

**Table S2.** Sociodemographic and clinical data of healthy donors who participated in the study as controls.

Participant's code	Age (years)	Gender (M/F)	Comorbidities	Type of COVID-19 vaccine	No. of doses received to complete vaccination schedule	Time between doses (days)	Time from complete vaccination schedule to 1 <sup>st</sup> sample (days)	Time from complete vaccination schedule to 2 <sup>nd</sup> sample (days)	Time from 1 <sup>st</sup> to 2 <sup>nd</sup> sample (days)	SARS-CoV-2 breakthrough infection (Y/N; Severity)
CTV_16	71	M	None	Comirnaty	2	21	23	93	70	N
CTV_24	71	M	Dyslipidemia	Comirnaty	2	21	23	93	70	Y; Mild
CTV_37	50	M	None	Comirnaty	2	21	29	92	63	N
CTV_38	48	M	HBP, DM, obesity	Comirnaty	2	21	24	87	63	N
CTV_39	47	M	Dyslipidemia	Comirnaty	2	21	36	99	63	N
CTV_41	40	M	Obesity	Comirnaty	2	21	24	87	63	N
CTV_50	55	F	None	Spikevax	2	28	23	81	58	Y; Mild
CTV_51	55	F	Asthma	Spikevax	2	28	30	88	58	Y; Mild
CTV_52	45	M	None	Comirnaty	2	21	23	86	63	N
CTV_55	46	M	None	Comirnaty	2	21	32	93	61	N
CTV_59	53	M	Dyslipidemia	Comirnaty	2	21	23	86	63	N
CTV_64	36	M	None	Comirnaty	2	21	37	95	58	Y; Mild
CTV_65	44	M	Dyslipidemia, obesity	Comirnaty	2	21	29	92	63	N
CTV_68	25	F	None	Comirnaty	2	21	22	85	63	N
CTV_71	67	F	Asthma	Comirnaty	2	21	28	86	58	Y; Mild
CTV_72	67	M	HBP	Comirnaty	2	21	28	91	63	Y; Mild
CTV_89	57	F	Obesity	Comirnaty	2	21	29	94	65	Y; Mild
CTV_99	39	M	None	Comirnaty	2	23	49	111	62	Y; Mild

DM, Diabetes Mellitus; F, Female; HBP, High blood pressure; M, male.