

**Supplementary information**

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**A multisystem, cardio-renal investigation  
of post-COVID-19 illness**

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## Supplement

2 **Title: Post-COVID-19 illness trajectory: a multisystem investigation.**

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**Table S1. Expanded - Clinical characteristics of the population by control vs. COVID-19 and likelihood of adjudicated myocarditis post-COVID-19.**

		COVID-19		Control	p-value <sup>(a)</sup>	p-value <sup>(b)</sup>	Adjudicated Myocarditis Diagnosis				p-value
		Without Primary Outcome	With Primary Outcome				Not present	Unlikely	Probable	Very likely	
		n = 104	n = 159	n = 29			n = 17	n = 56	n = 65	n = 21	
<i>Baseline Demographics</i>											
Age, years	Mean (SD)	55.6 (12.3)	54.5 (11.9)	57.3 (9.6)	0.608	0.373	56.9 (11.4)	55.1 (13.3)	53.1 (11.4)	54.9 (10.1)	0.525
Sex	Male	65 (62.5%)	90 (56.6%)	18 (62.1%)	0.371	0.685	13 (76.5%)	35 (62.5%)	33 (50.8%)	9 (42.9%)	0.115
	Female	39 (37.5%)	69 (43.4%)	11 (37.9%)			4 (23.5%)	21 (37.5%)	32 (49.2%)	12 (57.1%)	
Race	Arab	0 (0.0%)	4 (2.5%)	0 (0.0%)	0.315	0.788	0 (0.0%)	2 (3.6%)	1 (1.5%)	1 (4.8%)	0.248
	Black	0 (0.0%)	2 (1.3%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	2 (3.1%)	0 (0.0%)	
	East Asian	1 (1.0%)	4 (2.5%)	0 (0.0%)			0 (0.0%)	2 (3.6%)	2 (3.1%)	0 (0.0%)	
	South Asian	3 (2.9%)	8 (5.0%)	2 (6.9%)			0 (0.0%)	0 (0.0%)	6 (9.2%)	2 (9.5%)	
	West Asian	3 (2.9%)	2 (1.3%)	1 (3.4%)			1 (5.9%)	1 (1.8%)	0 (0.0%)	0 (0.0%)	
	Latin American	0 (0.0%)	0 (0.0%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	White	97 (93.3%)	139 (87.4%)	26 (89.7%)			16 (94.1%)	51 (91.1%)	54 (83.1%)	18 (85.7%)	
<b>Most deprived SIMD quintile</b>		40 (39.6%)	61 (40.4%)	5 (17.9%)	1.000	<b>0.032</b>	4 (25.0%)	20 (37.0%)	25 (41.0%)	12 (60.0%)	0.178
Healthcare Worker		18 (17.3%)	36 (22.6%)	5 (17.9%)	0.350	0.804	1 (5.9%)	10 (17.9%)	18 (27.7%)	7 (33.3%)	0.121
<b>BMI, kg/m<sup>2</sup></b>	Mean (SD)	32.0 (6.5)	30.5 (7.1)	30.7 (5.0)	<b>0.020</b>	0.555	30.9 (5.6)	29.6 (5.8)	31.1 (8.7)	30.6 (6.4)	0.829
<i>Presenting Characteristics</i>											
<b>Heart Rate, bpm</b>	Mean (SD)	95.4 (19.7)	94.8 (19.1)	69.0 (15.1)	0.652	<b>&lt;0.001</b>	97.7 (18.8)	94.4 (20.2)	94.7 (16.3)	93.6 (25.0)	0.586
<b>Systolic blood pressure, mmHg</b>	Mean (SD)	132.7 (18.4)	128.5 (19.8)	142.1 (18.6)	0.085	<b>0.003</b>	122.0 (24.5)	134.6 (18.3)	126.3 (19.8)	124.1 (16.6)	0.139
Diastolic blood pressure, mmHg	Mean (SD)	78.8 (14.7)	76.9 (12.5)	82.4 (15.7)	0.257	0.058	74.3 (13.2)	78.6 (11.5)	77.3 (13.4)	73.7 (11.6)	0.458
<b>Oxygen saturation, %</b>	Mean (SD)	94.3 (4.4)	93.3 (6.5)	97.4 (1.8)	0.831	<b>&lt;0.001</b>	91.1 (9.6)	93.7 (4.7)	93.5 (6.2)	93.6 (8.7)	0.758
<b>Respiratory rate, /min</b>	Mean (SD)	22.6 (5.5)	23.5 (12.4)	14.4 (4.0)	0.262	<b>&lt;0.001</b>	22.5 (4.6)	22.9 (11.3)	25.1 (15.7)	21.0 (6.2)	0.312
<b>WHO Clinical severity score (in full)</b>	No evidence of infection	0 (0.0%)	0 (0.0%)	29 (100.0%)	0.672	<b>&lt;0.001</b>	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.100
	No limitation of activities	0 (0.0%)	0 (0.0%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	Limitation of activities	1 (1.0%)	0 (0.0%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	Hospitalized, no oxygen therapy	28 (26.9%)	50 (31.4%)	0 (0.0%)			3 (17.6%)	17 (30.4%)	24 (36.9%)	6 (28.6%)	
	Oxygen by mask or nasal prongs	51 (49.0%)	74 (46.5%)	0 (0.0%)			8 (47.1%)	30 (53.6%)	28 (43.1%)	8 (38.1%)	
	Non-invasive ventilation	15 (14.4%)	20 (12.6%)	0 (0.0%)			4 (23.5%)	7 (12.5%)	8 (12.3%)	1 (4.8%)	
	Mechanical ventilation	5 (4.8%)	5 (3.1%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	3 (4.6%)	2 (9.5%)	
	Ventilation with organ support	4 (3.8%)	10 (6.3%)	0 (0.0%)			2 (11.8%)	2 (3.6%)	2 (3.1%)	4 (19.0%)	
	Death	0 (0.0%)	0 (0.0%)	0 (0.0%)			0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
<i>COVID-19 diagnosis</i>											
<b>PCR test</b>		104 (100.0%)	159 (100.0%)	0 (0.0%)	1.000	<b>&lt;0.001</b>	17 (100.0%)	56 (100.0%)	65 (100.0%)	21 (100.0%)	1.000
Nosocomial		6 (5.8%)	7 (4.4%)	0 (0.0%)	0.772	0.598	0 (0.0%)	4 (7.1%)	3 (4.6%)	0 (0.0%)	0.666
<b>Antibody test</b>		0 (0.0%)	0 (0.0%)	27 (93.1%)	1.000	<b>&lt;0.001</b>	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1.000
<i>Chest x-ray / CT scan</i>											

