)	0.002	0	0	-
Month 6	n=90	n=95		n=47	n=44	
GMT	2.0(2.0-2.0)	2.0(2.0-2.0)	0.558	2.0(2.0-2.0)	2.0(2.0-2.0)	-
Seropositivity	2.2(0.3-7.8)	2.1(0.3-7.4)	0.956	0	0	-
Rate difference	87.8(76.7-99.0)	51.2(33.1-69.3)		0	0	
Aged over 60years						
Delta						
Day 14	n=44	n=40		n=23	n=21	
GMT	43.2(31.5-59.2)	7.9(5.8-10.7)	<0.001	5.1(3.2-8.2)	4.3(2.45-7.4)	0.619
Seropositivity	100.0(92.0-100.0)	80.0(64.4-90.9)	0.002	56.5(34.5-76.8)	33.3(14.6-57.0)	0.123
Month 6	n=84	n=86		n=45	n=44	
GMT	9.2(6.9-12.3)	2.7(2.4-3.0)	<0.001	2.2(2.0-2.5)	2.1(2.0-2.2)	0.196
Seropositivity	64.3(53.1-74.4)	26.6(17.8-37.4)	<0.001	11.1(3.7-24.1)	4.5(0.6-15.5)	0.250
Rate difference	35.7(25.5-46.0)	53.4(37.9-68.9)		45.4(23.2-67.6)	28.8(7.7-49.9)	
Omicron(B.1.1.529)						
Day 14	n=44	n=40		n=23	n=21	
GMT	28.2(19.3-41.3)	4.1(3.0-5.7)	<0.001	4.9(2.8-8.7)	3.9(2.2-6.8)	0.529
Seropositivity	93.2(81.3-98.6)	40.0(24.9-56.7)	<0.001	47.8(26.8-69.4)	33.3(14.6-57.0)	0.329
Month 6	n=84	n=86		n=45	n=44	
GMT	3.0(2.4-3.6)	2.2(2.0-2.4)	0.005	2.0(2.0-2.0)	2.0(2.0-2.0)	-
Seropositivity	17.9(10.4-27.7)	8.1(3.3-16.1)	0.059	0	0	-
Rate difference	75.3(64.2-86.4)	31.9(15.7-48.1)		47.8(27.4-68.2)	33.0(12.9-53.1)	

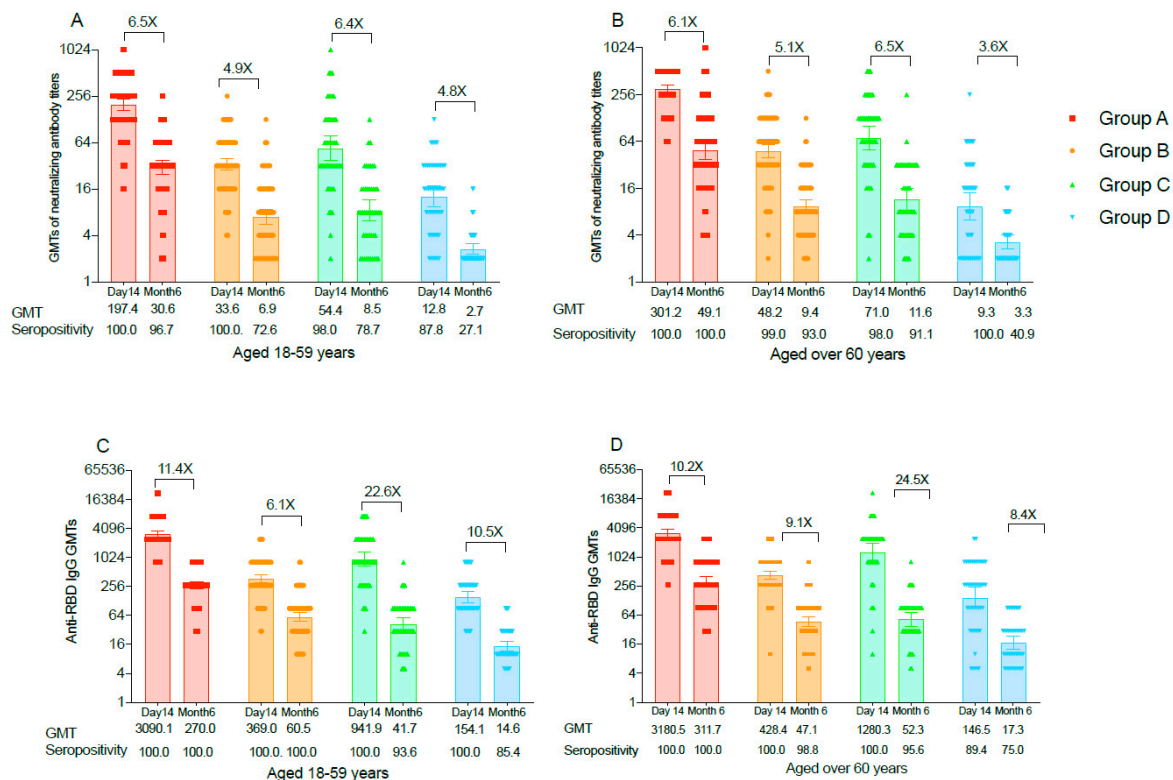
Data are GMT (95% CI), seropositivity(%, 95% CI), rate difference(%, 95%CI, two time points of day 14 and month 6). Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. GMT=geometric mean titer.

