

Table S1. The relationship between urine IgG and the onset and progression of DKD. ^aAdjusted for age, ALT,AST,ALT/AST,BMI, DBP, DM duration, Follow-up time, GGT, HbA1c, HDL, LDL,SBP, SUA, SUREA, TC, TG, uβ2-MG, and uRBP. 24 h UAE, 24 hour urinary albumin excretion; ALT, alanine aminotransferase; AST, aspartate aminotransferase; BMI, body mass index; DBP, diastolic blood pressure; GGT, Glutamyl transpeptidase ;HbA1c, haemoglobin A1c; HDL, high-density lipoprotein; IgG, immunoglobulin G; LDL, low-density lipoprotein; SBP, systolic blood pressure; SUA, serum uric acid; SUREA, serum urea; TC, total cholesterol; TG, triglyceride uβ2-MG, urine β2-microglobulin ; uRBP, urine retinol-binding protein. Among patients with baseline 24 h UAE < 30 mg/24 h, those with eGFR ≥ 60 mL/min/1.73 m² and 24 h UAE <30 mg/24 h at the end of follow-up were categorised as ‘no onset’; those with eGFR < 60 mL/min/1.73 m² and 24 h UAE < 30 mg/24 h were categorised as ‘onset1’; those with eGFR ≥ 60 mL/min/1.73 m² and 24 h UAE ≥ 30 mg/24 h were categorised as ‘onset2’; and those with eGFR < 60 mL/min/1.73 m² and 24 h UAE ≥ 30 mg/24 h were categorised as ‘onset3’. Among patients with baseline 24 h UAE between 30 and 300 mg/24 h, those with eGFR ≥ 60 mL/min/1.73 m² and 24 h UAE <300 mg/24 h at the end of follow-up were categorised as ‘nonprogress’; those with eGFR < 60 mL/min/1.73 m² and 24 h UAE < 300 mg/24 h were categorised as ‘progress1’; those with eGFR ≥ 60 mL/min/1.73 m² and 24 h UAE ≥ 300 mg/24 h were categorised as ‘progress2’; and those with eGFR < 60 mL/min/1.73 m² and 24 h UAE ≥ 300 mg/24 h were categorised as ‘progress3’.

Outcomes	Baseline 24 h UAE < 30 mg/24 h (n = 733)					Baseline 24 h UAE ≥ 30 mg/24 h (n = 302)				
	Univariate analysis		Multivariate analysis		Outcomes	Univariate analysis		Multivariate analysis		Outcomes
	OR (95% CI)	p value	OR (95% CI)	p value ^a		OR (95% CI)	p value	OR (95% CI)	p value ^a	
Onset- 1 BaselineU- (n = 14) rine IgG	0.996 (0.916– 1.084)	0.929	1.013 (0.918– 1.118)	0.794	Progr- ess1 (n = 15)	BaselineU- rine IgG	1.010 (0.998 –1.021)	1.025 (1.002– –1.049)	0.104	0.031
Onset- 2 BaselineU- (n = 109) rine IgG	1.048 (1.025– 1.072)	< 0.001	1.039 (1.018– 1.061)	< 0.001	Progr- ess2 (n = 58)	BaselineU- rine IgG	1.029 (1.015 –1.044)	1.031 (1.014 –1.048)	< 0.001	< 0.001
Onset -3 BaselineU- (n=15) rine IgG	1.055 (1.031– 1.079)	< 0.001	1.051 (1.028– 1.074)	< 0.001	Progr- ess3 (n = 22)	BaselineU- rine IgG	1.032 (1.017 –1.048)	1.022 (1.008 –1.037)	< 0.001	0.002