

Supplemental Material

Table S1. Baseline Characteristics in Alberta HEART study groups.

Patient Characteristics	Controls N (%)	At-risk, N (%)	HFpEF, N (%)	HFrEF, N (%)	Total N	P
All	98 (15.8)	163 (26.2)	191 (30.8)	169 (27.2)	621	
Male	38 (38.8)	88 (54.0)	99 (51.8)	127 (75.1)	352 (56.7)	<.0001
Age at enrollment, median(IQR)	61.5 (53.0, 71.0)	64.0 (60.0, 72.0)	73.0 (63.0, 80.0)	64.0 (57.0, 72.0)	66.0 (59.0, 75.0)	<.0001
NYHA Functional Classification, N			171	159		0.3413
Class I	NA	NA	41 (24.0)	38 (23.9)		
Class II	NA	NA	86 (50.3)	76 (47.8)		
Class III	NA	NA	44 (25.7)	42 (26.4)		
Class IV	NA	NA	0 (0.0)	3 (1.9)		
Medical comorbidity						
Atrial fibrillation	2 (2.0)	25 (15.3)	91 (47.6)	71 (42.0)	189 (30.4)	<.0001
Coronary artery disease	1 (1.0)	14 (8.6)	43 (22.5)	31 (18.3)	89 (14.3)	<.0001
Diabetes	0 (0.0)	52 (31.9)	82 (42.9)	62 (36.7)	196 (31.6)	<.0001
COPD	0 (0.0)	53 (32.5)	70 (36.6)	88 (52.1)	211 (34.0)	<.0001
Lab measurements, median(IQR)						
Hemoglobin, g/dL (N=538)	144.0 (133.0, 150.0)	144.0 (133.0, 151.0)	134.0 (122.0, 145.0)	138.0 (128.0, 148.0)	139.5 (129.0, 149.0)	<.0001
BNP, pg/mL (N=556)	23.0 (13.0, 41.0)	30.0 (17.0, 58.0)	118.0 (59.0, 255.0)	173.0 (82.0, 364.0)	70.0 (26.5, 193.0)	<.0001
NT-proBNP, pg/mL (N=555)	55.0 (27.9, 93.9)	9.0 (4.1, 21.1)	599.6 (198.7, 1403.0)	963.3 (407.6, 2044.9)	241.0 (66.0, 948.0)	<.0001
BMI (N=617)	25.4 (23.5, 29.4)	30.4 (26.5, 33.9)	30.4 (27.2, 34.9)	29.2 (26.4, 33.4)	29.4 (25.7, 33.5)	<.0001
Signs and symptoms						
Leg edema	1 (1.0)	32 (19.6)	87 (45.5)	40 (23.7)	160 (25.8)	<.0001
Shortness of breath	2 (2.0)	50 (30.7)	123 (64.4)	97 (57.4)	272 (43.8)	<.0001
Fatigue	5 (5.1)	48 (29.4)	116 (60.7)	100 (59.2)	269 (43.3)	<.0001
Heart sounds S3	0 (0.0)	2 (1.2)	14 (7.3)	28 (16.6)	44 (7.1)	<.0001

