



**Supplementary Figure 1 Flowchart of the study design.**

**Supplementary Table 1 Normality assessment of baseline clinical characteristics in patients with type 2 diabetes**

<b>Characteristics</b>	<b>W</b>	<b>P value</b>
Age (years)	0.9904	<0.001
BMI (kg/m <sup>2</sup> )	0.8249	<0.001
Diabetes duration (years)	0.8505	<0.001
Baseline HbA1c (%)	0.9214	<0.001
FPG (mmol/L)	0.8345	<0.001
BUN (mmol/L)	0.9686	<0.001
CREAT (μmol/L)	0.9924	<0.001
UA (μmol/L)	0.9855	<0.001
eGFR (mL/min/1.73 m <sup>2</sup> )	0.9958	0.006
TC (mmol/L)	0.1681	<0.001
TG (mmol/L)	0.4771	<0.001
HDL-C (mmol/L)	0.0514	<0.001
LDL-C (mmol/L)	0.0481	<0.001
Lp(a) (mg/L)	0.6591	<0.001
UACR (mg/g)	0.2145	<0.001
Total HbA1c Measurement ( <i>n</i> )	0.7119	<0.001
Measurement Intensity ( <i>n</i> /year)	0.5935	<0.001
Median Measurement Interval (years)	0.8725	<0.001
Follow-up time (years)	0.9822	<0.001

BMI, body mass index; BUN, blood urea nitrogen; CREAT, creatinine; eGFR, estimated glomerular filtration rate; FPG, fasting plasma glucose; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LP(a), Lipoprotein (a); TC, total cholesterol; TG, triglycerides; UA, uric acid; UACR, urinary microalbumin-to-creatinine ratio; W, Shapiro-Wilk test statistic.

**Supplementary Table 2 Baseline and clinical characteristics of participants according to baseline HbA1c**

<b>Characteristics</b>	<b>Class 1 (&lt;7%)</b>	<b>Class 2 (7-8%)</b>	<b>Class 3 (&gt;8%)</b>	<b>P value</b>
<i>n</i>	321	199	537	
Age (years)	55.0 (47.0, 65.0)	56.0 (48.0, 65.0)	54.0 (45.0, 62.0)	0.010
Male sex (%)	175 (54.7)	107 (53.8)	337 (62.8)	0.020
BMI (kg/m <sup>2</sup> )	24.0 (22.8, 26.4)	24.1 (22.4, 26.1)	23.9 (21.7, 26.1)	0.315
Hypertension (%)	150 (46.6)	103 (46.6)	218 (42.2)	0.364
MACCE (%) <sup>1</sup>	57 (17.7)	37 (16.7)	57 (11.0)	0.014
Hyperlipidemia (%)	102 (31.7)	77 (34.8)	224 (43.4)	0.002
ACEI/ARB treatment (%)	61 (18.9)	28 (12.7)	55 (10.7)	0.003
Diabetes duration (years)	3.0 (1.0, 5.5)	6.0 (2.5, 12.0)	7.5 (2.0, 16.0)	<0.001
Baseline HbA1c (%)	6.3 (6.0, 6.6)	7.5 (7.2, 7.7)	10.7 (9.3, 12.4)	<0.001
FPG (mmol/L)	6.7 (5.8, 7.6)	7.9 (6.7, 9.3)	11.3 (8.5, 14.7)	<0.001
BUN (mmol/L)	5.4 (4.4, 6.0)	5.2 (4.5, 6.1)	5.2 (4.2, 6.1)	0.139
CREAT (μmol/L)	69.0 (59.0, 82.0)	68.8 (59.0, 81.0)	65.0 (53.2, 76.0)	<0.001
UA (μmol/L)	363.0 (303.0, 426.0)	357.6 (275.5, 442.5)	332.0 (266.0, 402.0)	<0.001
eGFR (mL/min/1.73)	95.2 (83.8, 95.4)	95.4 (83.2, 102.3)	102.3 (92.2, 102.3)	<0.001

