SUPPLEMENTARY DATA

Supplementary Table 1: Clinical predictors of all-cause mortality

Variable	Unadjusted OR (CI)	p value	Adjusted* OR (CI)	p value
Hypertension	2.49 (1.66-3.76)	<0.001	1.88 (1.01-3.55)	0.049
Admission saturations on air	0.97 (0.95-0.99)	0.004	0.97 (0.94-0.99)	0.017
Myocardial injury	4.58 (3.05-6.97)	<0.001	2.39 (1.31-4.40)	0.005
Peak CRP	1.007 (1.005- 1.009)	<0.001	1.008 (1.006 - 1.011)	<0.001
Haemoglobin, g/DL	0.99 (0.98-1.00)	0.003	0.99 (0.98 - 1.01)	0.483
Platelets	0.997 (0.995-0.999)	0.005	0.998 (0.995-1.001)	0.147
ACEi	1.78 (1.11-2.83)	0.015	1.84 (0.90-3.80)	0.095

* Adjusted for demographic variables (age, sex and ethnicity[supplementary table 6])

OR: odds ratio, CI: confidence interval, ACEi: angiotensin converting enzyme inhibitor

Supplementary Table 2: Details of patients who had coronary angiography for STEMI

Patient 1	Anterolateral ST elevation. PPCI to occluded LAD. Residual severe LCX and RCA disease with subsequent staged PCI to RCA as inpatient.
Patient 2	In ICU, intubated when developed anterior ST elevation. Felt too unwell to transfer and treated with thrombolysis. Improved initially with further ECG changes 1 week later. RWMA on echocardiogram consistent with ECG changes. Transferred across with PCI Left main stem to LAD. Residual severe RCA disease which was not treated.
Patient 3	ST elevation on ECG with chest pain. Anticoagulated for AF. Normal coronaries.
Patient 4	ST elevation with chest pain initially but pain settled with ECG settled on repeat. Severe metabolic disturbances with DKA. History of CABG. Medically managed as ECG and pain resolved.

PPCI: primary percutaneous coronary intervention, ICU: intensive care unit, RWMA: regional wall motion abnormality, PCI: percutaneous coronary intervention, LMS: left main stem, LAD: left anterior descending artery. RCA: right coronary artery, STEMI: ST elevation myocardial infarction, AF: atrial fibrillation. DKA: Diabetic ketoacidosis, CABG: Coronary artery bypass grafting.

Supplementary Table 3: Details of arrhythmias in COVID-19 patients

Arrhythmia	**n (%)**
Fast ventricular rate AF	18 (54.5%)
Bradycardia	4 (12.1%)
SVT	3 (9.1%)
Asystole	2 (6.1%)
VT	2 (6.1%)
SVT/AF	1 (3.0%)
Atrial flutter with pauses	1 (3.0%)
PEA arrest	1 (3.0%)
VF	1 (3.0%)

AF: atrial fibrillation, SVT: supraventricular tachycardia, VT: ventricular tachycardia, PEA: pulseless electrical activity, VF: ventricular fibrillation

Supplementary Table 4: Details of echocardiogram in COVID-19 patients

Patient	**LV function**	**RV function**	**Valve disease**	**Other**
Patient 1 – 18	Normal size and function	Normal size and function	No significant abnormality	
Patient 19 -20	Severely impaired	Normal size and function	No significant abnormality	
Patient 21	Moderately impaired	Normal size and function	No significant abnormality	
Patient 22	Mild/moderate impairment	Normal size and function	No significant abnormality	
Patient 23	Mildly impaired	Normal size and function	No significant abnormality	
Patient 24	Moderate impaired with anterior wall RWMA	Normal size and function	No significant abnormality	LV improved to mildly impaired after PCI
Patient 25	Normal size and function	Pressure overloaded RV	No significant abnormality	
Patient 26	Normal size and function	Severely impaired	No significant abnormality	

Patient 27	Normal size and function	Dilated and impaired RV. On repeat scan RV function improved to normal 1 week later.	No significant abnormality	
Patient 28	Normal size and function	Dilated RV with preserved function	No significant abnormality	
Patient 29	Normal size and function	Dilated RV with impaired function	No significant abnormality	
Patient 30	Normal size and function	Normal size and function	No significant abnormality	Chronic pericardial effusion - unchanged
Patient 31	Normal size and function	Normal size and function	Mild/Moderate TR	
Patient 32	Normal size and function	Normal size and function	Moderate MR. Well seated AVR with no AR	
Patient 33	Normal size and function	Mildly dilated	No significant abnormality	
Patient 34	Normal size and function	Normal size and function	Moderate TR	
Patient 35	Normal size and function	Normal size and function	Moderate AS	

LV: left ventricle, RV: right ventricle, RWMA: regional wall motion abnormality, TR: tricuspid regurgitation, MR: mitral regurgitation, AR: aortic regurgitation, AVR: aortic valve replacement, PCI: percutaneous coronary intervention

Supplementary definitions

- Acute kidney injury was identified according to the Kidney Disease: Improving Global Outcomes definitions 3.
- Disseminated intravascular coagulation (DIC) was defined according to the International Society of Thrombosis and Haemostasis (ISTH) scoring system to provide an objective measurement of DIC. It was also noted that diagnosis consists of both clinical features and lab criteria[4].
- Body Mass index (BMI) was calculated using weight / $(height)^2$ (kg/m^2)
- Acute myocardial injury was defined as a peak troponin above 99th percentile of upper reference limit as per our laboratory guidelines (adjusted according to sex).

- Cardiovascular disease was defined as patients having hypertension, coronary artery disease/ ischemic heart disease, valvular disease, impaired left ventricular function, arrhythmia, peripheral vascular disease or cerebrovascular disease

Statistical analysis

The Chi-squared test was used to compare categorical data while the independent samples t-test or the Mann-Whitney U tests were used to assess differences between continuous variables (appropriate test employed for parametric and nonparametric data).

Supplementary Table 5: Statistical tests used

Statistical Test Used	Data Type	Distribution
Independent t-test	Continuous	Parametric
Mann-Whitney U Test	Continuous	Non-parametric
Chi-square Test	Categorical	

Supplementary Table 6: Ethnicity breakdown

Ethnicity	**n (%)**
White	172 (34.5%)
Black	124 (24.9)
Indian/Pakistani	57 (11.4%)
Other Asian	54 (10.8%)
Mixed	18 (3.6%)
Other	5 (1.0%)
Unknown	68 (13.7%)