Elevated JVP	0 (0.0)	13 (8.0)	83 (43.5)	62 (36.7)	158 (25.4)	<.0001
PND	0 (0.0)	4 (2.5)	26 (13.6)	9 (5.3)	39 (6.3)	<.0001
PHJR	0 (0.0)	13 (8.0)	30 (15.7)	23 (13.6)	66 (10.6)	0.0002
Echocardiographic parameters, median(IQR)						
LVEF, % (N=572)	64.9 (60.5, 67.5)	64.3 (58.4, 69.0)	59.0 (52.0, 65.3)	37.1 (27.8, 43.8)	58.3 (44.5, 65.5)	<.0001
LVEDVI, ml/m ² (N=567)	50.1 (41.1, 60.0)	46.3 (35.6, 59.8)	51.5 (39.4, 66.1)	74.6 (58.7, 108.9)	54.0 (41.7, 71.5)	<.0001
LVMI, g/m ² (N=588)	68.7 (55.2, 80.7)	79.7 (66.5, 98.0)	91.7 (77.2, 115.2)	115.6 (92.4, 141.4)	90.1 (70.6, 114.9)	<.0001
RVSP, mmHg (N=290)	25.2 (22.1, 27.7)	30.4 (25.8, 34.9)	34.0 (28.4, 43.4)	35.0 (29.0, 46.1)	31.8 (26.4, 39.4)	<.0001
E/e' Average (N=519)	8.2 (6.9, 9.8)	9.3 (7.7, 11.5)	12.6 (9.9, 15.5)	11.6 (8.8, 16.5)	10.1 (8.1, 13.6)	<.0001
Medications						
ACEi/ARB	3 (3.1)	124 (76.1)	158 (82.7)	153 (90.5)	438 (70.5)	<.0001
Betablocker	1 (1.0)	62 (38.0)	159 (83.2)	161 (95.3)	383 (61.7)	<.0001
Loop diuretic	0 (0.0)	15 (9.2)	131 (68.6)	103 (60.9)	249 (40.1)	<.0001
MRA (spironolactone)	0 (0.0)	8 (4.9)	38 (19.9)	74 (43.8)	120 (19.3)	<.0001
Digoxin	0 (0.0)	2 (1.2)	19 (9.9)	30 (17.8)	51 (8.2)	<.0001

All comparisons are across the five groups for available data, with the exception of NYHA Functional Classification that is compared between HFpEF and HFrEF groups only. COPD= chronic obstructive pulmonary disease; JVP=; LVEDVI: left ventricular end-diastolic volume index; LVEF: left ventricular ejection fraction; LVMI: left ventricular mass index; PHJR= Positive hepatojugular reflex; RVSP= right ventricle systolic pressure; E/e'= left ventricular filling pressure calculated by ratio between early mitral inflow velocity and mitral annular early diastolic velocity.

Table S2. Availability of health status data at baseline and follow-up in the Alberta HEART cohort (n=621).

	Patients with available KCCQ*, n	Patients with available FACT-Anemia, n	Patients with available EQ-5D, n
Baseline	555	458	521
6 months	347	323	339
12 months	415	364	372
Baseline and 6 months	332	280	310
Baseline and 12 months	392	310	342
Baseline, 6 months and 12 months	320	260	287

*both components are missing at the same time; KCCQ: Kansas City Cardiomyopathy Questionnaire.

Table S3. Baseline characteristics by availability of KCCQ Overall Summary Score in the Alberta HEART cohort of 621 participants.

Participants Characteristics	Missing KCCQ data at baseline and 12 month, N (%)	KCCQ data only available at baseline, N (%)	Available baseline and 12 months KCCQ data, N (%)	P*
All	66 (10.6)	163 (26.2)	392 (63.1)	
AB Heart group				<.0001
Control	20 (30.3)	52 (31.9)	26 (6.6)	
At risk	22 (33.3)	34 (20.8)	107 (27.3)	
HFpEF	14 (21.2)	36 (22.1)	141 (36.0)	
HFrEF	10 (15.2)	41 (25.2)	118 (30.1)	
Male	24 (36.4)	86 (52.8)	242 (61.7)	0.0003
Age at enrollment, median(IQR)	63.5 (59.0, 76.0)	65.0 (57.0, 74.0)	67.0 (59.0, 76.0)	0.374
NYHA Functional Classification, N	0	77	253	0.0201
Class I	NA	13 (16.9)	66 (26.1)	
Class II	NA	34 (44.2)	128 (50.6)	
Class III	NA	28 (36.4)	58 (22.9)	
Class IV	NA	2 (2.6)	1 (0.4)	
Medical comorbidity				
Atrial fibrillation	15 (22.7)	31 (19.0)	143 (36.5)	<.0001
Coronary artery disease	5 (7.6)	25 (15.3)	59 (15.1)	0.2525
Diabetes	19 (28.8)	44 (27.0)	133 (33.9)	0.2434
COPD	15 (22.7)	48 (29.4)	148 (37.8)	0.0212
Lab measurements, median(IQR)				
Hemoglobin, g/dL (N=538#)	135.0 (127.0, 145.5)	140.0 (130.0, 148.0)	140.0 (129.0, 150.0)	0.4777
BNP, pg/mL (N=556)	47.0 (19.0, 245.0)	56.0 (24.0, 160.0)	83.0 (30.0, 198.0)	0.127
NT-proBNP,pg/mL (N=555)	116.7 (46.5, 678.3)	170.0 (57.9, 770.4)	334.1 (77.8, 1099.4)	0.0118
BMI (N=617)	29.5 (24.1, 33.0)	28.5 (24.7, 32.9)	29.5 (26.5, 34.2)	0.0328
Signs and symptoms				
Leg edema	13 (19.7)	21 (12.9)	126 (32.1)	<.0001

