

Table 2. Characteristics of ischaemic heart disease cases (n=110,442) and control populations without ischaemic heart disease (n=223,843), stratified by total number of vaccine doses.

	0/1 dose (Unvaccinated/partially vaccinated)		2 doses (Fully vaccinated, not boosted)		3 doses (Boosted)		≥4 doses (Double boosted)	
	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control
Sex, no. (%)								
Female	1173 (35.1)	2556 (39.8)	1479 (37.8)	2826 (43.0)	14,569 (28.8)	34,850 (33.9)	67,850 (26.5)	38,633 (31.3)
Male	2173 (64.9)	3868 (60.2)	2434 (62.2)	3744 (57.0)	36,078 (71.2)	67,850 (66.1)	38,633 (73.5)	74,333 (68.7)
Age, no. (%)								
18–29 years	2 (0.1)	6 (0.1)	4 (0.1)	12 (0.2)	59 (0.1)	167 (0.2)	17 (0.0)	47 (0.0)
30–39 years	19 (0.6)	48 (0.7)	31 (0.8)	79 (1.2)	631 (1.2)	1660 (1.6)	191 (0.4)	507 (0.5)
40–49 years	123 (3.7)	286 (4.5)	196 (5.0)	374 (5.7)	3801 (7.5)	9134 (8.9)	1660 (3.2)	4037 (3.7)
50–59 years	437 (13.1)	873 (13.6)	527 (13.5)	916 (13.9)	10,754 (21.2)	22,909 (22.3)	8166 (15.5)	17,841 (16.5)
60–69 years	848 (25.3)	1642 (25.6)	916 (23.4)	1521 (23.2)	17,134 (33.8)	33,759 (32.9)	18,564 (35.3)	38,094 (35.2)
70–79 years	865 (25.9)	1674 (26.1)	1094 (28.0)	1760 (26.8)	12,017 (23.7)	23,352 (22.7)	15,248 (29.0)	30,668 (28.4)
≥80 years	1052 (31.4)	1895 (29.5)	1145 (29.3)	1908 (29.0)	6251 (12.3)	11,719 (11.4)	8690 (16.5)	16,955 (15.7)
Ethnicity, no. (%)								
Chinese	2250 (67.2)	4532 (70.5)	2535 (64.8)	4583 (69.8)	35,455 (70.0)	75,130 (73.2)	41,756 (79.5)	88,599 (81.9)
Indian	570 (17.0)	925 (14.4)	698 (17.8)	958 (14.6)	6943 (13.7)	11,952 (11.6)	4265 (8.1)	7074 (6.5)
Malay	434 (13.0)	771 (12.0)	659 (16.8)	988 (15.0)	7772 (15.3)	14,732 (14.3)	5775 (11.0)	10,982 (10.2)
Others	92 (2.7)	196 (3.1)	21 (0.5)	41 (0.6)	477 (0.9)	886 (0.9)	740 (1.4)	1494 (1.4)
Socioeconomic status by housing type, no. (%)^b								
Public, 1–2 rooms	392 (11.7)	684 (10.6)	567 (14.5)	877 (13.3)	4283 (8.5)	8075 (7.9)	3710 (7.1)	7109 (6.6)
Public, 3 rooms	734 (21.9)	1360 (21.2)	938 (24.0)	1589 (24.2)	9796 (19.3)	19,732 (19.2)	9463 (18.0)	19,461 (18.0)
Public, 4 rooms	993 (29.7)	1862 (29.0)	1270 (32.5)	2104 (32.0)	17,008 (33.6)	34,756 (33.8)	16,239 (30.9)	33,561 (31.0)
Public, 5 rooms	833 (24.9)	1646 (25.6)	918 (23.5)	1576 (24.0)	16,285 (32.2)	33,494 (32.6)	18,630 (35.5)	38,926 (36.0)
Others	114 (3.4)	258 (4.0)	17 (0.4)	37 (0.6)	105 (0.2)	228 (0.2)	250 (0.5)	476 (0.4)
Private housing	280 (8.4)	614 (9.6)	203 (5.2)	387 (5.9)	3170 (6.3)	6415 (6.2)	4244 (8.1)	8616 (8.0)

Table 2. Characteristics of ischaemic heart disease cases (n=110,442) and control populations without ischaemic heart disease (n=223,843), stratified by total number of vaccine doses. (Cont'd)

