Supplementary Table 5. Risk factors associated with higher HbA1c variability during follow-up (CAN was staged using three parasympathetic CARTs)

Variable	OR (95% CI)		
	Model 1	Model 2	Model 3
Higher HbA1c-SD			
Early CAN (vs. normal group)	1.32 (0.93–1.87)	1.37 (0.92–2.03)	1.40 (0.94–2.10)
Definite CAN (vs. normal group)	1.61 (1.06–2.44)[a]	1.69 (1.05–2.73)[a]	1.76 (1.07–2.88)[a]
Age (per 1 yr increment)	0.97 (0.95–0.98)[b]	0.98 (0.96–1.00)	0.97 (0.94–0.99)[b]
Sex (male vs. female)	1.20 (0.87–1.65)	1.01 (0.70–1.46)	1.08 (0.74–1.57)
BMI (per 1 kg/m^2 increment)	1.08 (1.03–1.14)[b]	1.07 (1.01–1.14)[a]	1.06 (1.00–1.13)[a]
Duration of diabetes (per 1 yr increment)		0.98 (0.95–1.01)	0.96 (0.93–0.99)[a]
Mean of serial HbA1c (per 1% increment)		8.54 (5.63–12.96)[b]	8.41 (5.45–12.97)[b]
Heart rate (per 1 beats/min increment)			1.02 (1.00–1.03)[a]
eGFR (per 1 mL/min/1.73 m^2 increment)			1.00 (0.99–1.01)
Diabetic retinopathy (yes vs. no)			2.11 (1.33–3.35)[b]
Coronary artery disease (yes vs. no)			1.99 (1.01–3.95)[a]
Diabetes treatment (insulin use vs. no)			1.02 (0.56–1.87)
Hypertension medication (yes vs. no)			1.35 (0.91–1.99)
Higher HbA1c-CV			
Early CAN (vs. normal group)	1.19 (0.84–1.68)	1.19 (0.82–1.72)	1.21 (0.83–1.77)
Definite CAN (vs. normal group)	1.41 (0.93–2.14)	1.38 (0.88–2.17)	1.41 (0.88–2.23)
Age (per 1 yr increment)	0.97 (0.95–0.99)[b]	0.98 (0.96–1.00)	0.97 (0.95–0.99)[a]
Sex (male vs. female)	1.19 (0.86–1.64)	1.03 (0.73–1.46)	1.09 (0.76–1.56)
BMI (per 1 kg/m^2 increment)	1.06 (1.01–1.12)[a]	1.05 (0.99–1.10)	1.04 (0.98–1.10)
Duration of diabetes (per 1 yr increment)		0.99 (0.96–1.01)	0.98 (0.95–1.00)
Mean of serial HbA1c (per 1% increment)		4.42 (3.13–6.24)[b]	4.29 (3.00–6.13)[b]
Heart rate (per 1 beats/min increment)			1.02 (1.00–1.03)[a]
eGFR (per 1 mL/min/1.73 m^2 increment)			1.00 (0.99–1.01)
Diabetic retinopathy (yes vs. no)			1.79 (1.16–2.75)[b]
Coronary artery disease (yes vs. no)			2.24 (1.17–4.28)[a]
Diabetes treatment (insulin use vs. no)			0.84 (0.48 -1.47)
Hypertension medication (yes vs. no)			1.19 (0.82 -1.71)
Higher adjusted-HbA1c-SD			
Early CAN (vs. normal group)	1.30 (0.92–1.84)	1.34 (0.90–2.00)	1.37 (0.92–2.06)
Definite CAN (vs. normal group)	1.54 (1.02–2.34)[a]	1.61 (1.00–2.60)	1.67 (1.02–2.74)[a]
Age (per 1 yr increment)	0.97 (0.95–0.98)[b]	0.98 (0.96–1.00)[a]	0.97 (0.94–0.99)[b]
Sex (male vs. female)	1.22 (0.89–1.69)	1.04 (0.72–1.50)	1.11 (0.76–1.63)
BMI (per 1 kg/m^2 increment)	1.08 (1.02–1.13)[b]	1.07 (1.01–1.13)[a]	1.06 (1.00–1.13)
Duration of diabetes (per 1 yr increment)		0.98 (0.96–1.01)	0.96 (0.94–0.99)[a]
Mean of serial HbA1c (per 1% increment)		8.77 (5.77–13.35)[b]	8.61 (5.57–13.32)[b]
Heart rate (per 1 beats/min increment)			1.02 (1.00–1.03)[a]
eGFR (per 1 mL/min/1.73 m^2 increment)			1.00 (0.99–1.01)
Diabetic retinopathy (yes vs. no)			1.98 (1.25–3.15)[b]
Coronary artery disease (yes vs. no)			2.01 (1.02–3.99)[a]
Diabetes treatment (insulin use vs. no)			1.02 (0.56–1.87)
Hypertension medication (yes vs. no)			1.38 (0.93–2.04)

The CAN staging was defined as follows (1) one abnormal parasympathetic test result defined as early CAN; or (2) at least two abnormal parasympathetic function tests are defined as definite CAN. Model 1: adjusted for age, sex, and BMI; Model 2: adjusted for model 1+diabetes duration and mean serial HbA1c; Model 3: adjusted for model 2+heart rate, eGFR, diabetic retinopathy, coronary artery disease, diabetes treatment (insulin use), and use of hypertension medication.

HbA1c, glycosylated hemoglobin; CAN, cardiovascular autonomic neuropathy; CART, cardiovascular autonomic reflex test; OR, odds ratio; CI, confidence interval; SD, standard deviation; BMI, body mass index; eGFR, estimated glomerular filtration rate; CV, coefficient of variation.

[a]$P<0.05$, [b]$P<0.01$.