Shortness of breath	22 (33.3)	54 (33.1)	196 (50.0)	0.0002
Fatigue	17 (25.8)	52 (31.9)	200 (51.0)	<.0001
Heart sounds S3	1 (1.5)	8 (4.9)	35 (8.9)	0.0427
Elevated JVP	11 (16.7)	34 (20.9)	113 (28.8)	0.0325
PND	7 (10.6)	8 (4.9)	24 (6.1)	0.2676
PHJR	0 (0.0)	8 (4.9)	58 (14.8)	<.0001
Echocardiographic parameters, median(IQR)				
LVEF, % (N=572)	63.9 (57.6, 66.9)	60.5 (46.0, 66.6)	56.5 (42.7, 64.4)	0.0004
LVEDVI, ml/m ² (N=567)	49.8 (42.1, 64.2)	57.7 (47.5, 75.4)	52.6 (40.0, 70.9)	0.0052
LVMI, g/m ² (N=588)	80.8 (68.3, 105.0)	92.1 (72.3, 120.0)	90.2 (70.4, 114.6)	0.0913
RVSP, mmHg (N=290)	29.1 (24.2, 36.0)	32.1 (26.7, 41.3)	32.0 (26.8, 39.8)	0.257
E/e' Average (N=519)	10.0 (8.2, 13.1)	9.8 (8.0, 13.0)	10.3 (8.1, 13.7)	0.466

*All characteristics are compared across the three groups, with the exception of NYHA Functional Classification that is compared between two groups restricted to HF participants with NYHA available; COPD: chronic obstructive pulmonary disease; E/e': left ventricular filling pressure; JVP: jugular vein pressure; KCCQ: Kansas City Cardiomyopathy Questionnaire; LVEDVI: left ventricular end-diastolic volume index; LVEF: left ventricular ejection fraction; LVMI: left ventricular mass index; N: number; OSS: KCCQ Overall Summary Score; PHJR: Positive hepatojugular reflex; RVSP: right ventricle systolic pressure.

Table S4. Health status measurements at baseline and 12 months using KCCQ, EQ-5D and FACT-Anemia.

	Controls	At-risk	HFpEF	HFrEF	p
Baseline					
KCCQ CSS, N	78	141	177	159	
Mean ± SD	96.9 (9.3)	88.7 (16.1)	70.6 (21.1)	74.9 (21.4)	<.0001
KCCQ OSS, N	78	141	177	159	
Mean ± SD	97.2 (7.2)	88.4 (17.0)	69.5 (20.9)	71.7 (22.0)	<.0001
FACT-Anemia, N	45	106	161	146	
Mean ± SD	166.9 (19.5)	151.4 (24.2)	132.2 (28.9)	133.0 (32.2)	<.0001
EQ-5D, N	81	130	161	149	
Mean ± SD	86.1 (12.7)	76.9 (15.4)	67.0 (17.7)	65.6 (18.7)	<.0001
12-month F/U					
KCCQ CSS, N	32	114	150	119	
Mean ± SD	99.1 (2.3)	89.7 (14.3)	69.7 (21.2)	76.0 (20.4)	<.0001
KCCQ OSS, N	32	114	150	119	
Mean ± SD	99.3 (1.9)	89.8 (13.8)	68.8 (22.1)	72.5 (21.9)	<.0001
FACT-Anemia, N	15	98	142	109	
Mean ± SD	175.2 (10.7)	151.8 (23.9)	132.5 (31.2)	136.5 (29.5)	<.0001
EQ-5D, N	30	98	134	110	
Mean ± SD	90.1 (7.2)	77.7 (16.3)	64.4 (20.4)	67.4 (19.8)	<.0001