		COVID-19			p-value <sup>(a)</sup>	p-value <sup>(b)</sup>	Adjudicated Myocarditis Diagnosis				p-value	
		Without Primary Outcome	With Primary Outcome	Control			Not present	Unlikely	Probable	Very likely		
		n = 104	n = 159	n = 29			n = 17	n = 56	n = 65	n = 21		
	<b>Typical of COVID-19</b>	72 (69.9%)	109 (74.7%)	-		12 (75.0%)	40 (78.4%)	41 (68.3%)	16 (84.2%)			
	<b>Atypical of COVID-19</b>	10 (9.7%)	11 (7.5%)	-	0.848	2 (12.5%)	3 (5.9%)	4 (6.7%)	2 (10.5%)			
	<b>Unlikely</b>	3 (2.9%)	4 (2.7%)	-		2 (12.5%)	0 (0.0%)	1 (1.7%)	1 (5.3%)	<b>0.024</b>		
	<b>Normal</b>	18 (17.5%)	22 (15.1%)	-		0 (0.0%)	8 (15.7%)	14 (23.3%)	0 (0.0%)			
<i>COVID-19 treatment</i>												
	Oxygen	75 (72.1%)	109 (68.6%)	-	0.584	-	14 (82.4%)	39 (69.6%)	41 (63.1%)	15 (71.4%)	0.509	
	Non-invasive respiratory support	18 (17.3%)	31 (19.5%)	-	0.747	-	5 (29.4%)	9 (16.1%)	11 (16.9%)	6 (28.6%)	0.386	
	<b>Invasive ventilation</b>	9 (8.7%)	14 (8.8%)	-	1.000	-	2 (11.8%)	1 (1.8%)	5 (7.7%)	6 (28.6%)	<b>0.004</b>	
	IV inotrope	4 (3.8%)	7 (4.4%)	-	1.000	-	1 (5.9%)	2 (3.6%)	1 (1.5%)	3 (14.3%)	0.092	
	Antiviral	24 (23.1%)	42 (26.4%)	-	0.564	-	9 (52.9%)	15 (26.8%)	14 (21.5%)	4 (19.0%)	0.075	
	Steroid	45 (43.3%)	89 (56.0%)	-	0.058	-	12 (70.6%)	31 (55.4%)	36 (55.4%)	10 (47.6%)	0.557	
	Intensive Care Unit	9 (8.7%)	24 (15.1%)	-	0.133	-	5 (29.4%)	5 (8.9%)	8 (12.3%)	6 (28.6%)	0.048	
<i>Cardiovascular History</i>												
	Hypertension	30 (28.8%)	56 (35.2%)	10 (34.5%)	0.347	1.000	8 (47.1%)	21 (37.5%)	18 (27.7%)	9 (42.9%)	0.326	
	Renal impairment	11 (10.6%)	7 (4.4%)	0 (0.0%)	0.078	0.598	1 (5.9%)	1 (1.8%)	4 (6.2%)	1 (4.8%)	0.562	
	Diabetes mellitus	25 (24.0%)	35 (22.0%)	2 (6.9%)	0.764	0.075	2 (11.8%)	17 (30.4%)	13 (20.0%)	3 (14.3%)	0.294	
	Hypercholesterolaemia	47 (45.2%)	76 (47.8%)	13 (44.8%)	0.706	0.841	10 (58.8%)	30 (53.6%)	28 (43.1%)	8 (38.1%)	0.399	
	Smoking	Never	62 (59.6%)	106 (66.7%)	18 (62.1%)		12 (70.6%)	38 (67.9%)	44 (67.7%)	12 (57.1%)		
		Former	36 (34.6%)	44 (27.7%)	9 (31.0%)	0.458	0.737	4 (23.5%)	17 (30.4%)	17 (26.2%)	6 (28.6%)	0.530
		Current	6 (5.8%)	9 (5.7%)	2 (6.9%)			1 (5.9%)	1 (1.8%)	4 (6.2%)	3 (14.3%)	
	Percutaneous coronary intervention	1 (1.0%)	10 (6.3%)	0 (0.0%)	0.054	0.365	3 (17.6%)	2 (3.6%)	4 (6.2%)	1 (4.8%)	0.215	
	Coronary artery bypass graft surgery	2 (1.9%)	2 (1.3%)	0 (0.0%)	0.649	1.000	0 (0.0%)	1 (1.8%)	1 (1.5%)	0 (0.0%)	1.000	
	CCS Angina Class	No Angina	96 (92.3%)	154 (96.9%)	29 (100.0%)		16 (94.1%)	55 (98.2%)	64 (98.5%)	19 (90.5%)		
		Angina Class I-IV	8 (7.7%)	5 (3.1%)	0 (0.0%)	0.144	1.000	1 (5.9%)	1 (1.8%)	1 (1.5%)	2 (9.5%)	0.180
	Heart failure	1 (1.0%)	6 (3.8%)	0 (0.0%)	0.250	0.593	0 (0.0%)	2 (3.6%)	3 (4.6%)	1 (4.8%)	1.000	
	Myocardial infarction	7 (6.7%)	17 (10.7%)	0 (0.0%)	0.382	0.079	3 (17.6%)	6 (10.7%)	6 (9.2%)	2 (9.5%)	0.758	
	Stroke or transient ischemic attack	2 (1.9%)	5 (3.1%)	3 (10.3%)	0.707	0.108	1 (5.9%)	1 (1.8%)	3 (4.6%)	0 (0.0%)	0.625	
	Peripheral vascular disease	2 (1.9%)	1 (0.6%)	0 (0.0%)	0.564	1.000	1 (5.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.107	
	Cardiovascular disease and/or treatment	52 (50.0%)	74 (46.5%)	14 (48.3%)	0.615	1.000	8 (47.1%)	29 (51.8%)	26 (40.0%)	11 (52.4%)	0.560	
<i>Risk Scores</i>												
	<b>ISARIC-4c Mortality Score</b>	Mean (SD)	6.76 (3.53)	6.36 (3.33)	4.38 (3.30)	0.368	<b>0.003</b>	7.00 (3.26)	6.71 (3.42)	5.88 (3.06)	6.38 (3.94)	0.426
	<b>ISARIC-4c Mortality Risk, in %</b>	Mean (SD)	13.5 (11.5)	12.1 (10.6)	6.9 (8.4)	0.368	<b>0.003</b>	14.0 (10.7)	13.2 (11.4)	10.4 (9.4)	12.8 (11.7)	0.426
	QRisk3 10y CVD Risk, in %	Mean (SD)	16.0 (14.0)	13.5 (11.1)	13.1 (10.0)	0.401	0.984	12.5 (7.9)	15.5 (12.8)	12.0 (9.7)	14.3 (13.1)	0.724



		COVID-19			Control	p-value <sup>(a)</sup>	p-value <sup>(b)</sup>	Adjudicated Myocarditis Diagnosis				p-value
		Without Primary Outcome	With Primary Outcome					Not present	Unlikely	Probable	Very likely	
		n = 104	n = 159	n = 29	n = 17	n = 56	n = 65	n = 21				
Charlson Comorbidity Index	Mean (SD)	2.10 (2.21)	1.89 (1.82)	1.45 (1.21)	0.747	0.412	1.71 (1.93)	2.07 (2.01)	1.86 (1.79)	1.62 (1.24)	0.793	
<i>Pre-existing maintenance medication</i>												
Aspirin		8 (7.7%)	12 (7.5%)	0 (0.0%)	1.000	0.218	3 (17.6%)	4 (7.1%)	4 (6.2%)	1 (4.8%)	0.419	
Statin		25 (24.0%)	46 (28.9%)	10 (34.5%)	0.398	0.659	7 (41.2%)	20 (35.7%)	13 (20.0%)	6 (28.6%)	0.159	
Beta-blocker		15 (14.4%)	20 (12.6%)	2 (6.9%)	0.712	0.537	3 (17.6%)	7 (12.5%)	5 (7.7%)	5 (23.8%)	0.208	
ACE inhibitor		20 (19.2%)	35 (22.0%)	4 (13.8%)	0.644	0.456	6 (35.3%)	11 (19.6%)	13 (20.0%)	5 (23.8%)	0.542	
ARB		9 (8.7%)	10 (6.3%)	2 (6.9%)	0.476	1.000	0 (0.0%)	6 (10.7%)	3 (4.6%)	1 (4.8%)	0.447	
Oral anticoagulation		6 (5.8%)	8 (5.0%)	1 (3.4%)	0.786	1.000	1 (5.9%)	3 (5.4%)	3 (4.6%)	1 (4.8%)	1.000	
<i>Blood results, index admission</i>												
Haemoglobin, g/l	Mean (SD)	141 (17)	141 (16)	143 (12)	0.970	0.655	142 (15)	140 (17)	140 (15)	143 (16)	0.624	
<b>Platelet count, 10<sup>9</sup>/l</b>	Mean (SD)	238 (84)	237 (94)	259 (58)	0.435	<b>0.006</b>	264 (137)	217 (75)	244 (93)	248 (95)	0.344	
White cell count, 10 <sup>9</sup> /l	Mean (SD)	7.56 (3.34)	7.29 (5.52)	7.51 (3.11)	0.055	0.172	7.32 (4.82)	6.68 (2.65)	7.73 (7.76)	7.50 (2.98)	0.676	
<b>Lymphocyte count, 10<sup>9</sup>/l</b>	Mean (SD)	1.21 (0.67)	1.53 (4.66)	1.88 (0.64)	0.823	<b>&lt;0.001</b>	1.02 (0.48)	1.08 (0.52)	2.11 (7.26)	1.35 (0.65)	0.215	
<b>Peak D-Dimer, ng/ml</b>	Mean (SD)	1511 (4463)	1740 (5493)	311 (303)	0.722	<b>0.026</b>	2022 (4159)	916 (2132)	1754 (6648)	3127 (7431)	0.881	
<b>Peak HbA1c, mmol/mol</b>	Mean (SD)	47.6 (16.9)	48.0 (18.4)	44.2 (22.1)	0.864	<b>0.020</b>	57.3 (32.3)	50.5 (18.1)	44.8 (13.5)	44.9 (19.2)	0.100	
Initial creatinine, mmol/l	Mean (SD)	84.3 (29.6)	81.1 (37.1)	75.9 (24.2)	0.069	0.564	96.9 (55.3)	73.8 (21.9)	78.3 (28.2)	96.6 (62.7)	0.316	
<b>Initial eGFR, ml/min/1.73m<sup>2</sup></b>	Mean (SD)	83.7 (21.8)	88.5 (23.4)	89.5 (19.5)	<b>0.034</b>	0.900	82.5 (27.7)	92.6 (18.7)	89.4 (23.5)	79.8 (28.4)	0.376	
Initial eGFR <60 ml/min/1.73m <sup>2</sup>		16 (15.4%)	19 (11.9%)	1 (3.4%)	0.460	0.322	2 (11.8%)	4 (7.1%)	8 (12.3%)	5 (23.8%)	0.256	
Peak creatinine, µmol/l	Mean (SD)	92 (40)	103 (95)	90 (46)	0.123	0.752	99 (54)	89 (57)	96 (79)	168 (187)	0.506	
Minimum eGFR, ml/min/1.73m <sup>2</sup>	Mean (SD)	79.2 (22.8)	81.6 (27.4)	77.8 (29.0)	0.124	0.799	79.8 (27.1)	84.8 (23.4)	83.5 (26.5)	68.7 (37.0)	0.454	
Minimum eGFR <60 ml/min/1.73m <sup>2</sup>		23 (22.3%)	28 (17.6%)	1 (20.0%)	0.425	1.000	2 (11.8%)	7 (12.5%)	12 (18.5%)	7 (33.3%)	0.200	
<b>Peak ferritin, µg/l</b>	Median (IQR)	348 (107, 919)	360 (180, 864)	118 (69, 166)	0.333	<b>&lt;0.001</b>	454 (184, 835)	359 (212, 1082)	332 (154, 692)	562 (198, 1860)	0.441	
<b>Initial high sensitivity troponin I, ng/l</b>	Median (IQR)	4 (2, 7)	4 (3, 10)	4 (4, 4)	<b>0.003</b>	0.519	5 (4, 8)	4 (3, 8)	4 (3, 7)	16 (4, 51)	0.146	
<b>Initial high sensitivity troponin I, males</b>	<1.2 pg/ml	7 (11.5%)	0 (0.0%)	0 (0.0%)	<b>0.017</b>	0.052	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.745	
	1.2 - 5.0 pg/ml	33 (54.1%)	44 (55.7%)	15 (88.2%)			6 (54.5%)	16 (57.1%)	18 (58.1%)	4 (44.4%)		
	>5 - 34 pg/ml	16 (26.2%)	25 (31.6%)	2 (11.8%)			3 (27.3%)	9 (32.1%)	8 (25.8%)	5 (55.6%)		
	>34 pg/ml	5 (8.2%)	10 (12.7%)	0 (0.0%)			2 (18.2%)	3 (10.7%)	5 (16.1%)	0 (0.0%)		
<b>Initial high sensitivity troponin I, females</b>	<1.2 pg/ml	6 (15.8%)	5 (8.5%)	0 (0.0%)	0.320	0.557	1 (25.0%)	2 (10.0%)	1 (3.8%)	1 (11.1%)	<b>&lt;0.001</b>	
	1.2 - 5.0 pg/ml	23 (60.5%)	37 (62.7%)	7 (77.8%)			1 (25.0%)	14 (70.0%)	21 (80.8%)	1 (11.1%)		
	>5 - 16 pg/ml	7 (18.4%)	8 (13.6%)	2 (22.2%)			2 (50.0%)	3 (15.0%)	3 (11.5%)	0 (0.0%)		
	>16 pg/ml	2 (5.3%)	9 (15.3%)	0 (0.0%)			0 (0.0%)	1 (5.0%)	1 (3.8%)	7 (77.8%)		