**Table S3.** The GMT and seropositivity of pseudovirus neutralizing antibodies to the Omicron(BA.4/5) variant at day 14 and at month 6 of people aged 18-59 years and over 60 years.

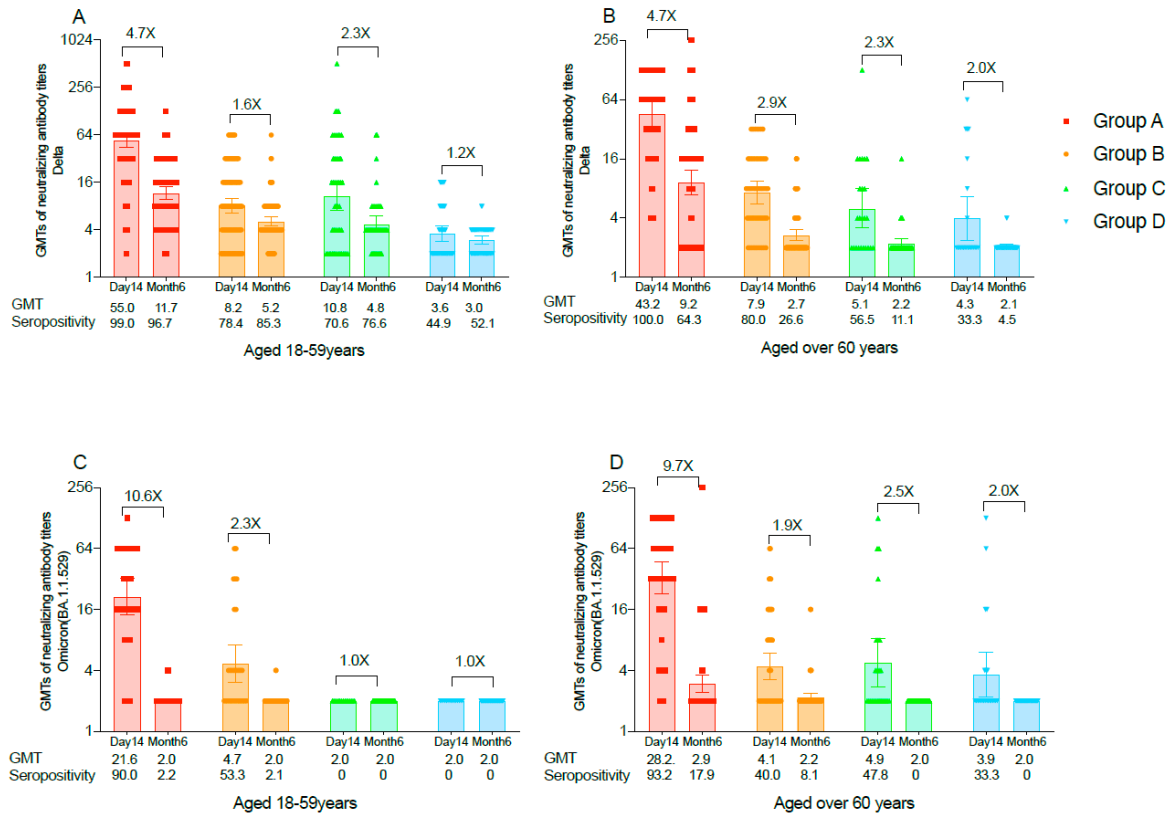
	Group A	Group B	P value	Group C	Group D	P value
Aged over 18-59 years						
Day 14	n=30	n=30		n=15	n=15	
GMT	37.8(30.4-46.9)	19.8(16.4-24.0)	<0.001	22.8(16.9-30.8)	17.8(14.6-21.6)	0.109
Seropositivity	80.0(61.4-92.3)	26.7(12.3-45.9)	<0.001	40.0(16.3-67.7)	20.0(4.3-48.1)	0.157
Month 6	n=30	n=30		n=15	n=15	
GMT	19.6(16.7-23.0)	18.9(16.3-22.0)	0.856	17.8(14.6-21.6)	19.7(13.6-28.6)	0.724

