Supplemental table 1 unadjusted continuous CAN indices vs Slope of GFR and UACR

	N	Parameter	Outcomes	Estimate	(95% CI)	P value
Model 1	141	Valsalva	UACR	10.56	(0.15;22.06)	0.048
	144	Valsalva	GFR	0.23	(-0.94;1.40)	0.704
	208	30/15 ratio	UACR	40.56	(9.67;80.14)	0.008
	212	30/15 ratio	GFR	0.45	(-2.37;3.27)	0.753
	211	E/I ratio	UACR	37.38	(6.74;76.82)	0.014
	215	E/I ratio	GFR	1.58	(1.27;4.44)	0.277
	213	SDNN	UACR	0.14	(0.002;0.28)	0.047
	217	SDNN	GFR	-0.004	(-0.02;0.01)	0.635
Model 2	141	Valsalva	UACR	9.39	(-1.29;21.21)	0.088
	144	Valsalva	GFR	0.071	(-1.12;1.26)	0.907
	208	30/15 ratio	UACR	39.66	(9.55;78.04)	0.008
	212	30/15 ratio	GFR	0.386	(-2.41;3.18)	0.786
	211	E/I ratio	UACR	34.80	(4.78;73.43)	0.021
	215	E/I ratio	GFR	1.65	(-1.22;4.53)	0.260
	213	SDNN	UACR	0.13	(-0.01;0.26)	0.071
	217	SDNN	GFR	-0.0039	(-0.01;0.01)	0.625
Model 3	141	Valsalva	UACR	10.88	(-0.16;23.15)	0.055
	144	Valsalva	GFR	-0.29	(-1.47;0.88)	0.626
	207	30/15 ratio	UACR	37.47	(7.42;75.91)	0.012
	211	30/15 ratio	GFR	-0.36	(-3.10;23.38)	0.797
	210	E/I ratio	UACR	26.60	(-3.25;65.65)	0.087
	214	E/I ratio	GFR	-0.02	(-2.98;2.95)	0.992
	212	SDNN	UACR	0.11	(-0.03;0.26)	0.109
	216	SDNN	GFR	-0.01	(-0.02;0.01)	0.286
Model 4	141	Valsalva	UACR	10.33	(-0.71;22.60)	0.069
	144	Valsalva	GFR	-0.07	(-1.22;1.08)	0.905
	205	30/15 ratio	UACR	31.76	(4.06;66.82)	0.023
	210	30/15 ratio	GFR	-0.18	(-2.97;2.60)	0.898
	208	E/I ratio	UACR	12.98	(-13.09;46.89)	0.362
	213	E/I ratio	GFR	0.2006	(-2.92;3.32)	0.900
	210	SDNN	UACR	0.05	(-0.08;0.19)	0.439
	215	SDNN	GFR	-0.01	(-0.02;0.01)	0.319
Model 5	129	Valsalva	UACR	11.77	(0.76;23.99)	0.037
	126	Valsalva	GFR	0.37	(-0.85;1.58)	0.554
	185	30/15 ratio	UACR	30.24	(2.53;65.45)	0.032
	184	30/15 ratio	GFR	-0.47	(-3.34;2.40)	0.749
	185	E/I ratio	UACR	13.94	(-13.73;50.48)	0.359
	184	E/I ratio	GFR	0.0007	(-3.40;3.40)	1.000
	187	SDNN	UACR	0.067	(-0.07;0.2)	0.321
	186	SDNN	GFR	-0.009	(-0.03;0.01)	0.263

Supplemental table 1. CAN, cardiovascular autonomic neuropathy; CART, cardiac autonomic reflex tests.

*Estimates are for a 1-unit change (95% CI).

Model 1: Unadjusted. Model 2: Adjusted for age and sex. Model 3: as model 2 and additionally adjusted for duration of diabetes, Hba1C, BMI, smoking, exercise, beta blocker use, LDL cholesterol and systolic blood pressure. Model 4: as model 3, and additionally adjusted for baseline estimated glomerular filtration rate (eGFR). Model 5: as model 4 and additionally adjusted for urinary albumin excretion rate.