CSS: KCCQ Clinical Summary Score; EQ-5D: EuroQOL five dimensions questionnaire; FACT-An: Functional Assessment of Cancer Therapy—Anemia; HFpEF: heart failure with preserved ejection fraction; HFrEF: Heart failure with reduced ejection fraction; KCCQ: Kansas City Cardiomyopathy Questionnaire; N: number; OSS: KCCQ Overall Summary Score; SD: standard deviation.

Table S5. The change of NYHA functional class in patients with HF with and without reduced ejection fraction.

	All HF, N=360	HFpEF, N=191	HFrEF, N=169	p
NYHA change in 12 months, N	274	148	126	
+2 NYHA class	3 (1.1)	3 (2.0)	0 (0.0)	0.2281
+1 NYHA class	40 (14.6)	23 (15.5)	17 (13.5)	
No change	137 (50.0)	75 (50.7)	62 (49.2)	
-1 NYHA class	81 (29.6)	43 (29.1)	38 (30.2)	
-2 NYHA class	13 (4.7)	4 (2.7)	9 (7.1)	

HF: heart failure; HFpEF: heart failure with preserved ejection fraction; HFrEF: Heart failure with reduced ejection fraction; N: number; NYHA: New York Heart Association functional class.

Table S6. Predictors for change in KCCQ Overall Summary Score between baseline and 12m in patients with HF.

	Linear Regression Estimate (95% CI) (N=518 KCCQ OSS records from 259 patients)	P	Mixed model Estimate (95% CI) (N=595 KCCQ OSS records from 336 patients)	P	n missing
HFpEF vs HFrEF	0.66 (-4.42 , 5.73)	0.7994	0.65 (-3.98 , 5.27)	0.7846	0
Age	-0.04 (-0.21 , 0.13)	0.617	-0.04 (-0.20 , 0.11)	0.6035	0
Male vs Female	1.37 (-2.98 , 5.71)	0.5374	1.24 (-2.82 , 5.30)	0.5499	0
Ethnicity					0
Caucasian	Ref		Ref		
Aboriginal	-8.03 (-24.43 , 8.37)	0.3371	-8.15 (-21.58 , 5.28)	0.2342	
South Asian	-2.89 (-15.75 , 9.97)	0.6599	-2.74 (-14.49 , 9.01)	0.6478	
Other	5.28 (-3.53 , 14.09)	0.2401	5.46 (-2.38 , 13.31)	0.1724	
Atrial fibrillation	-1.52 (-5.25 , 2.22)	0.4257	-1.54 (-5.00 , 1.93)	0.3847	0
Coronary artery disease	-4.03 (-7.72 , -0.33)	0.0329	-4.04 (-7.44 , -0.65)	0.0196	0
Diabetes	-0.99 (-5.10 , 3.12)	0.6358	-0.91 (-4.66 , 2.85)	0.636	0
COPD	-5.81 (-10.21 , -1.42)	0.0095	-5.79 (-9.86 , -1.72)	0.0053	0
Baseline KCCQ OSS score	-0.27 (-0.36 , -0.17)	<.0001	-0.27 (-0.35 , -0.18)	<.0001	0
BMI	-0.19 (-0.48 , 0.11)	0.219	-0.19 (-0.45 , 0.08)	0.1719	2/595 (0.3)
Leg edema	-0.23 (-4.34 , 3.88)	0.9113	-0.23 (-3.98 , 3.51)	0.9033	0
Shortness of breath	-0.94 (-4.80 , 2.92)	0.6339	-0.93 (-4.44 , 2.57)	0.6019	0
Fatigue	-0.78 (-4.67 , 3.11)	0.6929	-0.76 (-4.33 , 2.80)	0.6749	0
Heart sounds S3	-1.57 (-6.77 , 3.63)	0.5542	-1.57 (-6.50 , 3.36)	0.5327	0
Elevated JVP	-3.83 (-7.79 , 0.12)	0.0575	-3.84 (-7.47 , -0.21)	0.0383	0
PND	-0.56 (-7.02 , 5.90)	0.8647	-0.63 (-6.58 , 5.32)	0.8356	0
PHJR	1.51 (-3.25 , 6.28)	0.5336	1.53 (-2.99 , 6.05)	0.5081	0
Hemoglobin per 1g/dL	0.00 (-0.14 , 0.14)	0.9935	0.02 (-0.11 , 0.14)	0.8151	102/595 (17.1)