m <sup>2</sup> )	105.3)	105.7)	111.9)	
TC (mmol/L)	4.6 (4.0, 5.4)	4.7 (4.1, 5.4)	5.0 (4.3, 5.8)	<0.001
TG (mmol/L)	1.3 (0.9, 2.0)	1.5 (1.0, 2.3)	1.5 (1.0, 2.4)	0.001
HDL-C (mmol/L)	1.1 (1.0, 1.3)	1.1 (0.9, 1.3)	1.0 (0.9, 1.3)	0.013
LDL-C (mmol/L)	2.9 (2.2, 3.5)	2.9 (2.4, 3.5)	3.2 (2.5, 3.8)	<0.001
Lp(a) (mg/L)	116.5 (54.4, 203.6)	106.5 (57.2, 199.5)	108.0 (54.0, 225.6)	0.918
UACR (mg/g)	10.2 (6.8, 15.1)	10.5 (7.0, 18.0)	11.0 (7.4, 17.9)	0.042
Total HbA1c Measurement ( <i>n</i> )	7.0 (5, 10)	7.0 (5, 9)	7.0 (4.0, 9.0)	0.003
Measurement Intensity ( <i>n</i> /year)	1.0 (0.8, 1.3)	1.0 (0.8, 1.3)	1.0 (0.7, 1.3)	0.600
Median Measurement Interval (years)	1.1 (0.7, 1.8)	1.0 (0.6, 1.8)	1.0 (0.6, 2.0)	0.600
Follow-up time (years)	7.4 (5.5, 9.5)	7.0 (5.2, 9.4)	6.7 (4.5, 9.0)	0.006
DKD (%)	38 (11.8)	42 (19.0)	164 (31.8)	<0.001

<sup>1</sup>MACCE includes coronary heart disease and stroke.

ACEI, angiotensin-converting enzyme inhibitors; ARB, angiotensin II receptor blockers; BMI, body mass index; BUN, blood urea nitrogen; Cr, creatinine; DKD, diabetic kidney disease; eGFR, estimated glomerular filtration rate; FPG, fasting plasma glucose; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LP(a),

Lipoprotein (a); MACCE, major adverse cardiovascular and cerebrovascular events; TC, total cholesterol; TG, triglycerides; UA, uric acid; UA, uric acid; UACR, urinary microalbumin-to-creatinine ratio.

**Supplementary Table 3 Cumulative incidence of DKD according to baseline and time-weighted average HbA1c**

HbA1c Category	Events, <i>n</i> (%)	Incidence Rate (per 100 person-years)	3-year Incidence (95% CI)	5-year Incidence (95% CI)	7-year Incidence (95% CI)
<b>Baseline HbA1c</b>					
Class 1 (<7%)	39/321 (11.8%)	1.6 (1.1-2.2)	1.9% (0.4 - 3.5)	4.4% (2.0 - 6.8)	9.2% (5.5 - 12.7)
Class 2 (7-8%)	39/199 (19.1%)	2.7 (1.9-3.7)	2.1% (0 - 4.1)	5.5% (2.1 - 8.8)	11.7% (6.6 - 16.6)
Class 3 (>8%)	168/537 (31.3%)	4.7 (4.0-5.4)	3.9% (2.2 - 5.5)	11.8% (8.9 - 14.7)	22.6% (18.4 - 26.6)
<b>TWA-HbA1c<sup>1</sup></b>					
Class 1 (<7%)	35/512 (6.8%)	1.2 (0.9-1.7)	1.5% (0.3 - 2.8)	3.2% (1.4 - 5.0)	7.6% (4.6 - 10.5)
Class 2 (7-8%)	35/480 (7.3%)	2.0 (1.4-2.8)	2.4% (0.5 - 4.2)	5.6% (2.6 - 8.6)	9.2% (5.1 - 13.1)
Class 3	174/622	6.3	4.8%	15.4%	29.3%

(>8%)	(28%)	(5.4-7.4)	(2.6 - 7.0)	(11.6 - 19.2)	(24.1 - 34.2)
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<sup>1</sup>TWA-HbA1c was included as a time-varying covariate to compute risk estimates for DKD events.

CI, confidence interval; DKD, diabetic kidney disease; TWA-HbA1c, time-weighted average HbA1c.

**Supplementary Table 4 Pairwise log-rank comparisons for Kaplan-Meier survival curves**

Parameter	versus Class 1 P value	versus Class 2 P value
Baseline HbA1c		
Class 2	0.040	-
Class 3	<0.001	<0.001
TWA-HbA1c		
Class 2	0.002	-
Class 3	<0.001	<0.001

Pairwise comparisons were performed using the log-rank test. Participants were categorized into three groups based on predefined HbA1c thresholds: Class 1 (<7%), Class 2 (7-8%), and Class 3 (>8%).