		COVID-19			p-value <sup>(a)</sup>	p-value <sup>(b)</sup>	Adjudicated Myocarditis Diagnosis				p-value
		Without Primary Outcome	With Primary Outcome	Control			Not present	Unlikely	Probable	Very likely	
		n = 104	n = 159	n = 29			n = 17	n = 56	n = 65	n = 21	
<b>Initial high sensitivity troponin I</b>	<1.2 pg/ml	13 (13.1%)	5 (3.6%)	0 (0.0%)	<b>0.031</b>	0.061	1 (6.7%)	2 (4.2%)	1 (1.8%)	1 (5.6%)	<b>0.041</b>
	1.2 - 5.0 pg/ml	56 (56.6%)	81 (58.7%)	22 (84.6%)			7 (46.7%)	30 (62.5%)	39 (68.4%)	5 (27.8%)	
	>5 pg/ml - 99 <sup>th</sup> percentile	23 (23.2%)	33 (23.9%)	4 (15.4%)			5 (33.3%)	12 (25.0%)	11 (19.3%)	5 (27.8%)	
	>99 <sup>th</sup> percentile	7 (7.1%)	19 (13.8%)	0 (0.0%)			2 (13.3%)	4 (8.3%)	6 (10.5%)	7 (38.9%)	
<b>Peak high sensitivity troponin I, ng/l</b>	Median (IQR)	4.0 (2.0, 10.5)	4.0 (3.0, 12.8)	4.0 (4.0, 4.0)	<b>0.009</b>	0.358	6.0 (4.0, 10.0)	4.0 (3.0, 10.0)	4.0 (3.0, 9.0)	30.0 (3.5, 83.8)	0.158
<b>Peak high sensitivity troponin I, males</b>	<1.2 pg/ml	6 (9.8%)	0 (0.0%)	0 (0.0%)	<b>0.020</b>	<b>0.044</b>	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.906
	1.2 - 5.0 pg/ml	29 (47.5%)	43 (54.4%)	14 (87.5%)			6 (54.5%)	15 (53.6%)	18 (58.1%)	4 (44.4%)	
	>5 - 34 pg/ml	19 (31.1%)	21 (26.6%)	2 (12.5%)			3 (27.3%)	9 (32.1%)	6 (19.4%)	3 (33.3%)	
	>34 pg/ml	7 (11.5%)	15 (19.0%)	0 (0.0%)			2 (18.2%)	4 (14.3%)	7 (22.6%)	2 (22.2%)	
Peak high sensitivity troponin I, females	<1.2 pg/ml	6 (15.8%)	5 (8.5%)	0 (0.0%)	0.559	0.362	1 (25.0%)	2 (10.0%)	1 (3.8%)	1 (11.1%)	<b>&lt;0.001</b>
	1.2 - 5.0 pg/ml	21 (55.3%)	35 (59.3%)	7 (77.8%)			0 (0.0%)	14 (70.0%)	20 (76.9%)	1 (11.1%)	
	>5 - 16 pg/ml	6 (15.8%)	7 (11.9%)	2 (22.2%)			2 (50.0%)	3 (15.0%)	2 (7.7%)	0 (0.0%)	
	>16 pg/ml	5 (13.2%)	12 (20.3%)	0 (0.0%)			1 (25.0%)	1 (5.0%)	3 (11.5%)	7 (77.8%)	
<b>Peak high sensitivity troponin I</b>	<1.2 pg/ml	12 (12.1%)	5 (3.6%)	0 (0.0%)	<b>0.034</b>	<b>0.021</b>	1 (6.7%)	2 (4.2%)	1 (1.8%)	1 (5.6%)	<b>0.013</b>
	1.2 - 5.0 pg/ml	50 (50.5%)	78 (56.5%)	21 (84.0%)			6 (40.0%)	29 (60.4%)	38 (66.7%)	5 (27.8%)	
	>5 pg/ml - 99 <sup>th</sup> percentile	25 (25.3%)	28 (20.3%)	4 (16.0%)			5 (33.3%)	12 (25.0%)	8 (14.0%)	3 (16.7%)	
	>99 <sup>th</sup> percentile	12 (12.1%)	27 (19.6%)	0 (0.0%)			3 (20.0%)	5 (10.4%)	10 (17.5%)	9 (50.0%)	
<b>Peak fibrinogen, g/l</b>	Mean (SD)	7.13 (2.37)	6.04 (2.54)	3.41 (0.48)	0.376	<b>0.003</b>	6.70 (2.75)	4.69 (2.70)	5.65 (2.22)	7.83 (1.72)	0.240
<b>Peak CRP, mg/l</b>	Median (IQR)	131 (40, 206)	104 (37, 181)	2 (1, 5)	0.385	<b>&lt;0.001</b>	130 (77, 180)	107 (45, 164)	91 (35, 181)	121 (17, 350)	0.584
<b>Peak CRP, mg/l</b>	<5 mg/l	9 (8.7%)	10 (6.3%)	20 (71.4%)	0.529	<b>&lt;0.001</b>	0 (0.0%)	2 (3.6%)	4 (6.2%)	4 (19.0%)	0.274
	≥5, <10 mg/l	2 (1.9%)	6 (3.8%)	4 (14.3%)			0 (0.0%)	3 (5.4%)	3 (4.6%)	0 (0.0%)	
	≥10 mg/l	92 (89.3%)	143 (89.9%)	4 (14.3%)			17 (100.0%)	51 (91.1%)	58 (89.2%)	17 (81.0%)	
Peak sodium, mmol/l	Mean (SD)	140.1 (4.3)	140.3 (4.0)	139.4 (2.5)	0.336	0.157	138.8 (4.2)	139.8 (3.2)	140.8 (3.8)	141.8 (5.6)	0.233
<b>Albumin, g/l</b>	Mean (SD)	34.0 (4.9)	34.2 (5.2)	40.0 (5.3)	0.756	<b>&lt;0.001</b>	32.1 (5.0)	35.0 (4.4)	33.8 (6.0)	34.8 (4.8)	0.273
Initial MCV, fl	Mean (SD)	- (-)	89.6 (6.1)	91.6 (4.1)	-	0.109	89.0 (4.5)	88.4 (7.2)	90.5 (5.7)	90.5 (5.0)	0.551
Initial RDW, %	Mean (SD)	- (-)	13.1 (1.4)	13.1 (0.5)	-	0.164	13.1 (0.8)	13.3 (1.9)	13.1 (1.0)	13.1 (1.2)	0.825
Peak MCV, fl	Mean (SD)	- (-)	92.8 (6.3)	91.9 (4.2)	-	0.221	92.9 (4.8)	90.9 (6.6)	93.6 (5.8)	95.2 (6.7)	0.094
RDW at peak MCV, %	Mean (SD)	- (-)	13.3 (1.3)	13.2 (0.6)	-	0.602	13.3 (0.9)	13.3 (1.5)	13.3 (1.2)	13.8 (1.6)	0.399

769 Table S1: <sup>(a)</sup> COVID-19 patients, without primary outcome vs. with primary outcome. <sup>(b)</sup>: COVID-19 patients with primary outcome vs. controls. Ethnicity: Indian (0), Pakistani  
770 (0), Bangladeshi (0), Other Asian n=14 (8.8%), Black Caribbean (0), Black African n=2 (1.2%), Chinese n=1 (0.6%), Other (n=1 (0.9%), White, n=139 (87.4%). Missing data  
771 in post-COVID-19 patients: D-Dimer, n=62; HbA1c, n=23; ferritin, n=18; troponin I, n=21. Missing data in Control patients: D-Dimer, n=15; HbA1c, n=5; ferritin, n=5;  
772 troponin I, n=4. CCS – Canadian Cardiovascular Society; CRP – C-reactive protein; GFR - glomerular filtration rate was estimated using the Chronic Kidney Disease  
773 Epidemiology equation<sup>6</sup>, ISARIC-4C - Coronavirus Clinical Characterisation Consortium; MCV – mean cell volume; PCR – polymerase chain reaction; SD – standard  
774 deviation; RDW – red cell distribution width; SIMD - Scottish Index of Multiple Deprivation; TIA – transient ischaemic attack; WHO – World Health Organization. In the  
775 control group, the Abbott Architect CMIA SARS-CoV-2 IgG assay<sup>8</sup> was used to confirm absence of prior infection with COVID-19. The primary outcome evaluation (visit 2)  
776 was scheduled 28-60 days post-discharge. \*Categorical data are summarized as frequency and percentage, and compared between groups using Fisher’s Exact tests. Continuous  
777 data are summarized as mean and standard deviation, or median and interquartile range (IQR, defined as the upper and lower quartiles), and compared between groups using  
778 Kruskal-Wallis tests. All p-values are two-sided. No adjustments were made for multiple comparisons.