BNP per 10 pg/mL at baseline		0.10 (-0.06 , 0.26)	0.2042	0.10 (-0.03 , 0.24)	0.1426	57/595 (9.6)
	Change	0.06 (-0.11 , 0.23)	0.5012	0.06 (-0.07 , 0.19)	0.3751	37/259 (14.3)
NTproBNP per 100 pg/mL at baseline		-1.01 (-2.65 , 0.74)	0.2251	-0.97 (-2.35 , 0.42)	0.1705	60/595 (10.1)
	change	-1.57 (-3.41 , 0.32)	0.0946	-1.55 (-3.00 , -0.11)	0.0355	38/259 (14.7)
LVEF per 1% at baseline		-0.18 (-0.42 , 0.05)	0.1301	-0.18 (-0.38 , 0.03)	0.0872	56/595 (9.4)
	change	-0.25 (-0.46 , -0.05)	0.017	-0.25 (-0.41 , -0.09)	0.0019	53/259 (20.5)
LVEDVI per 1 ml/m ² at baseline		-0.08 (-0.21 , 0.04)	0.2073	-0.08 (-0.19 , 0.03)	0.1624	58/595 (9.7)
	change	-0.05 (-0.17 , 0.06)	0.3803	-0.05 (-0.14 , 0.04)	0.2856	51/259 (19.7)
LVMI per 1 g/m ² at baseline		0.04 (-0.04 , 0.12)	0.2874	0.04 (-0.03 , 0.11)	0.2385	28/595 (4.7)
	change	0.04 (-0.03 , 0.12)	0.2582	0.04 (-0.01 , 0.10)	0.1239	19/259 (7.3)
E/e' Average at baseline		0.05 (-0.32 , 0.41)	0.8011	0.05 (-0.28 , 0.37)	0.7666	124/595 (20.4)
	change	0.05 (-0.26 , 0.35)	0.7544	0.05 (-0.19 , 0.28)	0.6863	79/259 (30.5)

The linear regression modelled changes in KCCQ OSS as follows:

$$\Delta KCCQ OSS_i = \alpha_0 + \alpha_1 KCCQ OSS_{Baseline,i} + \alpha_2 BNP_{Baseline,i} + \alpha_3 \Delta BNP_i + \dots + \varepsilon_i$$

Changes in response and predictors were evaluated between baseline and 12 month. The model was estimated using data on HF participants with KCCQ OSS available at baseline and 12 month (N=259).

The mixed model modelled KCCQ OSS at baseline and 12 month as follows:

$$KCCQ\ OSS_{Baseline,i} = c_i + \alpha_0 + \alpha_1 KCCQ\ OSS_{Baseline,i} + \alpha_2 BNP_{Baseline,i} + \dots + \varepsilon_{Baseline,i}$$

$$KCCQ\ OSS_{12\ month,i} = c_i + b_0 + b_1 KCCQ\ OSS_{Baseline,i} + b_2 BNP_{Baseline,i} + b_3 \Delta BNP_i + \dots + \varepsilon_{12\ month,i}$$

Changes in response and predictors were evaluated between baseline and 12 month. The model was estimated using data on HF participants with KCCQ OSS available at baseline (N=336).