Seropositivity	26.7(12.3-45.9)	26.7(12.3-45.9)	0.937	20.0(4.3-48.1)	20.0(4.3-48.1)	0.739
Rate difference	53.3(32.0-74.6)	0(-22.4-22.4)		20.0(-12.0-52.1)	0(-28.6-28.6)	
Aged over 60 years						
Day 14	n=49	n=50		n=25	n=23	
GMT	65.5(47.8-90.1)	44.0(30.1-64.4)	0.109	42.0(29.2-60.4)	37.8(23.5-60.9)	0.367
Seropositivity	75.5(61.1-86.7)	58.0(43.2-71.8)	0.065	68.0(46.5-85.1)	60.9(38.5-80.3)	0.606
Month 6	n=44	n=40		n=24	n=22	
GMT	33.5(25.1-44.8)	44.4(32.4-60.9)	0.190	25.9(18.7-35.8)	24.4(19.1-31.2)	0.292
Seropositivity	54.4(38.8-69.6)	65.0(48.3-79.4)	0.330	41.7(22.1-63.4)	45.5(24.4-67.8)	0.796
Rate difference	21.1(2.1-40.1)	-7.0(-27.1-13.1)		26.3(-0.6-53.2)	15.4(-13.4-44.2)	

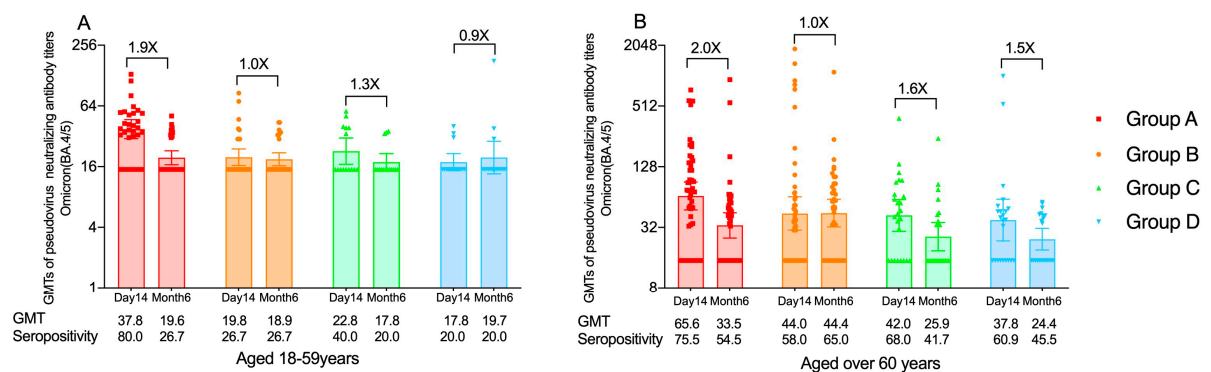
Data are GMT (95% CI), seropositivity(%), 95% CI, rate difference(%), 95% CI, two time points of day 14 and month 6). Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. GMT=geometric mean titer.



**Figure S1.** The neutralising antibodies against SARS-CoV-2 prototype and RBD-specific IgG antibodies at day 14 and at month 6 of people aged 18-59 years and over 60 years . Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the reduction folds of GMTs of antibodies titers at month 6 compared to day 14. GMT=geometric mean titer.