779 **Table S2. Expanded - Multisystem phenotyping: serial electrocardiography, biomarkers of inflammation, metabolism, renal function,**  
780 **and hemostasis, and heart, lung, and kidney imaging at 28-60 days post-discharge.**

	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
<i>Electrocardiogram, n (%)</i>								
<i>Admission (n = 150)</i>								
<b>Myopericarditis criteria</b>	31 (20.7)	0 (0)	<b>0.003</b>	3 (17.6)	9 (16.7)	13 (22.4)	6 (28.6)	0.646
Premature atrial contraction	2 (1.3)	0 (0)	1.000	0 (0.0)	0 (0.0)	2 (3.1)	0 (0.0)	0.710
<b>Premature ventricular contraction</b>	3 (1.9)	0 (0)	1.000	1 (5.9)	0 (0.0)	0 (0.0)	2 (9.5)	<b>0.013</b>
Atrial fibrillation or flutter, n = 9 missing	5 (3.3)	0 (0)	1.000	0 (0.0)	2 (3.6)	2 (3.4)	1 (4.8)	1.000
<i>Enrolment (n = 147)</i>								
<b>Myopericarditis criteria</b>	47 (32.0)	0 (0)	<b>&lt;0.001</b>	3 (21.4)	16 (30.2)	20 (32.3)	8 (44.4)	0.586
Premature atrial contraction	7 (4.4)	0 (0)	0.598	1 (5.9)	3 (5.4)	2 (3.1)	1 (4.8)	0.840
Premature ventricular contraction	1 (0.6)	0 (0)	1.000	0 (0.0)	1 (1.8)	0 (0.0)	0 (0.0)	0.591
Atrial fibrillation or flutter	3 (2.0)	0 (0)	1.000	0 (0.0)	1 (1.9)	1 (1.6)	1 (5.9)	0.623
<i>28-60 days post-discharge (n = 143)</i>								
<b>Myopericarditis criteria</b>	33 (23.1)	0 (0)	<b>0.002</b>	2 (14.3)	10 (20.4)	14 (23.3)	7 (35.0)	0.546
Premature atrial contraction	8 (5.0)	0 (0)	0.612	1 (5.9)	3 (5.4)	3 (4.6)	1 (4.8)	1.000
Premature ventricular contraction	2 (1.3)	0 (0)	1.000	1 (5.9)	0 (0.0)	1 (1.5)	0 (0.0)	0.220
Atrial fibrillation or flutter	2 (1.4)	0 (0)	1.000	0 (0.0)	0 (0.0)	1 (1.6)	1 (5.0)	0.535

	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
<i>CT chest 28-60 days post-discharge</i>								
<b>Ground glass opacity and/or consolidation, n (%)</b>	70 (44.6)	1 (4.2)	<b>&lt;0.001</b>	10 (66.7)	26 (46.4)	24 (36.9)	10 (47.6)	0.201
<b>Reticulation and/or architectural distortion, n (%)</b>	47 (29.9)	1 (4.2)	<b>0.006</b>	6 (40.0)	15 (26.8)	18 (27.7)	8 (38.1)	0.600
Atelectasis, n (%)	13 (8.3)	0 (0.0)	0.222	1 (6.7)	7 (12.5)	4 (6.2)	1 (4.8)	0.600
Pulmonary arterial thrombus, n (%)	5 (3.3)	0 (0.0)	1.000	0 (0.0)	2 (3.6)	2 (3.1)	1 (5.3)	0.905
<b>Visual estimate of % of total lung area abnormal, mean (SD)</b>	14.3 (19.0)	0.1 (0.5)	<b>&lt;0.001</b>	19.3 (22.5)	12.7 (17.6)	12.3 (17.5)	21.1 (23.4)	0.286
<b>&lt;20%, n (%)</b>	107 (68.2)	23 (95.8)	<b>0.006</b>	9 (60.0)	38 (67.9)	48 (73.8)	12 (57.1)	0.324
<b>≥20%, n (%)</b>	38 (24.2)	0 (0.0)		3 (20.0)	15 (26.8)	14 (21.5)	6 (28.6)	
<b>≥50%, n (%)</b>	12 (7.6)	1 (4.2)		3 (20.0)	3 (5.4)	3 (4.6)	3 (14.3)	
<i>CT coronary angiogram 28-60 days post-discharge</i>								
Coronary calcium - Agatston score, mean (SD)	144 (502)	95 (297)	0.238	44 (61)	253 (730)	91 (363)	91 (162)	0.071
CADS-RADS score, n (%)								
Level 0	77 (50.0)	13 (52.0)		3 (21.4)	23 (41.1)	40 (63.5)	11 (52.4)	
Level 1	42 (27.3)	7 (32.0)		7 (50.0)	19 (33.9)	11 (17.5)	5 (23.8)	
Level 2	11 (7.1)	2 (8.0)	0.974	0 (0.0)	5 (8.9)	4 (6.3)	2 (9.5)	<b>0.013</b>
Level 3	7 (4.5)	1 (4.0)		2 (14.3)	1 (1.8)	4 (6.3)	0 (0.0)	
Level 4	14 (9.1)	1 (4.0)		1 (7.1)	8 (14.3)	2 (3.2)	3 (14.3)	
Level 5	3 (1.9)	0 (0.0)		1 (7.1)	0 (0.0)	2 (3.2)	0 (0.0)	
Obstructive coronary artery disease, n (%)	21 (13.9)	1 (4.0)	0.325	3 (20.0)	7 (12.7)	7 (11.3)	4 (21.1)	0.555
<i>FFR<sub>CT</sub> patient-level (all coronary arteries)</i>								
Median FFR <sub>CT</sub> , mean (SD)	0.93 (0.03)	0.93 (0.02)	0.109	0.92 (0.03)	0.93 (0.04)	0.93 (0.03)	0.92 (0.04)	0.308
Minimum FFR <sub>CT</sub> , mean (SD)	0.80 (0.10)	0.84 (0.09)	0.006	0.82 (0.08)	0.79 (0.11)	0.81 (0.09)	0.76 (0.13)	0.541

	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
Minimum FFR <sub>CT</sub> ≤0.80, n (%)	50 (37.9)	7 (28.0)	0.377	5 (41.7)	16 (34.8)	20 (35.7)	9 (50.0)	0.655
<i>Cardiovascular MRI 28-60 days post-discharge</i>								
LV end-diastolic volume index, mean (SD), mL/m <sup>2</sup>	75.9 (17.0)	73.9 (18.7)	0.326	77.2 (17.9)	74.1 (16.6)	77.4 (17.1)	75.2 (17.7)	0.881
<b>LV end-systolic volume index, mean (SD), mL/m<sup>2</sup></b>	35.3 (12.8)	30.2 (13.7)	<b>0.012</b>	34.6 (11.1)	33.7 (11.7)	36.3 (14.2)	36.6 (12.4)	0.815
<b>LV ejection fraction, mean (SD), %</b>	54.1 (9.7)	60.4 (9.3)	<b>&lt;0.001</b>	54.8 (9.8)	55.1 (10.1)	54.0 (8.6)	51.3 (11.5)	0.433
LV ejection fraction reduced, males <48%, n (%)	19 (21.3)	2 (12.5)	0.518	2 (15.4)	6 (17.1)	8 (24.2)	3 (33.3)	0.665
<b>LV ejection fraction reduced, females &lt;51%, n (%)</b>	12 (17.6)	0 (0.0)	0.346	1 (25.0)	0 (0.0)	6 (18.8)	5 (41.7)	<b>0.012</b>
<b>LV mass index, mean (SD), g/m<sup>2</sup></b>	91.8 (25.6)	119.4 (26.8)	<b>&lt;0.001</b>	100.9 (18.9)	93.2 (21.5)	89.7 (27.8)	87.6 (31.6)	0.170
<b>LV global longitudinal strain, mean (SD), %</b>	-14.2 (3.0)	-14.5 (6.9)	<b>0.031</b>	-13.7 (3.1)	-13.9 (2.9)	-14.6 (3.0)	-14.1 (3.0)	0.375
<b>LV global circumferential strain, mean (SD), %</b>	-17.0 (3.3)	-17.9 (3.0)	0.153	-17.4 (3.6)	-17.0 (3.4)	-17.1 (3.1)	-16.6 (3.4)	0.801
<b>LV global radial strain, mean (SD), %</b>	28.3 (7.8)	30.6 (7.7)	0.164	29.3 (8.4)	28.4 (8.3)	28.3 (7.3)	27.1 (7.9)	0.780
<b>RV end-diastolic volume index, mean (SD), mL/m<sup>2</sup></b>	73.3 (17.7)	79.7 (14.1)	<b>0.019</b>	77.8 (18.7)	72.7 (19.7)	72.6 (17.0)	73.3 (13.9)	0.760
RV end-systolic volume index, mean (SD), mL/m <sup>2</sup>	35.9 (11.3)	34.4 (10.0)	0.948	34.6 (12.4)	36.6 (11.9)	35.0 (11.5)	38.1 (8.3)	0.487
<b>RV ejection fraction, mean (SD), %</b>	50.9 (10.5)	58.5 (9.3)	<b>&lt;0.001</b>	54.6 (15.9)	49.9 (9.5)	51.9 (9.0)	47.5 (11.4)	0.210
RV global longitudinal strain, mean (SD), %	-17.2 (5.9)	-19.0 (5.8)	0.165	-14.4 (9.5)	-17.5 (5.4)	-18.1 (5.3)	-15.6 (4.3)	0.130
<i>Myocardial tissue characterization</i>								
Increased global T1 (>1233 ms), n (%)	55 (34.8)	5 (19.2)	0.174	2 (12.5)	14 (25.0)	31 (46.2)	9 (42.9)	<b>0.016</b>
Increased global T2 (>44 ms), n (%)	10 (6.3)	0 (0.0)	0.312	0 (0.0)	0 (0.0)	6 (9.2)	4 (19.0)	<b>0.007</b>
T2 ratio (myocardium/ serratus anterior muscle)	1.7 (0.2)	1.6 (0.1)	0.180	1.6 (0.2)	1.6 (0.2)	1.8 (0.2)	1.8 (0.3)	<b>&lt;0.001</b>
<b>Increased global extracellular volume (&gt;27.4%), n (%)</b>	71 (49.7)	5 (20.8)	<b>0.014</b>	1 (7.7)	22 (41.5)	35 (60.3)	13 (68.4)	<b>&lt;0.001</b>
<i>Late gadolinium enhancement</i>								
Myocardial late gadolinium enhancement, n (%)	30 (19.0)	2 (7.7)	0.262	4 (25.0)	7 (12.5)	13 (20.0)	6 (28.6)	0.329