Missing predictors were imputed (hemoglobin, BNP at baseline, BNP at 12 month, NTproBNP at baseline, NTproBNP at 12 month, EF at baseline, EF at 12 month, LVEDVI at baseline, LVEDVI at 12 month, LV mass index at baseline, LV mass index at 12 month, E/e' average at baseline, E/e' average at 12 month, NYHA at baseline, NYHA at 12 month, creatinine, systolic blood pressure). BMI: body mass index; BNP: brain-type natriuretic peptide; CI: confidence interval; COPD: chronic obstructive pulmonary disease; E/e': the ratio of transmitral Doppler early filling velocity to tissue Doppler early diastolic mitral annular velocity; HFpEF: heart failure with preserved ejection fraction; HFrEF: heart failure with reduced ejection fraction; JVP: jugular vein distension; KCCQ: Kansas City Cardiomyopathy Questionnaire; OSS: KCCQ Overall Summary Score; LVEDVI: left ventricular end-diastolic volume index; LVEF: left ventricular ejection fraction; LVMI: left ventricular mass index; PHJR: Positive hepatojugular reflex; NT-proBNP: Amino-terminal brain-type natriuretic peptide; NYHA: New York Heart Association functional class; PND: paroxysmal nocturnal dyspnea.

Table S7. Baseline, Follow-up and change over 12 months in those with decreased, unchanged, or increased KCCQ.

	12 month F/U			P
	Decrease (≥ 5 pts)	No change (< 5 pts)	Increase (≥ 5 pts)	
HF, n	84	96	79	
KCCQ OSS Baseline, median (IQR)	79 (59, 89)	82 (56, 93)	62 (47, 79)	<.0001
KCCQ OSS 12 month, median (IQR)	60 (40, 75)	82 (56, 95)	81 (66, 92)	<.0001
KCCQ OSS Change, median (IQR)	-14 (-19, -9)	0 (-1, 3)	13 (9, 21)	<.0001
HFpEF, n	52	50	39	
KCCQ OSS Baseline, median (IQR)	78 (60, 85)	84 (60, 97)	57 (45, 74)	<.0001
KCCQ OSS 12 month, median (IQR)	60 (43, 73)	84 (60, 97)	77 (63, 90)	<.0001
KCCQ OSS Change, median (IQR)	-13 (-19, -10)	0 (-1, 3)	16 (9, 22)	<.0001
HFrEF, n	32	46	40	
KCCQ OSS Baseline, median (IQR)	84 (59, 91)	79 (56, 91)	72 (50, 83)	0.038
KCCQ OSS 12 month, median (IQR)	62 (37, 76)	80 (56, 92)	85 (72, 92)	0.0001
KCCQ OSS Change, median (IQR)	-14 (-21, -9)	1 (-2, 3)	11 (7, 18)	<.0001

F/U: follow-up; HF: heart failure; HFpEF: heart failure with preserved ejection fraction; HFrEF: Heart failure with reduced ejection fraction; IQR: interquartile range; KCCQ: Kansas City Cardiomyopathy Questionnaire; N: number; OSS: KCCQ Overall Summary Score; p: p-value.

Table S8. Change of health-related quality of life based on change in NYHA functional class in Alberta HEART cohort.