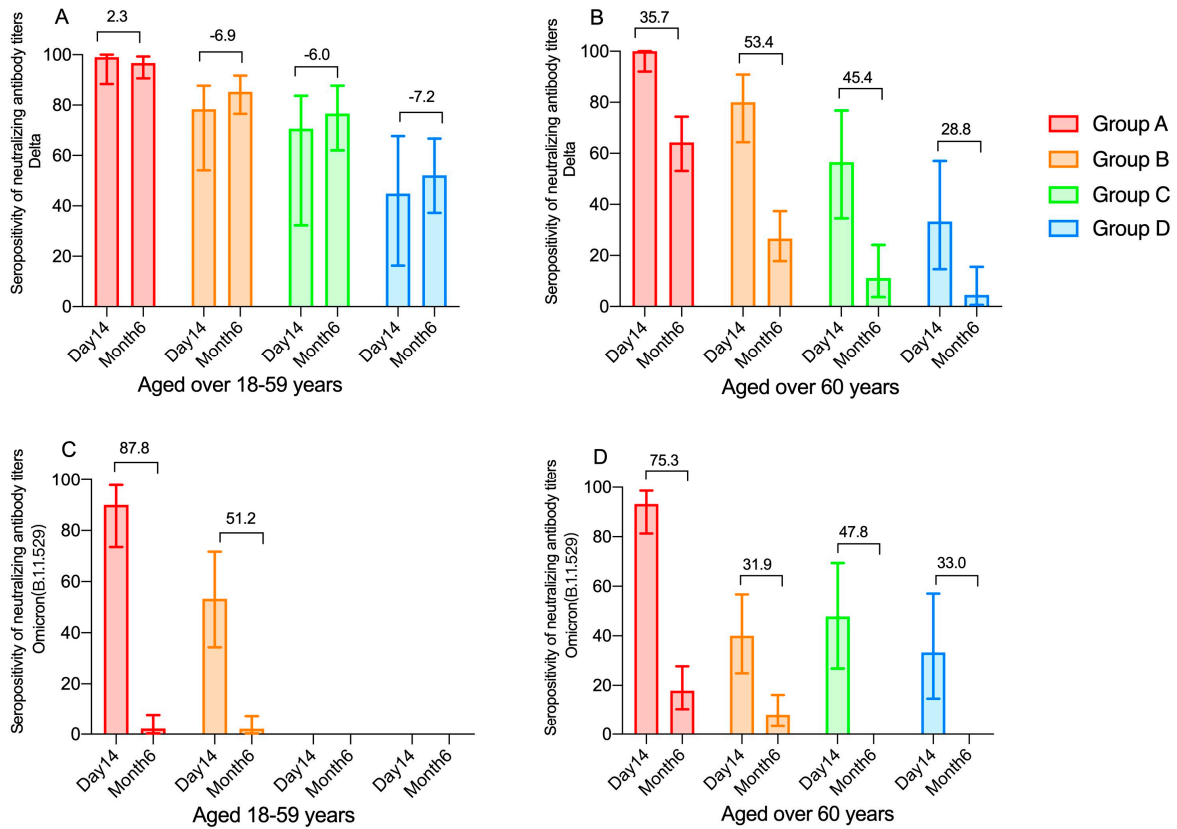


**Figure S2.** The neutralising antibodies against the Delta and Omicron(B.1.1.529) variants at day 14 and at month 6 of people aged 18-59 years and over 60 years . Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the reduction folds of GMTs of antibodies titers at month 6 compared to day 14. GMT=geometric mean titer.