TWA-HbA1c, time-weighted average HbA1c.

**Supplementary Table 5 Association of baseline and time-weighted average HbA1c with incident DKD after excluding outcomes within the initial 3 years of follow-up**

HbA1c Parameter	Model 1		Model 2		Model 3	
	HR (95%CI)	P value	HR (95%CI)	P value	HR (95%CI)	P value
r						

<b>Baseline HbA1c</b>						
Per 1% increment	1.22 (1.17-1.28)	<0.001	1.23 (1.17-1.28)	<0.001	1.22 (1.15-1.29)	<0.001
Class 1 (<7%)	Reference		Reference		Reference	
Class 2 (7-8%)	1.89 (1.17-3.07)	0.010	1.84 (1.14-2.98)	0.013	1.88 (1.14-3.09)	0.013
Class 3 (>8%)	3.49 (2.38-5.12)	<0.001	3.70 (2.52-5.44)	<0.001	3.31 (2.16-5.07)	<0.001
<i>P</i> for trend		<0.001		<0.001		<0.001
<b>TWA-HbA1c<sup>1</sup></b>						
Per 1% increment	1.42 (1.34-1.49)	<0.001	1.41 (1.33-1.49)	<0.001	1.39 (1.30-1.48)	<0.001
Class 1 (<7%)	Reference		Reference		Reference	
Class 2 (7-8%)	2.33 (1.42-3.82)	<0.001	2.25 (1.37-3.70)	0.001	2.28 (1.38-3.76)	0.001
Class 3 (>8%)	6.13 (4.12-9.11)	<0.001	6.03 (4.06-8.96)	<0.001	5.31 (3.52-8.01)	<0.001
<i>P</i> for trend		<0.001		<0.001		<0.001

Model 1: Unadjusted model; Model 2: Adjusted for age and sex; Model 3: Adjusted for age, sex, BMI, hypertension, MACCE, hyperlipidemia, ACEI/ARB treatment, diabetes duration, BUN, CREAT, UA, LDL-C, Lp(a), UACR and measurement intensity.

<sup>1</sup>TWA-HbA1c was included as a time-varying covariate to compute risk estimates for DKD events.

ACEI, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CREAT, serum creatinine; DKD, diabetic kidney disease; HR, hazard ratio; LDL-C, low-density lipoprotein cholesterol; Lp(a), lipoprotein(a); MACCE, major adverse cardiovascular and cerebrovascular events; TWA-HbA1c, time-weighted average HbA1c; UA, uric acid; UACR, urine albumin-to-creatinine ratio.

**Supplementary Table 6 Parameters based on model-adequacy criteria for multi-trajectories in the best model of each group**

<b>Number of groups</b>	<b>Proportion of individuals in groups (%)</b>	<b>of BIC</b>	<b>AIC</b>	<b>Average probability of assignment</b>	<b>posterior of</b>
2	13.93/86.07	26010.89	25956.16	0.88/0.97	
3	13.83/9.25/76.92	25844.08	25769.45	0.87/0.82/0.94	
<b>4</b>	<b>5.76/11.99/73.56/8.69</b>	<b>25745.41</b>	<b>25650.88</b>	<b>0.77/0.82/0.93/0.85</b>	
5	71.59/0/12.62/6.82/8.9	25773.31	25658.88	0.75/NA/0.80/0.74/0.8	4
6	0/9.07/0/70/7.20/13.74	25801.22	25666.88	NA/0.83/NA/0.58/0.7	2/0.77
7	0/0/0/8.41/65.42/9.53/16.63	25829.12	25674.88	NA/NA/NA/0.66/0.2	9/0.80/0.68

AIC, Akaike information criterion; BIC, Bayesian information criterion.