	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
Ischemic distribution, n (%)	8 (5.5)	0 (0.0)	0.658	0 (0.0)	2 (3.9)	5 (8.1)	1 (5.6)	0.769
<b>Non-ischemic distribution, n (%)</b>	24 (16.3)	2 (8.0)	0.606	4 (28.6)	5 (9.8)	8 (12.9)	7 (35.0)	<b>0.033</b>
Pericardial thickening, n (%)	33 (21.2)	0 (0.0)	0.176	1 (5.9)	10 (18.5)	15 (23.4)	7 (33.3)	0.197
Pericardial effusion, n (%)	16 (10.2)	0 (0.0)	0.135	0 (0.0)	5 (9.1)	7 (10.9)	4 (19.0)	0.297
Right atrial area, mean (SD), cm <sup>2</sup>	18.7 (4.7)	19.5 (4.2)	0.369	19.2 (3.9)	18.8 (4.9)	18.1 (5.1)	19.9 (3.2)	0.202
Left atrial area, mean (SD), cm <sup>2</sup>	20.7 (4.7)	21.8 (4.7)	0.210	22.3 (5.0)	19.9 (4.2)	20.5 (5.1)	21.9 (4.1)	0.204
<i>Myocardial inflammation (Lake Louise criteria), n (%)</i>								
<b>Probable (1/2)</b>	74 (46.8)	1 (3.4)	<b>&lt;0.001</b>	4 (25.0)	49 (87.5)	21 (32.3)	0 (0.0)	<b>&lt;0.001</b>
<b>Definite (2/2)</b>	67 (42.4)	1 (3.4)	<b>&lt;0.001</b>	0 (0)	2 (3.6)	44 (67.7)	21 (100.0)	<b>&lt;0.001</b>
<i>Renal MRI, mean (SD)</i>								
Average volume of right and left kidneys, ml	153 (31)	156 (33)	0.761	158 (37)	154 (25)	150 (33)	153 (38)	0.656
Average cortex T1 of right and left kidneys, ms	1544 (62)	1519 (70)	0.118	1548 (66)	1535 (58)	1541 (63)	1585 (60)	0.110
<b>Average medulla T1 of right and left kidneys, ms</b>	1934 (69)	1953 (59)	0.161	1935 (66)	1924 (65)	1925 (66)	2008 (57)	<b>0.003</b>
<b>Average T1 corticomedullary differentiation of kidneys</b>	0.80 (0.03)	0.78 (0.03)	<b>&lt;0.001</b>	0.80 (0.03)	0.79 (0.03)	0.80 (0.03)	0.79 (0.02)	0.535
<i>Biomarkers at enrolment, central laboratory</i>								
<b>eGFR, median [IQR], ml/min/1.73m<sup>2</sup></b>	96 (85, 106)	89 (70, 98)	<b>0.025</b>	95 (88, 103)	94 (84, 107)	97 (83, 105)	98 (94, 104)	0.931
eGFR <60 ml/min/1.73m <sup>2</sup> , n (%)	7 (4.7)	1 (4.8)	1.000	1 (6.2)	1 (1.9)	4 (6.6)	1 (5.3)	0.523
<b>C-reactive protein, median [IQR], mg/L</b>	5.5 (1.6, 22.3)	1.5 (0.8, 3.5)	<b>&lt;0.001</b>	6.0 (1.6, 18.2)	5.5 (1.4, 22.8)	4.9 (1.8, 21.6)	14.0 (0.9, 21.5)	0.971
<b>Peak CRP category</b>								
<b>&lt;5.0 mg/l</b>	75 (48.4%)	24 (88.9%)	<b>&lt;0.001</b>	7 (41.2%)	27 (49.1%)	33 (52.4%)	8 (40.0%)	0.591
<b>≥5.0, &lt;10.0 mg/l</b>	20 (12.9%)	2 (7.4%)		4 (23.5%)	8 (14.5%)	7 (11.1%)	1 (5.0%)	
<b>≥10.0 mg/l</b>	60 (38.7%)	1 (3.7%)		6 (35.3%)	20 (36.4%)	23 (36.5%)	11 (55.0%)	

	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
High sensitivity troponin I, median [IQR], ng/L	3 (2, 6)	4 (4, 6)	0.059	4 (3, 5)	3 (2, 7)	3 (2, 5)	4 (3, 7)	0.609
<b>NT-proBNP, median [IQR], pg/mL</b>	114 (57, 262)	58 (38, 99)	<b>0.004</b>	108 (57, 246)	116 (65, 258)	93 (49, 278)	139 (65, 274)	0.546
<b>Ferritin, median [IQR], µg/L</b>	366 (202, 675)	186 (96, 254)	<b>&lt;0.001</b>	428 (143, 576)	398 (281, 658)	313 (172, 683)	379 (187, 637)	0.529
<b>Haptoglobin, median [IQR], g/L</b>	2.1 (1.3, 3.1)	1.5 (1.2, 1.8)	<b>0.001</b>	2.2 (1.8, 3.2)	2.0 (1.5, 2.8)	1.9 (1.2, 3.1)	2.6 (1.6, 3.2)	0.738
Total cholesterol, mean (SD), mmol/L	4.8 (1.4)	4.9 (1.0)	0.530	4.8 (1.4)	4.6 (1.3)	5.0 (1.5)	5.0 (1.1)	0.384
<b>Triglycerides, mean (SD), mmol/L</b>	2.3 (1.3)	1.8 (1.3)	<b>0.016</b>	2.3 (1.3)	2.4 (1.4)	2.2 (1.2)	2.1 (0.8)	0.868
<b>HDL cholesterol, mean (SD), mmol/L</b>	1.1 (0.3)	1.2 (0.3)	<b>0.014</b>	1.0 (0.3)	1.0 (0.3)	1.1 (0.4)	1.1 (0.4)	0.432
<b>Prothrombin time, mean (SD), s</b>	12.1 (3.7)	11.2 (0.8)	0.106	12.1 (2.0)	12.7 (5.5)	11.7 (2.4)	12.0 (1.5)	<b>0.042</b>
<b>D-Dimer, mean (SD), ng/mL</b>	259 (221)	152 (149)	<b>&lt;0.001</b>	290 (195)	263 (178)	246 (168)	260 (192)	0.374
<b>Fibrinogen, mean (SD), g/L</b>	4.1 (1.7)	3.2 (1.1)	<b>0.006</b>	3.9 (1.5)	4.1 (1.7)	4.0 (1.6)	4.5 (1.9)	0.659
<b>Factor VIII, mean (SD), IU/dL</b>	184 (94)	99 (39)	<b>&lt;0.001</b>	208 (88)	183 (97)	181 (99)	173 (73)	0.527
Antithrombin, mean (SD), IU/dL	111 (18)	108 (14)	0.570	108 (18)	112 (18)	112 (17)	109 (20)	0.687
Protein C, mean (SD), IU/dL	123 (30)	116 (21)	0.194	121 (30)	120 (30)	127 (32)	123 (21)	0.574
Protein S, mean (SD), IU/dL	85 (28)	96 (26)	0.116	94 (33)	87 (32)	85 (25)	75 (23)	0.252
<b>VWF:GP1bR, mean (SD), IU/dL</b>	236 (127)	137 (70)	<b>&lt;0.001</b>	257 (176)	241 (118)	224 (123)	246 (122)	0.755
<b>VWF:Ag, mean (SD), IU/dL</b>	243 (145)	204 (251)	<b>0.002</b>	310 (235)	233 (118)	228(135)	261 (140)	0.380
<i>Biomarkers at 28-60 days post-discharge, central laboratory</i>								
<b>eGFR, median [IQR], ml/min/1.73m<sup>2</sup></b>	95 (83, 106)	88 (70, 98)	<b>0.047</b>	91 (79, 103)	95 (82, 106)	95 (87, 105)	98 (79, 105)	0.954
eGFR <60 ml/min/1.73m <sup>2</sup> , n (%)	7 (4.7)	1 (4.8)	1.000	1 (6.7)	1 (1.9)	4 (6.5)	1 (5.3)	0.514
C-reactive protein, median [IQR], mg/L	1.9 (0.9, 3.5)	1.5 (0.8, 3.5)	0.572	1.7 (1.1, 3.5)	2.0 (1.2, 3.4)	1.8 (0.8, 4.4)	1.9 (0.9, 3.1)	0.996
<b>Peak CRP category</b>								
<b>&lt;5.0 mg/l</b>	124 (81.0%)	24 (88.9%)	0.770	14 (87.5%)	45 (81.8%)	2 (3.6%)	16 (80.0%)	0.562
<b>≥5.0, &lt;10.0 mg/l</b>	16 (10.5%)	2 (7.4%)		1 (6.2%)	8 (14.5%)	6 (9.7%)	1 (5.0%)	