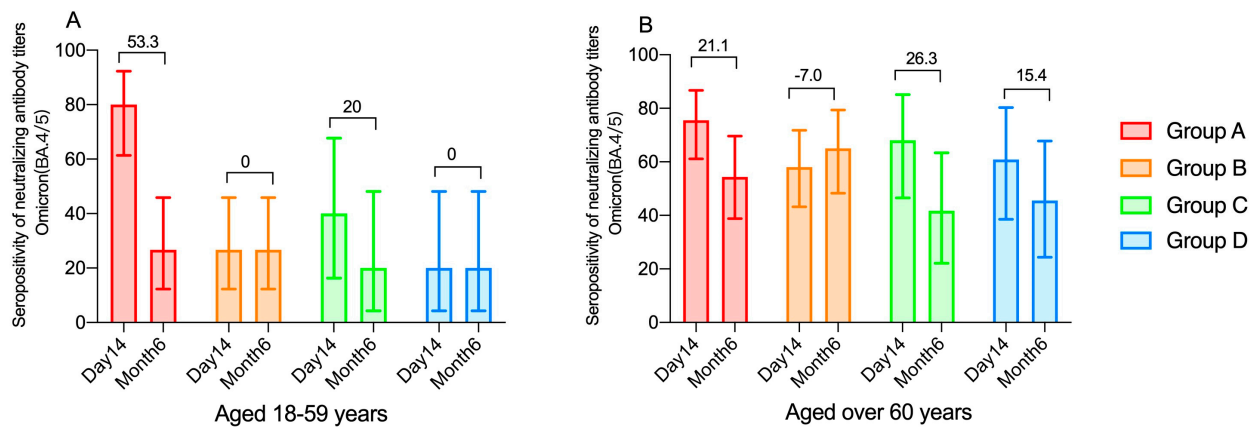


**Figure S3.** The pseudovirus neutralising antibodies against the Omicron(BA.4/5)variant at day 14 and at month 6 of people aged 18-59 years and over 60 years . Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the reduction folds of

GMTs of antibodies titers at month 6 compared to day 14. GMT=geometric mean titer.

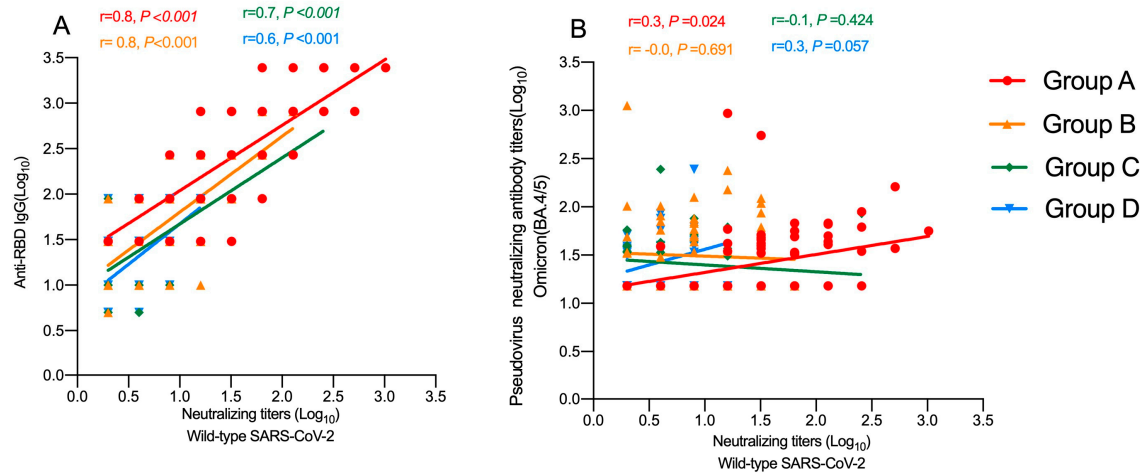


**Figure S4.** The seropositivity of neutralising antibodies against the Delta and Omicron(B.1.1.529) variants at day 14 and at month 6 of people aged 18-59 years and over 60 years . Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the seropositive rate difference of day 14 and month 6.



**Figure S5.** The seropositivity of pseudovirus neutralising antibodies against the Omicron(BA.4/5) variants at day 14 and at month 6 of people aged 18-59 years and over 60 years . Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the seropositive rate difference of day 14 and month 6.

completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Data above the bars show the seropositive rate difference of day 14 and month 6.



**Figure S6.** The correlation analyzed between the neutralising antibodies against SARS-CoV-2 prototype and RBD-specific IgG antibodies and the pseudovirus neutralising antibodies against the Omicron(BA.4/5)variant at month 6 of people aged 18-59 years and over 60 years. Group A=Participants completed the two-dose primary series of CoronaVac and a booster dose of Convidecia, Group B= Participants completed the two-dose primary series of CoronaVac and a booster dose of CoronaVac, Group C=Participants received one-dose of CoronaVac and another dose of Convidecia, Group D=Participants received one-dose of CoronaVac and another dose of CoronaVac. Pearson correlation coefficients are presented for each regimen.