**Supplementary Table 7 Baseline and clinical characteristics of participants according to HbA1c trajectories**

Characteristics	Group 1 (Low-stable)	Group 2 (Quickly declining-stable)	Group 3 (Quickly increasing-stable)	Group 4 (High-slow decline)	P value
<i>n</i>	777	127	61	92	
Age(years)	55.0 (46.0, 63.2)	54.6 (44.8, 62.4)	53.1 (43.9, 62.3)	57.2 (48.8, 64.0)	0.137
Male sex (n, %)	438 (56.23)	89 (70.08)	35 (57.38)	57 (61.96)	0.027
BMI (kg/m <sup>2</sup> )	24.0 (22.2, 26.2)	23.9 (22.0, 26.1)	24.5 (23.3, 26.3)	23.2 (21.0, 26.1)	0.417
Hypertension (n (%))	347 (44.5)	62 (48.8)	32 (52.5)	30 (32.6)	0.051
MACCE (%) <sup>1</sup>	113 (14.5)	14 (11.0)	13 (21.3)	11 (12.0)	0.261
Hyperlipidemia (%)	291 (37.4)	58 (45.7)	23 (37.7)	31 (33.7)	0.258
ACEI/ARB treatment (%)	110 (14.1)	17 (13.4)	9 (14.8)	8 (8.7)	0.544
Diabetes duration (years)	4.5 (0.5, 8.5)	8.5 (3.5, 14.0)	8.0 (2.5, 12)	7.5 (2.0, 11.5)	<0.001
Baseline HbA1c (%)	7.3 (6.4, 8.9)	12.6 (11.5, 13.3)	8.4 (7.5, 10.1)	12.1 (10.8, 13.5)	<0.001
FPG (mmol/L)	7.6 (6.4, 10.1)	13.3 (8.1, 17.4)	8.7 (7.3, 12.4)	13.9 (10.9, 17.2)	<0.001

BUN (mmol/L)	5.3 (4.3, 6.1)	5.0 (4.2, 6.0)	5.0 (4.4, 6.0)	5.3 (4.4, 6.3)	0.322
CREAT (umol/L)	68.0 (57.0, 80.0)	67.5 (56.0, 77.8)	64.6 (53.0, 74.1)	63.0 (51.5, 78.0)	0.044
UA (umol/L)	350.5 (286.8, 426.0)	326.0 (244.5, 392.8)	343.8 (278.3, 437.5)	293.0 (249.0, 361.0)	<0.001
eGFR (mL/min/1.73 m <sup>2</sup> )	97.8 (86.7, 107.6)	101.5 (91.5, 110.7)	101.0 (90.9, 111.9)	102.2 (89.2, 110.9)	0.010
TC (mmol/L)	4.8 (4.2, 5.5)	5.14 (4.4, 5.9)	4.9 (4.2, 5.5)	5.0 (4.3, 6.1)	0.004
TG (mmol/L)	1.5 (1.0, 2.2)	1.4 (1.0, 2.4)	1.4 (1.0, 2.1)	1.5 (1.0, 2.1)	0.852
HDL-C (mmol/L)	1.1 (0.9, 1.3)	1.1 (0.9, 1.3)	1.1 (0.9, 1.2)	1.1 (1.0, 1.3)	0.387
LDL-C (mmol/L)	3.0 (2.3, 3.6)	3.3 (2.7, 3.9)	3.1 (2.5, 3.7)	3.2 (2.5, 4.0)	0.004
Lp(a) (mg/L)	108.0 (54.0, 204.0)	127.0 (58.8, 231.8)	93.0 (57.0, 179.5)	109.0 (54.5, 252.1)	0.525
UACR (mg/g)	10.0 (6.8, 15.6)	10.0 (7.8, 17.4)	16.1 (9.3, 23.5)	15.0 (10.0, 23.4)	<0.001
Total HbA1c Measurements t (n)	7.0 (5.0, 10.0)	6.0 (4.0, 8.0)	7.0 (4.0, 9.0)	6.0 (4.0, 7.0)	<0.001
Measurements t Intensity (n/year)	1.1 (0.8, 1.3)	1.0 (0.7, 1.3)	0.9 (0.8, 1.2)	0.8 (0.6, 1.1)	<0.001

Median Measurement Interval (years)	1.0 (0.6, 1.8)	1.1 (0.6, 2.1)	1.3 (0.7, 2.2)	1.6 (0.7, 2.9)	<0.001
Follow-up time (years)	7.1 (5.0, 9.4)	6.4 (4.1, 8.3)	7.0 (5.0, 9.5)	6.6 (4.8, 8.7)	0.008
DKD (%)	116 (14.9)	22 (17.3)	35 (57.4)	71 (77.2)	<0.001

<sup>1</sup>MACCE includes coronary heart disease and stroke.

ACEI, angiotensin-converting enzyme inhibitors; ARB, angiotensin II receptor blockers; BMI, body mass index; BUN, blood urea nitrogen; Cr, creatinine; DKD, diabetic kidney disease; eGFR, estimated glomerular filtration rate; FPG, fasting plasma glucose; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LP(a), Lipoprotein (a); MACCE, major adverse cardiovascular and cerebrovascular events; TC, total cholesterol; TG, triglycerides; UA, uric acid; UACR, urinary microalbumin-to-creatinine ratio.