	-2 NYHA class	-1 NYHA class	No change	+1 NYHA class	+2 NYHA class	p	Total
Heart Failure							
N	12	70	126	35	3		246
ΔKCCQ CSS	9.9 (24.1)	0.2 (14.9)	-0.8 (12.7)	-2.2 (14.6)	-7.8 (19.3)	0.1106	-0.3 (14.5)
ΔKCCQ OSS	9.7 (19.7)	1.7 (14.9)	-0.5 (13.1)	-2.8 (17.4)	-11.5 (17.7)	0.0563	0.2 (14.8)
N	9	59	109	30	3		210
ΔEQ-5D	15.0 (32.3)	0.8 (17.2)	-1.7 (18.5)	-0.9 (21.7)	-5.0 (5.0)	0.1648	-0.2 (19.4)
N	11	58	113	30	3		215
ΔFACT-An	23.2 (30.4)	5.3 (19.5)	-0.7 (17.9)	0.3 (21.2)	-12.6 (11.4)	0.0013	2.1 (20.2)
HFpEF							
N	4	36	68	20	3		131
ΔKCCQ CSS	-3.1 (19.9)	0.5 (15.9)	-1.7 (13.5)	0.1 (16.5)	-7.8 (19.3)	0.8574	-1.0 (14.8)
ΔKCCQ OSS	2.2 (10.2)	1.9 (14.9)	-1.0 (13.4)	-0.3 (17.9)	-11.5 (17.7)	0.5741	-0.3 (14.5)
N	3	29	58	17	3		110
ΔEQ-5D	16.7 (46.2)	-0.3 (15.7)	-3.7 (18.8)	2.8 (19.1)	-5.0 (5.0)	0.3314	-1.3 (18.9)
N	4	30	58	17	3		112
ΔFACT-An	25.9 (21.2)	3.7 (19.8)	-3.7 (18.2)	2.0 (25.0)	-12.6 (11.4)	0.0287	-0.0 (20.4)
HFrEF							
N	8	34	58	15	0		115
ΔKCCQ CSS	16.3 (24.5)	-0.1 (14.1)	0.1 (11.8)	-5.1 (11.6)	na	0.005	0.5 (14.2)
ΔKCCQ OSS	13.4 (22.8)	1.4 (15.1)	0.2 (12.8)	-6.1 (16.6)	na	0.0309	0.6 (15.2)
N	6	30	51	13	0		100
ΔEQ-5D	14.2 (28.5)	1.9 (18.8)	0.7 (18.1)	-5.6 (24.7)	na	0.2547	1.0 (20.0)
N	7	28	55	13	0		103
ΔFACT-An	21.6 (36.2)	7.0 (19.4)	2.5 (17.2)	-2.1 (15.6)	na	0.05	4.4 (19.8)

