

Supplementary Table 4. ORs (95% CIs) of DKD according to the quartiles of plasma glucagon levels in 471 patients with well-controlled T2DM (HbA1c <7.0%)

Variable	Q1	Q2	Q3	Q4	P value for trend
Fasting glucagon, pg/mL	25.0–108.9	109.0–124.6	124.8–140.3	140.5–254.7	-
Number	117	118	117	119	-
DKD	24 (20.5)	27 (22.9)	32 (27.4)	44 (37.0)	<0.001
Model 0	1–reference	1.150 (0.618–2.140)	1.459 (0.796–2.763)	2.273 (1.289–4.702)	0.003
Model 1	1–reference	1.282 (0.665–2.473)	1.622 (0.853–3.084)	2.521 (1.358–4.678)	0.002
Model 2	1–reference	1.218 (0.578–2.567)	1.715 (0.822–3.579)	2.287 (1.123–4.658)	0.013
Model 3	1–reference	1.211 (0.572–2.566)	1.682 (0.791–3.577)	2.355 (1.135–4.886)	0.013
AUC _{gluc} , pg/mL·hr	68–306	308–380	381–482	483–1603	-
Number	120	117	116	118	-
DKD	19 (15.8)	29 (24.8)	34 (29.3)	45 (38.1)	<0.001
Model 0	1–reference	1.752 (0.919–3.340)	2.204 (1.171–4.419)	3.277 (1.772–6.061)	<0.001
Model 1	1–reference	1.586 (0.808–3.115)	2.045 (1.053–3.971)	3.301 (1.721–6.332)	<0.001
Model 2	1–reference	1.413 (0.661–3.021)	1.573 (0.733–3.374)	2.557 (1.215–5.382)	0.013
Model 3	1–reference	1.398 (0.646–3.025)	1.573 (0.725–3.415)	2.771 (1.288–5.965)	0.009

Values are presented as range, number (%), or odds ratio (95% confidence interval).

Model 0: crude; Model 1: adjusted for age, sex, diabetic duration, body mass index, systolic blood pressure, diastolic blood pressure, statins medication, and hypertension; Model 2: additionally adjusted for lipid profiles, serum uric acid, serum albumin, hemoglobin, homeostasis model assessment of insulin resistance using C-peptide, area under the C-peptide curve, area under the glucose curve, postchallenge 2-hour glucose, and HbA1c; Model 3: additionally adjusted for glucose-lowering therapies.

OR, odds ratio; CI, confidence interval; DKD, diabetic kidney disease; T2DM, type 2 diabetes mellitus; HbA1c, glycosylated hemoglobin; AUC_{gluc}, area under the glucagon curve.