**Supplementary Table 8. Cumulative incidence of DKD events in patients with different HbA1c trajectories**

HbA1c Trajectory	Events, <i>n</i> (%)	Incidence Rate (per 100 person-years)	3-year Incidence (%) (95% CI)	5-year Incidence (%) (95% CI)	7-year Incidence (%) (95% CI)
Low-stable (Group 1)	116/777 (14.9%)	2.09 (1.73 - 2.51)	1.7% (0.8 - 2.7)	5.1% (3.4 - 6.7)	9.9% (7.5 - 12.3)
Quickly	22/127	2.79 (1.75 - 4.9%)	4.9%	11.6%	17.0%

declining-stable (Group 2)	(17.3%)	4.23)	(1.0 - 8.6)	(5.4 - 17.4)	- (9.0 - 24.3)	-
Quickly increasing-stable (Group 3)	35/61 (57.4%)	8.02 (5.59 - 11.16)	6.6% (0.1 - 12.6)	13.7% (4.4 - 22.1)	33.2% (19.2 - 44.7)	-
High-slow decline (Group 4)	71/92 (77.2%)	11.42 (8.92 - 14.41)	7.6% (2.0 - 12.9)	25.3% (15.8 - 33.7)	49.1% (37.3 - 58.7)	-

CI, confidence interval; DKD, diabetic kidney disease.

**Supplementary Table 9 Pairwise log-rank comparisons for Kaplan-Meier survival curves among different HbA1c trajectories**

HbA1c Trajectory	versus Group 1		versus Group 2		versus Group 3	
	<i>P</i> value	<i>P</i> value	<i>P</i> value	<i>P</i> value	<i>P</i> value	<i>P</i> value
Group 2 (Quickly declining-stable)	0.018	-	-	-	-	-
Group 3 (Quickly increasing-stable)	<0.001	0.012	0.012	-	-	-
Group 4 (High-slow decline)	<0.001	<0.001	<0.001	<0.001	0.016	0.016

Pairwise comparisons of cumulative incidence for DKD were performed using the log-rank test. Group 1 (Low-stable) serves as the primary reference group.

**Supplementary Table 10 Univariate and Multivariable Multinomial Logistic Regression Analysis for Predictors of HbA1c Trajectories**

Baseline Predictors	Univariate Analysis	Multivariable Analysis <sup>1</sup>
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	OR (95% CI)	P value	OR (95% CI)	P value
<b>Group 2 vs. Group 1</b>				
<b>(Ref.)</b>				
Age (years)	0.99 (0.98-1.01)	0.315	—	—
Male sex	1.82 (1.22-2.73)	<b>0.004</b>	1.93 (0.12-30.79)	0.571
BMI (kg/m <sup>2</sup> )	0.99 (0.91-1.08)	0.791	—	—
Hypertension	1.19 (0.82-1.73)	0.370	0.87 (0.16-4.88)	0.848
MACCE	0.73 (0.41-1.32)	0.296	—	—
Hyperlipidemia	1.41 (0.97-2.06)	0.075	—	—
ACEI/ARB treatment	0.94 (0.54-1.63)	0.825	—	—
Diabetes duration (years)	1.74 (1.47-2.10)	<b>&lt;0.001</b>	1.29 (1.15-1.44)	<b>0.001</b>
BUN (mmol/L)	0.89 (0.78-1.02)	0.101	—	—
CREAT (per 10μmol/L)	0.95 (0.84-1.07)	0.399	1.22 (0.40-3.70)	0.667
UA (per 100μmol/L)	0.75 (0.63-0.90)	<b>0.002</b>	0.44 (0.25-0.79)	<b>0.012</b>
eGFR (mL/min/1.73 m <sup>2</sup> )	1.01 (1.00-1.03)	<b>0.020</b>	1.04 (0.97-1.13)	0.225
HDL-C (mmol/L)	1.00	0.967	—	—