	COVID-19 n = 159	Controls n = 29	P-value	Myocarditis				P-value*
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
<b>≥10.0 mg/l</b>	13 (8.5%)	1 (3.7%)		1 (6.2%)	2 (3.6%)	7 (11.3%)	3 (15.0%)	
<b>High sensitivity troponin I, median [IQR], ng/L</b>	2 (1, 4)	4 (4, 6)	<b>&lt;0.001</b>	2 (2, 4)	2 (1, 5)	2 (1, 4)	2 (1, 4)	0.941
<b>NT-proBNP, median [IQR], pg/mL</b>	83 (54, 198)	58 (38, 99)	<b>0.022</b>	60 (30, 172)	112 (65, 207)	87 (56, 148)	75 (52, 213)	0.290
Ferritin, median [IQR], ug/L	144 (72, 282)	186 (96, 254)	0.529	145 (86, 299)	158 (94, 296)	129 (57, 206)	157 (99, 319)	0.360
<b>Haptoglobin, median [IQR], g/L</b>	1.3 (0.9, 1.6)	1.5 (1.2, 1.8)	<b>0.031</b>	1.4 (1.1, 1.6)	1.2 (0.8, 1.6)	1.3 (0.8, 1.6)	1.3 (0.9, 1.8)	0.709
D-Dimer, mean (SD), ng/mL	205 (252)	152 (149)	0.146	171 (111)	207 (200)	194 (193)	266 (517)	0.965
Fibrinogen, mean (SD), g/L	3.4(1.4)	3.2 (1.1)	0.439	3.6 (2.4)	3.2 (0.9)	3.5 (1.3)	3.8 (1.7)	0.468
<b>Factor VIII, mean (SD), IU/dL</b>	149 (65)	108 (58)	<b>&lt;0.001</b>	151 (96)	141 (54)	151 (70)	160 (50)	0.606
Protein S, mean (SD), IU/dL	100 (22)	100 (26)	0.260	107 (21)	105 (21)	96 (22)	92 (17)	0.062
VWF:GP1bR, mean (SD), IU/dL	143 (80)	137 (70)	0.912	138 (104)	136 (76)	144 (79)	165 (77)	0.345
VWF:Ag, mean (SD), IU/dL	164 (97)	204 (251)	0.479	151 (79)	155 (85)	157 (88)	224 (144)	0.091
<i>Urine Biomarkers</i>								
Albumin: creatinine ratio at enrolment, mean (SD)	3.2 (8.0)	6.2 (26.9)	0.173	1.6 (3.1)	4.5 (12.0)	2.3 (4.3)	4.1 (6.5)	0.758
Albumin: creatinine ratio at 28-60 days post-discharge, mean (SD)	3.8 (10.9)	6.2 (26.9)	0.257	5.1 (13.4)	5.1 (15.2)	3.4 (5.4)	3.8 (6.4)	0.900

781 Table S2: Missing data in post-COVID-19 patients (admission, enrolment, 28-60 days) and controls – myopericarditis criteria – n=9, n=12, n=16, n=0; Missing data in post-  
782 COVID-19 patients at 28-60 days and controls – CT chest atelectasis, reticulation, ground glass – n=2, n=5; pulmonary arterial thrombus – n=8, n=6; CT coronary angiogram  
783 28-60 days and controls: Agatston score – n=7, n=4; CAD-RADS score – n=5, n=4; FFR<sub>CT</sub> – n=27, n=4; Cardiovascular magnetic resonance imaging 28-60 days post-discharge:  
784 left ventricular end-diastolic volume index, left ventricular end-systolic volume index, left ventricular ejection fraction, left ventricular strain – n=2, n=3; left ventricular mass  
785 – n=2, n=3; right ventricular end-diastolic volume index, right ventricular systolic volume index, n=4, n=3; right ventricular ejection fraction, n=3, n=3; global T1 – n=1, n=3;  
786 global T2 – n=1, n=3; global extracellular volume – n=16, n=5; late gadolinium enhancement – n=1, n=3; ischemic distribution – n=14, n=4; non-ischemic distribution – n=12,  
787 n=4; mixed distribution – n=14, n=4; pericardial thickening – n=3, n=3; pericardial effusion – n=2, n=3; right and left atrial area – n=1, n=3; myocardial inflammation – n=1,  
788 n=0. Missing data in blood biomarkers, post-COVID-19 patients (enrolment and 28-60 days) and controls – eGFR – n=9, n=10, n= 8; C-reactive protein – n=4, n=6, n=2; High  
789 sensitivity troponin I – n=6, n=8, n=2; NT-proBNP – n=6, n=10, n=2; Total cholesterol, triglycerides, HDL cholesterol – n=4, n=6, n=2; Fibrinogen – n=5, n=10, n=2; D-Dimer  
790 – n=5, n=9, n=2; Factor VIII – n=5, n=9, n=2; Antithrombin – n=5, n=10, n=3; Protein C – n=5, n=10, n=3; Protein S – n=3, n=11, n=3; VWF:GP1bR – n=6, n=9, n=2;  
791 VWF:Ag – n=5, n=9, n=2. Abbreviations – aPTT - activated partial thromboplastin time; CAD-RADS - Coronary Artery Disease - Reporting and Data System; ECV -  
792 extracellular volume; eGFR (CKD-EPI) – estimated glomerular filtration rate using the Chronic Kidney Disease Epidemiology (CKD-EPI) equation)<sup>6</sup>; EF – ejection fraction;  
793 EDV – end-diastolic volume; ESV – end-systolic volume; FFR<sub>CT</sub> – fractional flow reserve computed tomography; HbA1c - hemoglobin A1c; HDL – high density lipoprotein;  
794 LV – left ventricle; MESA - Multi-ethnic study of atherosclerosis; NT-proBNP - N-terminal pro B-type natriuretic peptide; PT – prothrombin time; RV - right ventricle; T1 –

795 longitudinal relaxation time; T2 – transverse relaxation time; TCT - thrombin clotting time; vWF:Ag - von Willebrand factor antigen.  
796 \* Categorical data are summarized as frequency and percentage and compared between groups using Fisher's Exact tests. Continuous data are summarized as mean and standard  
797 deviation, or median and interquartile range (IQR, defined as the upper and lower quartiles), and compared between groups using Kruskal-Wallis tests. All p-values are two-  
798 sided. No adjustments were made for multiple comparisons. The Kendall's tau rank correlation between Lake Louise criteria, and the final adjudication (4 levels) was 0.75, or  
799 with 2 levels, was 0.72, representing moderately strong correlations.

800 **Table S3. SARS-CoV-2 vaccination status.**

	COVID-19		Controls
	Without Primary Outcome	With Primary outcome	
	(n = 104)	(n = 159)	(n = 29)
<i>SARS-CoV-2 vaccination status, n (%)</i>			
First dose prior to admission	1 (1.0)	2 (1.3)	-
Second dose prior to admission	0 (0.0)	0 (0.0)	-
First dose prior to imaging	-	11 (6.9)	23 (79.3)
Second dose prior to imaging	-	0 (0.0)	15 (51.7)
Third dose prior to imaging	-	0 (0.0)	0 (0.0)

801 Table S3 shows numbers and percentages. SARS-CoV-2 vaccines used in the NHS Scotland vaccination  
802 programme are the messenger RNA vaccines, BNT162b2 and mRNA-1273 manufactured by Biotech GmbH  
803 (Mainz, Germany) and Moderna (Cambridge, MA), respectively, and the AZD1222 (ChAdOx1 nCoV-19)  
804 recombinant SARS-CoV-2 vaccine manufactured by AstraZeneca (Cambridge, UK).

805 **Table S4. Primary and secondary outcomes.**

	Myocarditis					P-value
	All cases n=159	Not present n=17 (11%)	Unlikely n=56 (35%)	Probable n=65 (41%)	Very likely n=21 (13%)	
<i>Cause of myocardial inflammation (endotype)</i>						
<i>SARS-COV-2 Myocarditis, n (%)</i>						
Not present	16 (10.1)	16 (94.1)	0 (0.0)	0 (0.0)	0 (0.0)	<b>&lt;0.001</b>
Unlikely	59 (37.1)	1 (5.9)	56 (100.0)	2 (3.1)	0 (0.0)	
Probable	76 (47.8)	0 (0.0)	0 (0.0)	62 (95.4)	14 (66.7)	
Very Likely	8 (5.0)	0 (0.0)	0 (0.0)	1 (1.5)	7 (33.3)	
<i>Acute Stress Cardiomyopathy, n (%)</i>						
Not present	89 (56.0)	15 (88.2)	37 (66.1)	26 (40.0)	11 (52.4)	<b>&lt;0.001</b>
Unlikely	69 (43.4)	1 (5.9)	19 (33.9)	39 (60.0)	10 (47.6)	
Probable	1 (0.6)	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	
Very Likely	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
<i>Ischemia/ Impaired Perfusion as a Stressor of Inflammation, n (%)</i>						
Not present	75 (47.2)	14 (82.4)	35 (62.5)	21 (32.3)	5 (23.8)	<b>&lt;0.001</b>
Unlikely	73 (45.9)	2 (11.8)	17 (30.4)	39 (60.0)	15 (71.4)	
Probable	9 (5.7)	0 (0.0)	3 (5.4)	5 (7.7)	1 (4.8)	
Very Likely	2 (1.3)	1 (5.9)	1 (1.8)	0 (0.0)	0 (0.0)	
<i>Infective Myopericarditis (non-Covid infection), n (%)</i>						
Not present	42 (26.4)	17 (100.0)	12 (21.4)	11 (16.9)	2 (9.5)	<b>&lt;0.001</b>
Unlikely	117 (73.6)	0 (0.0)	44 (78.6)	54 (83.1)	19 (90.5)	
Probable	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
Very Likely	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	