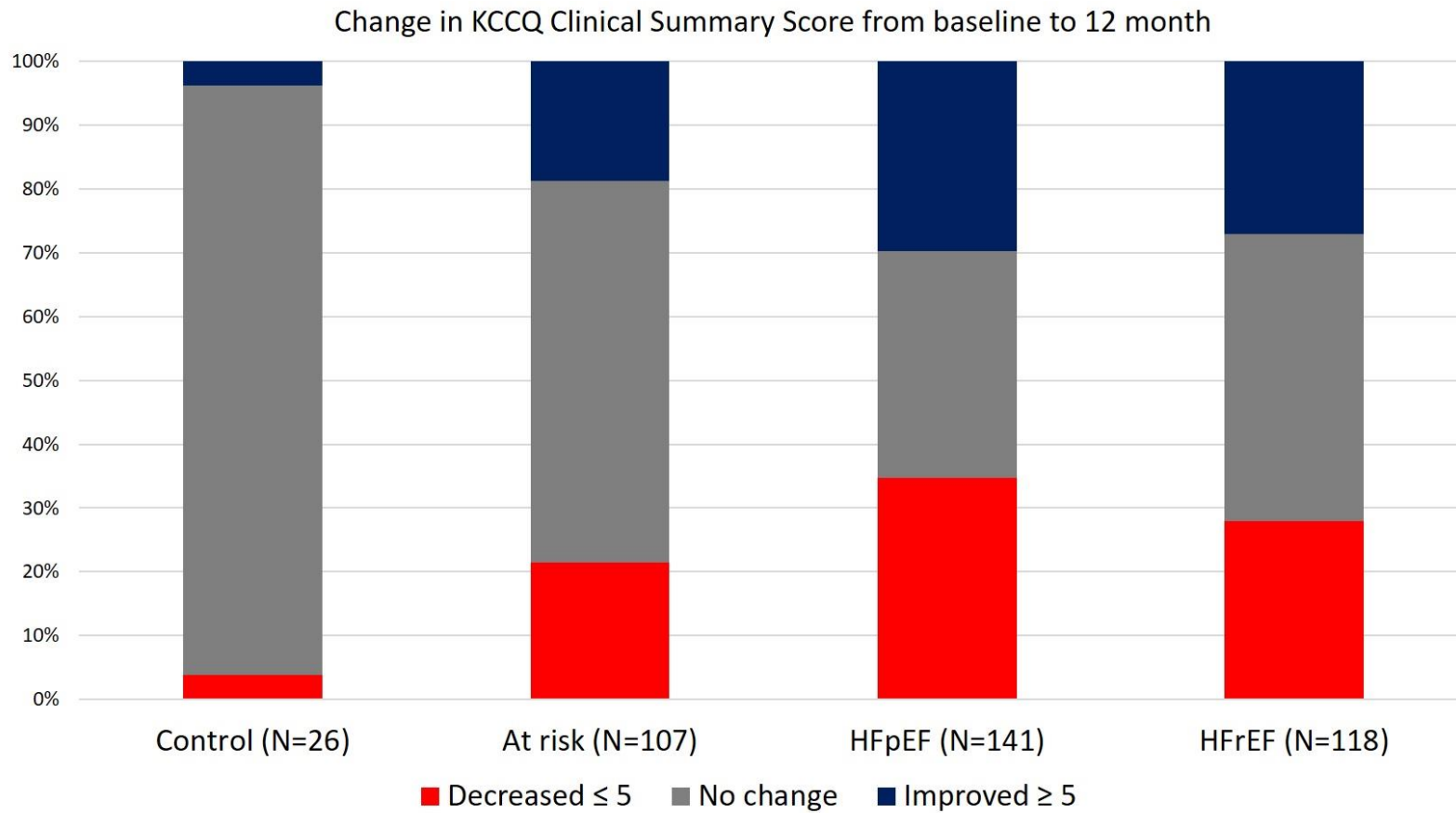
All HRQoL scores are provided as mean ± standard deviation; Δ: change; EQ-5D: EuroQOL five dimensions questionnaire; FACT-An: Functional Assessment of Cancer Therapy—Anemia; HFpEF: heart failure with preserved ejection fraction; HFrEF: Heart failure with reduced ejection fraction; KCCQ: Kansas City Cardiomyopathy Questionnaire; CSS: KCCQ Clinical Summary Score; OSS: KCCQ Overall Summary Score; N: number; NYHA: New York Heart Association functional class.

Table S9. Patients in Alberta HEART according to the baseline KCCQ overall summary score and change over 12 months.

	N	Low baseline KCCQ OSS & decreased	Low baseline KCCQ OSS & unchanged	Low baseline KCCQ OSS & increased	Normal baseline KCCQ OSS & decreased	Normal baseline KCCQ OSS & unchanged	Normal baseline KCCQ OSS & increased
All Alberta HEART subjects, n(%)	392	7 (1.8)	10 (2.5)	20 (5.1)	97 (24.8)	179 (45.6)	79 (20.2)
All HF, n(%)	259	7 (2.7)	10 (3.8)	17 (6.6)	77 (29.7)	86 (33.2)	62 (24.0)
HFrEF, n(%)	118	1 (0.8)	5 (4.2)	8 (6.8)	31 (26.3)	41 (34.7)	32 (27.2)
HFpEF, n(%)	141	6 (4.3)	5 (3.5)	9 (6.4)	46 (32.6)	45 (31.9)	30 (21.3)

HF: heart failure; HFpEF: heart failure with preserved ejection fraction; HFrEF: heart failure with reduced ejection fraction; KCCQ: Kansas City Cardiomyopathy Questionnaire; N: number; OSS: KCCQ Overall Summary Score; Baseline KCCQ was defined as low or normal when baseline KCCQ was <45 and ≥45, respectively. The cutpoint of 5 was used to determine change over 12 months.

Figure S1. The change in KCCQ Clinical Summary Score over 12 months follow-up in patients from different subgroups (N=392).



HFpEF: heart failure with preserved ejection fraction; HFrEF: Heart failure with reduced ejection fraction; KCCQ: Kansas City Cardiomyopathy Questionnaire; N: number.