	(0.94-1.06)			
Lp(a) (mg/L)	1.00	0.434	—	—
	(1.00-1.00)			
UACR (mg/g)	1.01	<b>0.032</b>	1.01	0.113
	(1.00-1.01)		(1.00-1.03)	
<b>Group 3 vs. Group 1 (Ref.)</b>				
Age (years)	0.98	0.144	—	—
	(0.96-1.01)			
Male sex	1.05	0.861	0.72	0.733
	(0.62-1.77)		(0.08-6.21)	
BMI (kg/m <sup>2</sup> )	1.01	0.769	—	—
	(0.92-1.12)			
Hypertension	1.37	0.233	1.03	0.963
	(0.81-2.31)		(0.20-5.45)	
MACCE	1.60	0.155	—	—
	(0.84-3.04)			
Hyperlipidemia	1.01	0.957	—	—
	(0.59-1.74)			
ACEI/ARB treatment	1.05	0.891	—	—
	(0.50-2.20)			
Diabetes duration (years)	1.67	<b>&lt;0.001</b>	1.21	<b>0.015</b>
	(1.42-1.96)		(1.05-1.38)	
BUN (mmol/L)	0.94	0.522	—	—
	(0.78-1.13)			
CREAT (per 10μmol/L)	0.87	0.115	1.37	0.459
	(0.74-1.03)		(0.54-3.45)	
UA (per 100μmol/L)	1.01	0.921	0.71	0.118
	(0.80-1.29)		(0.45-1.10)	
eGFR (mL/min/1.73 m <sup>2</sup> )	1.02	<b>0.019</b>	1.06	0.087

	(1.00-1.04)		(0.99-1.14)	
HDL-C (mmol/L)	0.85	0.676	—	—
	(0.41-1.79)			
Lp(a) (mg/L)	1.00	0.841	—	—
	(1.00-1.00)			
UACR (mg/g)	1.01	<b>0.011</b>	1.01	0.069
	(1.00-1.02)		(1.00-1.03)	
<b>Group 4 vs. Group 1 (Ref.)</b>				
Age (years)	1.02	0.072	—	—
	(1.00-1.04)			
Male sex	1.27	0.295	3.55	0.235
	(0.81-1.98)		(0.34-37.14)	
BMI (kg/m <sup>2</sup> )	0.92	0.146	—	—
	(0.82-1.03)			
Hypertension	0.60	<b>0.030</b>	0.45	0.179
	(0.38-0.95)		(0.13-1.59)	
MACCE	0.80	0.509	—	—
	(0.41-1.55)			
Hyperlipidemia	0.85	0.492	—	—
	(0.54-1.34)			
ACEI/ARB treatment	0.58	0.155	—	—
	(0.27-1.23)			
Diabetes duration (years)	1.60	<b>&lt;0.001</b>	1.19	<b>0.017</b>
	(1.42-1.82)		(1.05-1.35)	
BUN (mmol/L)	1.04	0.620	—	—
	(0.90-1.20)			
CREAT (per 10μmol/L)	0.81	<b>0.005</b>	0.64	0.290
	(0.70-0.94)		(0.25-1.63)	
UA (per 100μmol/L)	0.68	<b>&lt;0.001</b>	0.53	<b>0.008</b>

	(0.55-0.84)		(0.34-0.82)	
eGFR (mL/min/1.73 m <sup>2</sup> )	1.01	0.052	0.98	0.610
	(1.00-1.03)		(0.91-1.06)	
HDL-C (mmol/L)	1.00	0.949	–	–
	(0.92-1.08)			
Lp(a) (mg/L)	1.00	<b>0.035</b>	–	–
	(1.00-1.00)			
UACR (mg/g)	1.01	<b>&lt;0.001</b>	1.02	<b>0.017</b>
	(1.01-1.02)		(1.00-1.03)	

Data are presented as odds ratio (OR) and 95% confidence interval (CI). Group 1 (Low-stable trajectory) serves as the reference group for all comparisons.

<sup>1</sup>Variables with a *P* value less than 0.1 in univariate analysis were included in multivariate analysis.

ACEI, angiotensin-converting enzyme inhibitors; ARB, angiotensin II receptor blockers; BMI, body mass index; BUN, blood urea nitrogen; CI, confidence interval; CREAT, creatinine; DKD, diabetic kidney disease; eGFR, estimated glomerular filtration rate; FPG, fasting plasma glucose; HbA1c, hemoglobin A1c; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; LP(a), Lipoprotein (a); OR, odds ratio; MACCE, major adverse cardiovascular and cerebrovascular events; TC, total cholesterol; TG, triglycerides; UA, uric acid; UACR, urinary microalbumin-to-creatinine ratio.