

Table 1: Phenotype domains used for clinical metrics

Phenotype domain	Clinical Variables
Demographics	Age, gender, ethnicity
Admission symptoms	Breathless, chest pain, orthnopea, paroxysmal nocturnal dyspnoea, peripheral oedema, palpitations, syncope
Admission signs	Admission heart rate (HR), admission systolic blood pressure (SBP), admission diastolic blood pressure (DBP), admission mean blood pressure (MAP), admission weight, height, admission body mass index, discharge weight
Risk factors	Atrial fibrillation, hypertension, diabetes, chronic obstructive pulmonary disease, coronary artery disease, history of cerebrovascular disease, hypercholesterolaemia, obstructive sleep apnoea, iron deficiency, obesity
Comorbidities	Depression, dementia, amyloidosis, cancer
12 lead electrocardiogram (ECG)	Rhythm, rate, QRS duration, evidence of atrioventricular (AV) block, T wave inversion (TWI), evidence of left ventricular hypertrophy (LVH), presence of pacemaker
Laboratory tests	Haemoglobin, mean cell volume (MCV), packed cell volume (PCV), white blood cells (WBC), platelets, sodium, potassium, glomerular filtration rate (GFR), albumin, HbA1C, glucose, iron levels, transferrin saturations (TSAT), ferritin, troponin
Echocardiography	Left ventricular ejection fraction (LVEF), left atrial diameter left atrial area, right atrial area, E wave, E deceleration time, Lateral e', lateral S, E/e', dilated LV, A wave, E:A, gradient, regional wall motion abnormalities, left ventricular hypertrophy, tricuspid annular planesystolic excursion (TAPSE), pulmonary artery systolic pressure (PASP), mitral regurgitation, tricuspid regurgitation, aortic regurgitation, aortic stenosis
Outcome	Length of stay, time to heart failure hospitalization, time to mortality