	0/1 dose (Unvaccinated/partially vaccinated)		2 doses (Fully vaccinated, not boosted)		3 doses (Boosted)		≥4 doses (Double boosted)	
	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control	Ischaemic heart disease ^a	Control
Types of comorbidities no. (%)								
Heart failure	650 (19.4)	155 (2.4)	914 (23.4)	196 (3.0)	4848 (9.6)	942 (0.9)	3629 (6.9)	663 (0.6)
Chronic obstructive pulmonary disease	289 (8.6)	351 (5.5)	477 (12.2)	552 (8.4)	3597 (7.1)	5250 (5.1)	3640 (6.9)	5398 (5.0)
Cerebrovascular disorders	536 (16.0)	871 (13.6)	643 (16.4)	971 (14.8)	5040 (10.0)	8640 (8.4)	4947 (9.4)	8509 (7.9)
Cancer	297 (8.9)	612 (9.5)	504 (12.9)	950 (14.5)	2999 (5.9)	6194 (6.0)	3523 (6.7)	7134 (6.6)
Chronic kidney disease	609 (18.2)	635 (9.9)	987 (25.2)	963 (14.7)	6534 (12.9)	8642 (8.4)	6645 (12.6)	9747 (9.0)
Chronic liver disease	81 (2.4)	98 (1.5)	99 (2.5)	129 (2.0)	750 (1.5)	1162 (1.1)	750 (1.4)	1139 (1.1)
Diabetes	1504 (44.9)	2482 (38.6)	2040 (52.1)	2946 (44.8)	22,285 (44.0)	41,523 (40.4)	22,996 (43.8)	44,042 (40.7)
Hypertension	2433 (72.7)	4113 (64.0)	3180 (81.3)	4876 (74.2)	38,573 (76.2)	71,864 (70.0)	41,288 (78.6)	79,618 (73.6)
Hyperlipidaemia	2003 (59.9)	3243 (50.5)	2701 (69.0)	3961 (60.3)	37,407 (73.9)	69,387 (67.6)	40,139 (76.4)	77,229 (71.4)
No. of comorbidities, no. (%)								
0 comorbidity	349 (10.4)	1369 (21.3)	247 (6.3)	952 (14.5)	4426 (8.7)	14,950 (14.6)	4231 (8.1)	13,667 (12.6)
1 comorbidity	526 (15.7)	1076 (16.7)	383 (9.8)	815 (12.4)	7392 (14.6)	16,950 (16.5)	6964 (13.3)	16,066 (14.9)
2 comorbidities	707 (21.1)	1364 (21.2)	732 (18.7)	1286 (19.6)	13,630 (26.9)	27,969 (27.2)	14,582 (27.8)	30,659 (28.3)
3–4 comorbidities	1296 (38.7)	2162 (33.7)	1705 (43.6)	2797 (42.6)	21,256 (42.0)	39,088 (38.1)	23,279 (44.3)	44,139 (40.8)
≥5 comorbidities	468 (14.0)	453 (7.1)	846 (21.6)	720 (11.0)	3943 (7.8)	3743 (3.6)	3480 (6.6)	3618 (3.3)
COVID-19, no. (%)								
Infected ^c	1062 (31.7)	1567 (24.4)	1990 (50.9)	3155 (48.0)	22,977 (45.4)	43,344 (42.2)	22,773 (43.3)	43,673 (40.4)
Hospitalised ^d	617 (18.4)	788 (12.3)	799 (20.4)	972 (14.8)	2865 (5.7)	3506 (3.4)	2143 (4.1)	2731 (2.5)
Severe disease ^e	242 (7.2)	363 (5.7)	244 (6.2)	282 (4.3)	555 (1.1)	642 (0.6)	318 (0.6)	396 (0.4)
Death	83 (2.5)	139 (2.2)	70 (1.8)	95 (1.4)	71 (0.1)	95 (0.1)	20 (0.0)	35 (0.0)

^a Among cases of ischaemic heart disease (n=110,422), 10,041 (9.09%) had a concurrent diagnosis of heart failure.^b Housing type was used as an indicator of socioeconomic status.^c SARS-CoV-2 infection was defined as positive test result (polymerase chain reaction [PCR] test or rapid antigen testing [RAT]) recorded in the national COVID-19 registry^d COVID-19 hospitalisation was defined as all-cause hospitalisations occurring within 30 days from a positive COVID-19 result (PCR/RAT).^e Severe disease was defined as COVID-19 infection with resulting need for supplemental oxygen, intensive care admission or death.