	Myocarditis					P-value
	All cases n=159	Not present n=17 (11%)	Unlikely n=56 (35%)	Probable n=65 (41%)	Very likely n=21 (13%)	
<i>Drug Induced (Toxic) Myocardial Inflammation, n (%)</i>						
Not present	71 (44.7)	17 (100.0)	29 (51.8)	20 (30.8)	5 (23.8)	<b>&lt;0.001</b>
Unlikely	88 (55.3)	0 (0.0)	27 (48.2)	45 (69.2)	16 (76.2)	
Probable	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
Very Likely	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
<i>Idiopathic Myocardial and/or Pericardial Inflammation, n (%)</i>						
Not present	29 (18.2)	17 (100.0)	6 (10.7)	4 (6.2)	2 (9.5)	<b>&lt;0.001</b>
Unlikely	130 (81.8)	0 (0.0)	50 (89.3)	61 (93.8)	19 (90.5)	
Probable	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
Very Likely	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	

806 Table S4 shows numbers and percentages, with p-values from Fisher's Exact tests. All p-values are two-sided. No adjustments were made for multiple comparisons. The exact  
807 p-values are : SARS-COV-2 Myocarditis, p=0.0001; Acute Stress Cardiomyopathy, p=0.0001; Ischemia/ Impaired Perfusion as a Stressor of Inflammation, p=0.0001; Infective  
808 Myopericarditis (non-Covid infection), p=0.0001; Drug Induced (Toxic) Myocardial Inflammation, p=0.0001; Idiopathic Myocardial and/or Pericardial Inflammation,  
809 p=0.0001.

810 **Table S5. Diagnoses given by all raters in relation to the adjudicated diagnosis.**

		All COVID-19 (n=795)	Adjudicated Myocarditis Diagnosis				p-value
			Not present (n=85)	Unlikely (n=280)	Probable (n=335)	Very likely (n=105)	
Individual rater assessment of the likelihood of myocarditis	Not Present	111 (14.0%)	74 (87.1%)	36 (12.9%)	1 (0.3%)	0 (0.0%)	<b>P&lt;0.001</b>
	Unlikely	223 (28.1%)	9 (10.6%)	171 (61.1%)	41 (12.6%)	2 (1.9%)	
	Probable	314 (39.5%)	2 (2.4%)	68 (24.3%)	214 (65.8%)	30 (28.6%)	
	Very Likely	147 (18.5%)	0 (0.0%)	5 (1.8%)	69 (21.2%)	73 (69.5%)	

811 Table S5 shows numbers and percentages, with p-value from Fisher's Exact tests (two-sided). The denominators at the top of the table are five times the numbers of patients  
812 with each adjudicated diagnosis. E.g. with 21 patients adjudicated as being highly likely to have myocarditis, there were 105 individual assessment of this likelihood for these  
813 patients. The data illustrate a high level of concordance between the raters for myocarditis not present, and good discrimination between probably and very likely.

814 **Table S6. Clinical and Diagnostic criteria for myocarditis, split by adjudicated likelihood of myocarditis diagnosis.**

	COVID-19 n=159	Adjudicated Myocarditis Diagnosis				p-value
		Not present n=17	Unlikely n=56	Probable n=65	Very likely n=21	
<i>Clinical criteria</i>						
Chest pain	38 (23.9%)	7 (41.2%)	10 (17.9%)	13 (20.0%)	8 (38.1%)	0.081
New symptoms of breathlessness	149 (93.7%)	17 (100.0%)	51 (91.1%)	61 (93.8%)	20 (95.2%)	0.804
Chronic symptoms of breathlessness	2 (1.3%)	0 (0.0%)	1 (1.8%)	1 (1.5%)	0 (0.0%)	1.000
Cardiogenic shock	2 (1.3%)	1 (5.9%)	0 (0.0%)	1 (1.5%)	0 (0.0%)	0.220
Palpitations / Syncope / Arrhythmia	14 (8.8%)	1 (5.9%)	4 (7.1%)	7 (10.8%)	2 (9.5%)	0.905
Number of clinical criteria	0	7 (4.4%)	0 (0.0%)	4 (7.1%)	3 (4.6%)	0 (0.0%)
	1	104 (65.4%)	8 (47.1%)	40 (71.4%)	44 (67.7%)	12 (57.1%)
	2	44 (27.7%)	9 (52.9%)	10 (17.9%)	16 (24.6%)	9 (42.9%)
	3	3 (1.9%)	0 (0.0%)	2 (3.6%)	1 (1.5%)	0 (0.0%)
	4	1 (0.6%)	0 (0.0%)	0 (0.0%)	1 (1.5%)	0 (0.0%)
<i>Diagnostic criteria</i>						
ECG Myocarditis	30 (18.9%)	3 (17.6%)	9 (16.1%)	12 (18.5%)	6 (28.6%)	0.651
<b>T2 Criteria</b>	89 (56.0%)	0 (0.0%)	16 (28.6%)	52 (80.0%)	21 (100.0%)	<b>&lt;0.001</b>
<b>T1 Criteria</b>	114 (71.7%)	0 (0.0%)	36 (64.3%)	57 (87.7%)	21 (100.0%)	<b>&lt;0.001</b>
<b>Lake Louise Criteria</b>	<b>1 of 2</b>	73 (45.9%)	0 (0.0%)	52 (92.9%)	21 (32.3%)	0 (0.0%)
	<b>2 of 2</b>	65 (40.9%)	0 (0.0%)	0 (0.0%)	44 (67.7%)	21 (100.0%)
Elevated high sensitivity troponin	77 (48.4%)	6 (35.3%)	26 (46.4%)	31 (47.7%)	14 (66.7%)	0.267
<b>Global left ventricular dysfunction</b>	32 (20.1%)	3 (17.6%)	6 (10.7%)	14 (21.5%)	9 (42.9%)	<b>0.022</b>
<b>Regional left ventricular dysfunction</b>	34 (21.4%)	3 (17.6%)	5 (8.9%)	17 (26.2%)	9 (42.9%)	<b>0.006</b>

<b>Pericardial changes</b>		32 (20.1%)	0 (0.0%)	10 (17.9%)	15 (23.1%)	7 (33.3%)	<b>0.046</b>
<b>New left ventricular dysfunction</b>		29 (18.2%)	2 (11.8%)	5 (8.9%)	14 (21.5%)	8 (38.1%)	<b>0.022</b>
	<b>0</b>	10 (6.8%)	10 (58.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	
	<b>1-2</b>	28 (19.0%)	4 (23.5%)	20 (35.7%)	4 (6.7%)	0 (0.0%)	
<b>Number of diagnostic criteria</b>	<b>3-4</b>	62 (42.2%)	3 (17.6%)	32 (57.1%)	24 (40.0%)	3 (21.4%)	<b>&lt;0.001</b>
	<b>5-6</b>	37 (25.2%)	0 (0.0%)	3 (5.4%)	26 (43.3%)	8 (57.1%)	
	<b>7+</b>	10 (6.8%)	0 (0.0%)	1 (1.8%)	6 (10.0%)	3 (21.4%)	

815 Table S6 shows numbers and percentages, with p-values from Fisher's Exact tests. All p-values are two-sided. No adjustments were made for multiple comparisons.



816 **Table S7. Serious adverse events occurring during the index admission.**

	COVID-19 population		Fisher Test p-value
	Without Primary Outcome (n = 104)	With Primary outcome (n = 159)	
<i>Index admission, n (%)</i>			
Death	1 (1.0)	0 (0.0)	0.40
Myocardial infarction	1 (1.0)	7 (4.4)	0.16
Stroke	1 (1.0)	0 (0.0)	0.40
Heart failure	2 (1.9)	1 (0.6)	0.57
Pulmonary embolism	5 (4.8)	5 (3.1)	0.53
Deep vein thrombosis	0 (0.0)	1 (0.6)	1.00
Atrial fibrillation	6 (5.8)	5 (3.1)	0.36
Ventricular arrhythmia	0 (0.0)	0 (0.0)	-
Non-cardiovascular serious adverse event	0 (0.0)	0 (0.0)	-

817 Table S7 shows numbers and percentages, with p-values from Fisher's Exact tests. All p-values are two-sided. No adjustments were made for multiple comparisons.

