Demographics	
Age (years)	70 (10)
Male – no. (%)	91 (76)
Female – no. (%)	29 (24)
Weight (kg)	86.8 (19.9)
Height (m)	1.7 (0.1)
BMI (kg/m^2)	30.2 (6.4)
Waist circumference (cm)	102.3 (16.3)
Hip circumference (cm)	106.9 (14.0)
SBP (mm Hg)	126 (23)
HR (beats/min)	68 (13)
Medical history	
NYHA I – no. (%)	34 (28)
NYHA II – no. (%)	71 (59)
NYHA III – no. (%)	15 (13)
Atrial Fibrillation (%)	37 (31)
Hypertension (%)	63 (53)
Ischaemic heart disease (%)	78 (65)
Diabetes (%)	40 (33)
Previous Cancer (%)	16 (13)
Medication	
ACE-I (%)	86 (72)
ARB (%)	27 (23)
Beta blocker (%)	101 (84)
Loop diuretic (%)	71 (59)
Blood results	
Urea (mmol/L)	6.5 (5.3–9.5)
Creatinine (µmol/L)	95 (80–118)
Bilirubin (µmol/L)	16 (7)
Albumin (g/L)	40 (3)
NTproBNP (ng/L)	845 (355-1368)
Echocardiography	
LVEDV (ml)	139 (52)
LVEF (%)	44 (14)
LAD (mm)	4.0 (0.7)
TAPSE (mm)	18 (5)

Table 1: Baseline characteristics. Continuous variables are shown as mean (standard deviation), categorical variables as percentage. NTproBNP is shown as median (Q1-Q3). List of abbreviations: BMI: body mass index, SBP: systolic blood pressure, HR: heart rate, ACE-I: angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, NTproBNP: N-terminal pro B-type natriuretic peptide, LVEDV: left ventricular end-diastolic volume, LVEF: left ventricular ejection fraction, LAD: left atrial diameter, TAPSE: tricuspid annular plane systolic excursion.

	DEXA kg (SD)	BIA kg (SD)	Mean difference (BIA − DEXA, kg)	95% limits of agreement	% outside limits of agreement
Mean LM	51.1 (9.9)	56.6 (10.9)	5.5	-1.3, 12.3	6
Mean FM	32.3 (12.2)	27.2 (11.7)	-5.1	-11.7, 1.5	4
Mean BM	2.8 (0.6)	3.0 (0.5)	0.2	-0.5, 0.8	5

Table 2: Body composition measured by BIA and DEXA. DEXA: dual-energy X-ray absorptiometry, BIA: bioelectrical impedance analysis, LM: lean mass, FM: fat mass, BM: bone mass.

	Pearson Correlation – R (p value)										
	Age (Years)	BMI (kg/m^2)	Creatinine (mmol/L)	Log NTproBNP	hsCRP (mg/L)	LVEF (%)	LA volume	TAPSE (mm)	Hip Circ (cm)	Waist Circ (cm)	Waist hip Ratio
DEXA FM - Kg	-0.35 (<0.001)	0.91 (<0.001)	-0.15 (0.09)	-0.21 (0.02)	0.16 (0.08)	0.16 (0.09)	0.01 (0.89)	0.24 (0.01)	0.82 (<0.001)	0.76 (<0.001)	0.20 (0.03)
DEXA LM - Kg	-0.23 (0.01)	0.58 (<0.001)	0.09 (0.33)	-0.14 (0.12)	0.10 (0.27)	0.14 (0.14)	0.38 (<0.001)	0.05 (0.63)	0.58 (<0.001)	0.74 (<0.001)	0.51 (<0.001)
DEXA BM - Kg	-0.15 (0.11)	0.37 (<0.001)	0.07 (0.42)	-0.16 (0.08)	-0.01 (0.99)	0.18 (0.05)	0.26 (0.01)	0.11 (0.23)	0.38 (<0.001)	0.58 (<0.001)	0.50 (<0.001)
BIA FM - Kg	-0.36 (<0.001)	0.91 (<0.001)	-0.15 (0.10)	-0.18 (0.53)	0.193 (0.03)	0.13 (0.17)	0.06 (0.51)	0.22 (0.02)	0.81 (<0.001)	0.72 (<0.001)	0.14 (0.13)
BIA LM - Kg	-0.18 (0.05)	0.58 (<0.001)	0.07 (0.42)	-0.20 (0.03)	0.03 (90.77)	0.19 (0.04)	0.27 (0.01)	0.10 (0.28)	0.60 (<0.001)	0.77 (<0.001)	0.54 (<0.001)
BIA BM - Kg	-0.16 (0.07)	0.58 (<0.001)	0.08 (0.39)	-0.20 (0.03)	0.03 (0.72)	0.19 (0.04)	0.27 (0.01)	0.10 (0.28)	0.60 (<0.001)	0.77 (<0.001)	0.55 (<0.001)

