

Supplemental Material

ESM Table 1. Mean CMR values in participants, stratified by DKD (n=111).

CMR Parameters	With DKD	Without DKD	<i>p</i> -value
Mean (SD)	(n=36)	(n=75)	
LV EDVI	120.88 (34.31)	118.39 (27.90)	0.68
LV ESVI	45.23 (17.51)	44.79 (12.71)	0.88
LV MI	43.58 (10.61)	42.52 (8.39)	0.57
LV RI	0.68 (0.11)	0.65 (0.11)	0.18
LV EF	62.91 (7.10)	62.03 (6.89)	0.53

* CMR: cardiac magnetic resonance; † DKD: diabetic kidney disease; ‡ LV: left ventricle; § EDVI: end-diastolic volume index; || ESVI: end-systolic volume index; ¶ MI: mass index; # RI: remodelling index; ** EF: ejection fraction. Analysis conducted with independent sample t-tests.

ESM Table 2. Unadjusted and multivariable (adjusted) regression analysis of sex and serum CRP with CMR parameters in participants (n=111).

	Unadjusted analysis		Multivariable (adjusted) analysis	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
	(Standard error)		(Standard error)	
CMR Parameters vs. sex (female)				
LV EDVI	-11.49 (2.54)	<0.01	-13.64 (3.14)	<0.01
LV ESVI	-4.39 (1.37)	<0.01	-5.00 (1.71)	<0.01
LV MI	-9.75 (1.50)	<0.01	-10.14 (2.04)	<0.01
LV RI	-0.04 (0.02)	0.05	-0.02 (0.02)	0.26
LV EF	0.16 (1.35)	0.91		
CMR Parameters vs. CRP				
LV EDVI	2.09 (0.92)	0.02	-0.53 (1.23)	0.67
LV ESVI	1.04 (0.47)	0.03	-0.19 (0.67)	0.77
LV MI	1.23 (0.60)	0.04	-0.92 (0.80)	0.25
LV RI	0.02 (0.59)	0.71		
LV EF	0.39 (0.45)	0.39		

* CRP: C-reactive protein; † CMR: cardiac magnetic resonance; ‡ LV: left ventricle; § EDVI: end-diastolic volume index; || ESVI: end-systolic volume index; ¶ MI: mass index; # RI: remodelling index; ** EF: ejection fraction.

Unadjusted and multivariable analysis conducted with linear regression. Variables with $p < 0.05$ in unadjusted analysis were included in the multivariable model; age and HbA1c were also added to adjusted models.

ESM Table 3. Unadjusted regression analysis of CMR parameters with sex, stratified according to DKD status, in participants (n=111).

CMR Parameters	With DKD		Without DKD		<i>p</i> for interaction
	Estimate (Standard error)	<i>p</i> -value	Estimate (Standard error)	<i>p</i> -value	
LV EDVI	-20.07 (4.92)	<0.01	-7.91 (2.92)	0.01	0.03
LV ESVI	-9.86 (2.77)	<0.01	-2.04 (1.50)	0.18	0.01
LV MI	-12.18 (3.12)	<0.01	-8.74 (1.69)	<0.01	0.29
LV RI	0.01 (0.04)	0.93	-0.06 (0.02)	0.02	0.18
LV EF	3.38 (2.47)	0.18	-1.22 (1.62)	0.46	0.12

* CMR: cardiac magnetic resonance; † DKD: diabetic kidney disease; ‡ LV: left ventricle; § EDVI: end-diastolic volume index; || ESVI: end-systolic volume index; ¶ MI: mass index; # RI: remodelling index; ** EF: ejection fraction. Unadjusted analysis conducted with linear regression.

ESM Table 4. Summary of CGM metrics among CGM users (n=102).

CGM Metric	Results in participants (n=102)
Mean glucose (SD), mmol/L	8.16 (1.17)
GMI (SD)	6.83 (0.50)
% CV	32.06 (5.20)
Participants with % CV ≤ 36 (n, %)	78 (76.47%)
Participants with TAR >13.9 mmol/l, <5% of the time	72 (70.51%)
Participants with TAR >10 mmol/l, <25% of the time	66 (64.71%)
Participants with TIR 3.9-10 mmol/l, >70% of the time	72 (70.51%)
Participants with TBR <3.9 mmol/l, <4% of the time	76 (74.51%)
Participants with TBR <3.0 mmol/l, <1% of the time	82 (80.39%)

* CGM: continuous glucose monitor; † SD: standard deviation; ‡ GMI: glucose management indicator; § CV: coefficient of variation; || TAR: time above range; ¶ TIR: time in range; # TBR: time below range.

ESM Table 5. Comparison of the participants' CAC (n=142) against those of similar type 1 diabetes, type 2 diabetes and non-diabetes control cohorts.

CAC	Medalists (type 1 diabetes) n=142	Canadian Study of Longevity [1] (type 1 diabetes) n=69	DCCT/ EDIC [2] (type 1 diabetes) n=1156	CACTI [3] (type 1 diabetes) n=135	Pittsburgh EDC [4] (type 1 diabetes) n=292	Diabetes Heart Study [5] (type 2 diabetes) n=1123	MESA [6] (Controls) n=6110
>0	97%		29.3%	62%	51%		45%
>100	87%		10%		20%	65%	20%
>300	76%	68%	5%			53%	

* CAC: coronary artery disease; † T1D: type 1 diabetes; ‡ T2D: type 2 diabetes; § DCCT/EDIC: Diabetes Control and Complications Trial/Epidemiology of Diabetes Complications; || Pittsburgh EDC: Pittsburgh Epidemiology of Diabetes Complications; ¶ MESA: Multi-Ethnic Study of Atherosclerosis.

References

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6. McClelland RL, Chung H, Detrano R, Post W, and Kronmal RA. Distribution of coronary artery calcium by race, gender, and age: results from the Multi-Ethnic Study of Atherosclerosis (MESA). *Circulation*. 2006;113(1):30-7.