Supplemental table 2 CAN diagnosis and CART vs ESKD

	Events	Outcomes	Hazard Ratio	(95% CI)	P value
Model 1	9	CAN	2.695	(0.724;10.040)	0.14
	9	E/I Ratio	2.752	(0.688;11.006)	0.152
	5	Valsalva	2.307	(0.385;13.807)	0.360
	8	30/15 ratio	3.191	(0.763;13.357)	0.114
Model 2	9	CAN	2.422	(0.644;9.105)	0.19
	9	E/I Ratio	2.615	(0.647;10.564)	0.177
	5	Valsalva	1.719	(0.287;10.294)	0.553
	8	30/15 ratio	2.783	(0.661;11.711)	0.163
Model 3	9	CAN	1.567	(0.366;6.704)	0.545
	9	E/I ratio	1.839	(0.416;8.134)	0.422
	5	Valsalva	0.004	(0;2.125)	0.082
	8	30/15 ratio	2.377	(0.497;11.369)	0.278
Model 4	9	CAN	0.250	(0.026;2.403)	0.230
	9	E/I Ratio	0.121	(0.010;1.441)	0.095
	-	Valsalva	not enough data to perform analyses		
	8	30/15 ratio	0.530	(0.042;6.742)	0.625
Model 5	-	CAN	not enough data to perform analyses		
	-	E/I Ratio	not enough data to perform analyses		
	-	Valsalva	not enough data to perform analyses		
	-	30/15 ratio	not enough data to perform analyses		

Supplemental table 2. CAN, cardiovascular autonomic neuropathy; CART, cardiac autonomic reflex tests.

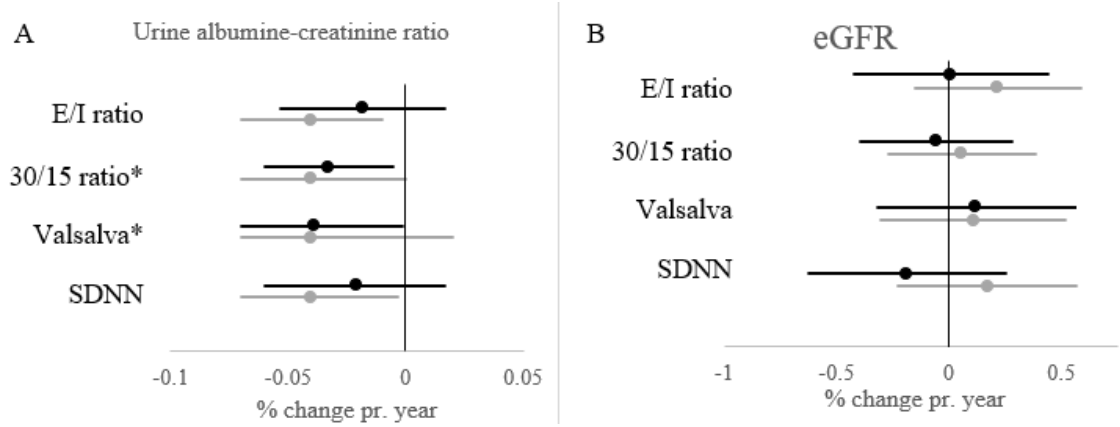
*Estimates are for increase in standardized units.

Model 1: Unadjusted. Model 2: Adjusted for age and sex. Model 3: as model 2 and additionally adjusted for duration of diabetes, Hba1C, BMI, smoking, exercise, beta blocker use, LDL cholesterol and systolic blood pressure. Model 4: as model 3, and additionally

adjusted for baseline estimated glomerular filtration rate (eGFR). Model 5: as model 4 and additionally adjusted for urinary albumin excretion rate.

CARTs were evaluated as binary variables based on age-specific cut-off values.

Supplemental figure 1



Supplemental figure 1. The effect of change in results on autonomic tests on progression of diabetic kidney disease: annual change in UACR (A) and annual change in eGFR (B). Estimates for standardized one-unit increase in heart rate, for deep breathing (E/I ratio), standing (30/15 ratio), the Valsalva manoeuvre and the SDNN intervals (milliseconds). Adjusted model including age, and sex (grey), adjusted model including in addition baseline HbA_{1C}, BMI, smoking, exercise, beta blocker use, LDL cholesterol, systolic blood pressure, eGFR and urinary albumin excretion rate at baseline (black).