Table 3: Correlations between body composition and patient demographics, kidney function, NTproBNP, echocardiographic findings and measures of obesity. BMI: body mass index, NTproBNP: N-terminal pro B-type natriuretic peptide, hsCRP: high sensitivity C reactive protein, LVEF: left ventricular ejection fraction, LA: left atrial, TAPSE: Tricuspid annular plane systolic excursion, Circ: Circumference, DEXA: dual energy X-ray absorptiometry, BIA: bioelectrical impedance analysis, FM: fat mass, LM: lean mass, BM: bone mass. Correlations were done in 120 patients, but for LA volume, TAPSE, Waist and Hip circumference n= 118.
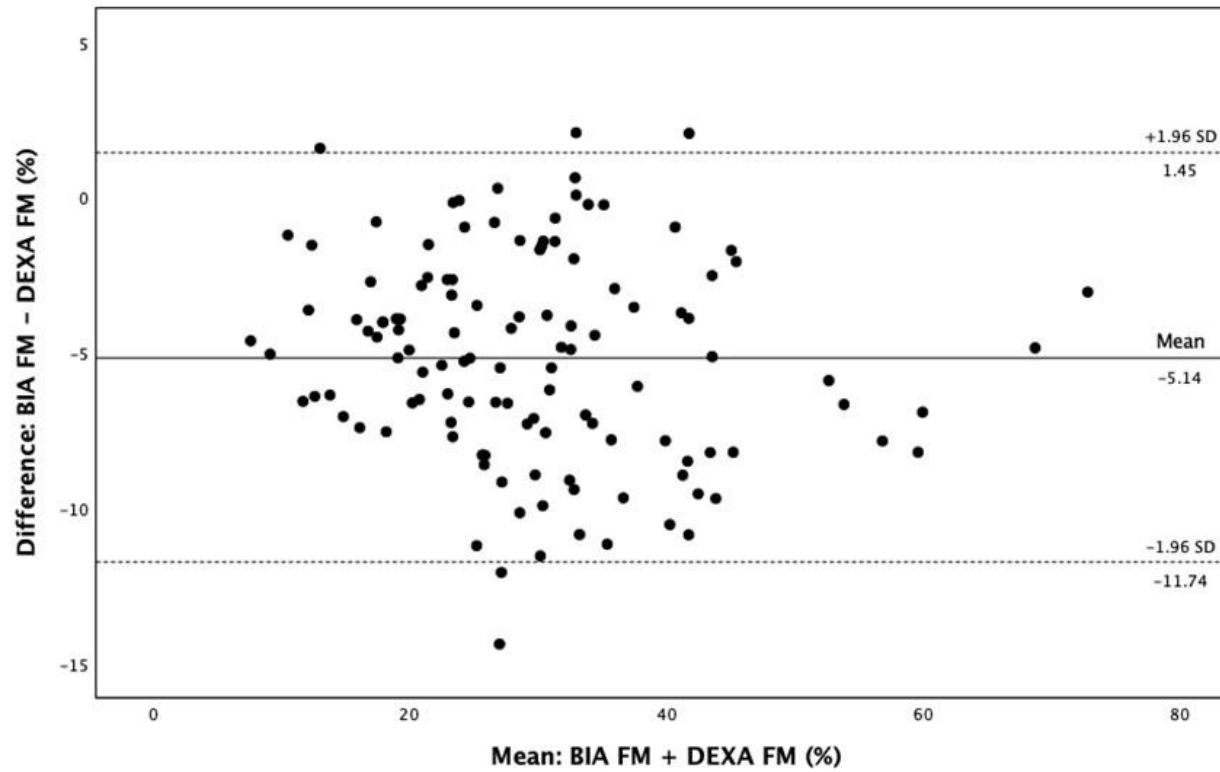
Figure 1: Bland-Altman analysis for FM measured by BIA and DEXA.
FM: fat mass, BIA: bioelectrical impedance analysis, DEXA: dual-energy X-ray absorptiometry.
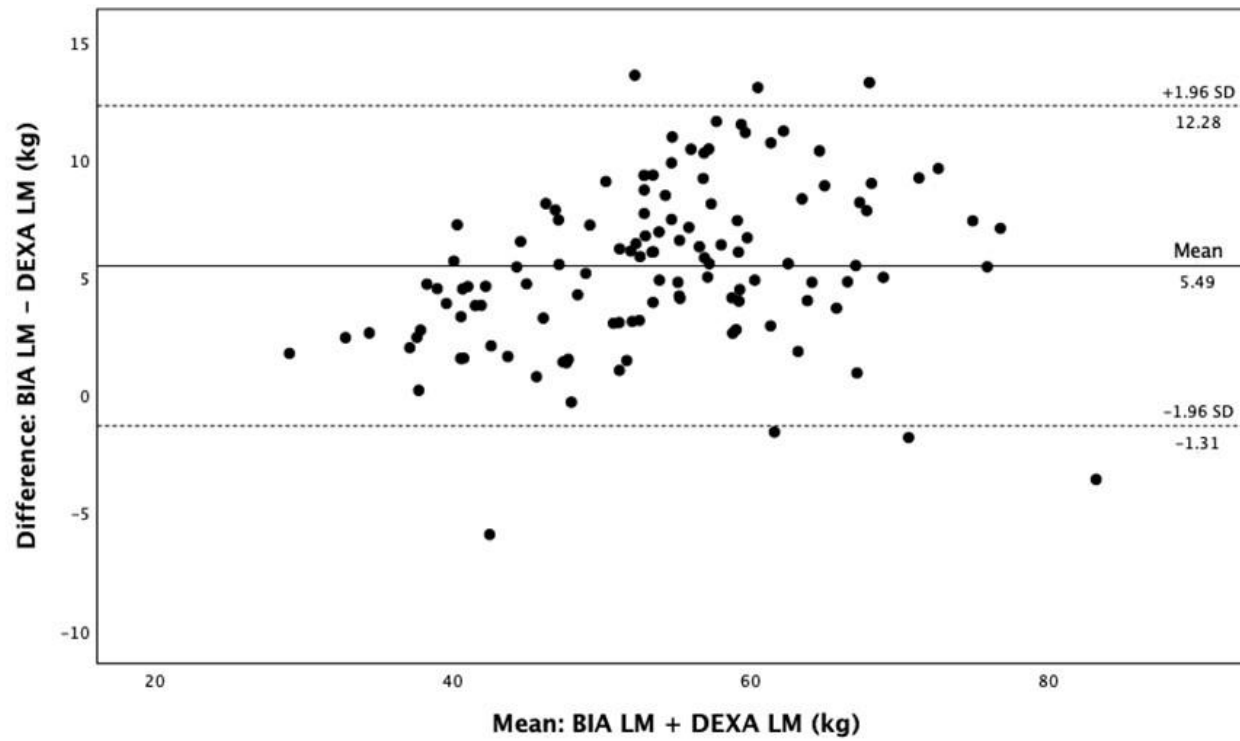
Figure 2: Bland-Altman analysis for LM measured by BIA and DEXA.
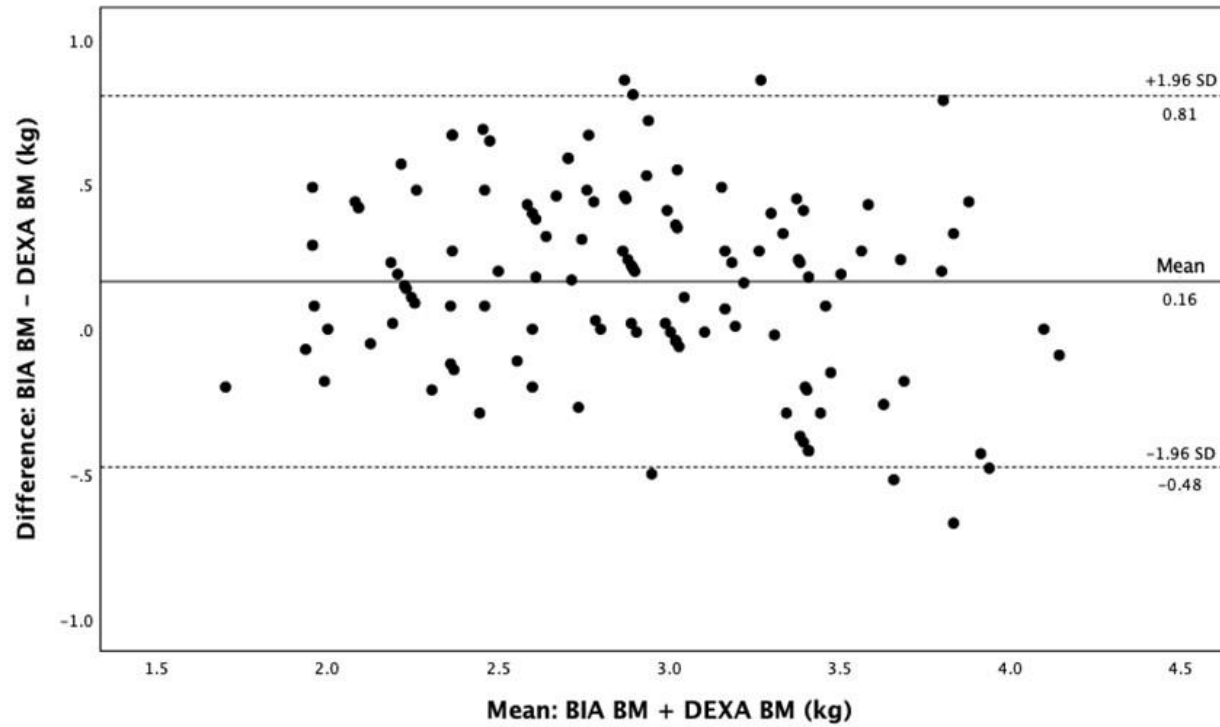LM: lean mass, BIA: bioelectrical impedance analysis, DEXA: dual-energy X-ray absorptiometry.

Figure 3: Bland-Altman analysis for BM measured by BIA and DEXA.
BM: bone mass, BIA: bioelectrical impedance analysis, DEXA: dual-energy X-ray absorptiometry.