818 **Table S8. Clinical outcomes in the primary analysis population.**

	With Primary Outcome n = 159	Control n = 27*	p-value <sup>(a)</sup>	Myocarditis				p-value <sup>(b)</sup>
				Not present n = 17 (11%)	Unlikely n = 56 (35%)	Probable n = 65 (41%)	Very likely n = 21 (13%)	
<i>Duration of follow-up</i>								
Days to Visit 3 or death, (median IQR)	419 (369, 451)	218 (208, 236)	<0.001	429 (416, 545)	414 (369, 437)	417 (369, 444)	454 (365, 546)	0.185
<i>Outcomes, n (%)</i>								
<b>Death or Hospitalization (Any Cause)</b>	24 (15.1)	2 (7.4)	0.356	3 (17.6)	10 (17.9)	9 (13.8)	2 (9.5)	0.845
Death (Any Cause)	2 (1.3)	0 (0.0)	0.663	0 (0.0)	0 (0.0)	2 (3.1)	0 (0.0)	0.413
Cardiovascular Death	1 (0.6)	0 (0.0)	0.888	0 (0.0)	0 (0.0)	1 (1.5)	0 (0.0)	0.701
Renal Death	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
Respiratory Death	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
<b>Hospitalization (Any Cause)</b>	24 (15.1)	2 (7.4)	0.356	3 (17.6)	10 (17.9)	9 (13.8)	2 (9.5)	0.845
Cardiovascular Hospitalization	7 (4.4)	2 (7.4)	0.340	1 (5.9)	5 (8.9)	1 (1.5)	0 (0.0)	0.177
Renal Hospitalization	2 (1.3)	0 (0.0)	0.680	1 (5.9)	1 (1.8)	0 (0.0)	0 (0.0)	0.526
Respiratory Hospitalization	8 (5.0)	0 (0.0)	0.242	2 (11.8)	2 (3.6)	2 (3.1)	2 (9.5)	0.335
<i>Cardiovascular outcomes, n (%)</i>								
<b>Myocardial infarction</b>	1 (0.6)	0 (0.0)	0.679	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	0.040
Percutaneous Coronary Intervention	3 (1.9)	0 (0.0)	0.481	1 (5.9)	1 (1.8)	0 (0.0)	1 (4.8)	0.300
Coronary Artery Bypass Grafting	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
<b>Cerebrovascular accident</b>	0 (0.0)	1 (3.7)	<b>0.016</b>	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
Heart Failure	2 (1.3)	1 (3.7)	0.232	0 (0.0)	1 (1.8)	1 (1.5)	0 (0.0)	0.886
Deep vein thrombosis	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
New atrial fibrillation	3 (1.9)	1 (3.7)	0.204	0 (0.0)	1 (1.8)	2 (3.1)	0 (0.0)	0.739

Ventricular tachycardia or fibrillation	0 (0.0)	0 (0.0)	-	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	-
<i>Respiratory outcomes, n (%)</i>								
<b>Pulmonary fibrosis</b>	9 (5.7)	0 (0.0)	0.336	0 (0.0)	0 (0.0)	4 (6.2)	5 (23.8)	<b>&lt;0.001</b>
New diagnosis asthma	1 (0.6)	0 (0.0)	0.680	1 (5.9)	0 (0.0)	0 (0.0)	0 (0.0)	0.039
Pulmonary embolism	4 (2.5)	0 (0.0)	0.407	0 (0.0)	1 (1.8)	2 (3.1)	1 (4.8)	0.778
Long-term oxygen therapy	2 (1.3)	0 (0.0)	0.559	0 (0.0)	0 (0.0)	1 (1.5)	1 (4.8)	0.391
<i>Secondary care (outpatients)</i>								
<b>Any outpatient care</b>	108 (67.9)	7 (25.9)	<b>0.017</b>	12 (70.6)	35 (62.5)	44 (67.7)	17 (81.0)	0.184
Acute COVID-19 (<28 days)	15 (9.4)	0 (0.0)	0.102	2 (11.8)	3 (5.4)	9 (13.8)	1 (4.8)	0.340
Ongoing COVID-19 (28-84 days)	20 (12.6)	1 (3.7)	0.194	1 (5.9)	5 (8.9)	9 (13.8)	5 (23.8)	0.225
<b>Long COVID-19 (&gt;84 days)</b>	58 (36.5)	1 (3.7)	<b>0.017</b>	9 (52.9)	13 (23.2)	27 (41.5)	9 (42.9)	0.122
Cardiology	22 (13.8)	1 (3.7)	0.320	3 (17.6)	9 (16.1)	6 (9.2)	4 (19.0)	0.650
<b>Respiratory</b>	55 (34.6)	1 (3.7)	<b>0.013</b>	8 (47.1)	12 (21.4)	27 (41.5)	8 (38.1)	0.102
Physiotherapy	22 (13.8)	1 (3.7)	0.232	2 (11.8)	4 (7.1)	12 (18.5)	4 (19.0)	0.264

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Table S8: For clinical outcomes, data are the number and percentage of participants with at least one event during follow-up. P-values are from log rank tests of the time to first event. All p-values are two-sided. No adjustments were made for multiple comparisons. (a): COVID-19 patients with primary outcome vs. controls. (b): Comparing subgroups defined by likelihood of myocarditis. \*Two controls developed COVID-19 after the imaging visit, hence they were excluded from this group.

822 **Table S9. Deaths and adjudicated causes of death.**

Participant ID	Date of consent	Date of death	Death during index hospitalisation, Y/N	Visit 2, Y/N	Myocarditis adjudicated very likely, Y/N	Acute kidney injury, Y/N	Adjudicated cause of death
1074	21/09/2020	16/12/2020	N	Y	N	N	Urosepsis
1104	08/10/2020	02/11/2020	N	N	N/A	N	Metastatic prostate cancer
1117	20/10/2020	15/08/2021	N	Y	N	N	Diffuse hypoxic brain injury secondary to out of hospital cardiac arrest and lower respiratory tract infection
2025	23/10/2020	16/11/2020	Y	N	N/A	N	COVID-19 pneumonitis

823 Table S9: The reporting period extends from the date of the first patient in (22 May 2020) to the last day of follow-up (13 December 2021). Participant details: Patient 1074 had chronic  
824 kidney disease stage 3B and the adjudicated likelihood of myocarditis for this patient was ‘probably’ (median score = 3; adjudicator scores: 2,3,3,3,3). The adjudicated likelihood of  
825 myocarditis for patient 1117 was ‘probably’ (median score = 3; adjudicator scores: 3,3,3,4,4).

**Table S10. Medication prescription at follow-up.**

	COVID-19 N=159	Control N=27*	p-value <sup>(a)</sup>	Myocarditis				p-value <sup>(b)</sup>
				Not present	Unlikely	Probable	Very likely	
				n = 17 (11%)	n = 56 (35%)	n = 65 (41%)	n = 21 (13%)	
<i>Medication, n (%)</i>								
<b>Aspirin</b>	22 (13.8%)	0 (0.0%)	<b>0.048</b>	4 (23.5)	7 (12.5)	6 (9.2)	5 (23.8)	0.204
P2Y12 inhibitor	8 (5.0%)	3 (11.1%)	0.202	2 (11.8)	3 (5.4)	2 (3.1)	1 (4.8)	0.413
<b>Calcium channel blocker</b>	31 (19.5%)	6 (22.2%)	0.795	<b>6 (35.3)</b>	<b>13 (23.2)</b>	<b>6 (9.2)</b>	<b>6 (28.6)</b>	<b>0.021</b>
Angiotensin converting enzyme inhibitor	37 (23.3%)	5 (18.5%)	0.804	5 (29.4)	13 (23.2)	12 (18.5)	7 (33.3)	0.463
Angiotensin receptor blocker	15 (9.4%)	2 (7.4%)	1.000	1 (5.9)	7 (12.5)	6 (9.2)	1 (4.8)	0.802
Sacubitril/Valsartan	5 (3.1%)	0 (0.0%)	1.000	1 (5.9)	1 (1.8)	2 (3.1)	1 (4.8)	0.625
Statin	76 (47.8%)	15 (55.6%)	0.534	11 (64.7)	32 (57.1)	25 (38.5)	8 (38.1)	0.074
Mineralocorticoid receptor antagonist	2 (1.3%)	0 (0.0%)	1.000	0 (0.0)	0 (0.0)	2 (3.1)	0 (0.0)	0.710
Beta Blocker	33 (20.8%)	3 (11.1%)	0.301	4 (23.5)	9 (16.1)	12 (18.5)	8 (38.1)	0.190
<b>Thiazide</b>	14 (8.8%)	2 (7.4%)	1.000	<b>2 (11.8)</b>	<b>10 (17.9)</b>	<b>1 (1.5)</b>	<b>1 (4.8)</b>	<b>0.008</b>
Warfarin	1 (0.6%)	0 (0.0%)	1.000	0 (0.0)	1 (1.8)	0 (0.0)	0 (0.0)	0.591
Novel oral anticoagulant therapy	12 (7.5%)	3 (11.1%)	0.461	1 (5.9)	4 (7.1)	5 (7.7)	2 (9.5)	0.968
Inhaled Steroid	24 (15.1%)	2 (7.4%)	0.379	2 (11.8)	8 (14.3)	9 (13.8)	5 (23.8)	0.691
Inhaled Bronchodilator	31 (19.5%)	3 (11.1%)	0.422	2 (11.8)	11 (19.6)	11 (16.9)	7 (33.3)	0.349
Inhaled Anti-muscarinics	15 (9.4%)	1 (3.7%)	0.475	0 (0.0)	5 (8.9)	6 (9.2)	4 (19.0)	0.285
Sodium-glucose co-transporter-2 inhibitor	17 (10.7%)	1 (3.7%)	0.479	0 (0.0)	8 (14.3)	7 (10.8)	2 (9.5)	0.456
Glucagon-like peptide-1 agonist	4 (2.5%)	1 (3.7%)	0.548	1 (5.9)	1 (1.8)	1 (1.5)	1 (4.8)	0.388
Insulin	8 (5.0%)	0 (0.0%)	0.605	1 (5.9)	5 (8.9)	1 (1.5)	1 (4.8)	0.222
Other anti-diabetic	24 (15.1%)	1 (3.7%)	0.135	2 (11.8)	12 (21.4)	7 (10.8)	3 (14.3)	0.436
Loop diuretic	5 (3.1%)	1 (3.7%)	1.000	1 (5.9)	1 (1.8)	1 (1.5)	2 (9.5)	0.180

Oral Steroid	1 (0.6%)	1 (3.7%)	0.270	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.8)	0.239
Antidepressant	28 (17.6%)	5 (18.5%)	1.000	2 (11.8)	5 (8.9)	15 (23.1)	6 (28.6)	0.087

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Table S10: n (%) of participants who were taking the medication at follow-up. \*Two controls developed COVID-19 after the imaging visit, hence they were excluded from this group. P-values are from Fisher's Exact tests. All p-values are two-sided. No adjustments were made for multiple comparisons. (a): COVID-19 patients with primary outcome vs. controls. (b): Comparing subgroups defined by likelihood of myocarditis.