Supplementary Information

Association of the plasma xanthine oxidoreductase activity with the metabolic parameters and vascular complications in patients with type 2 diabetes

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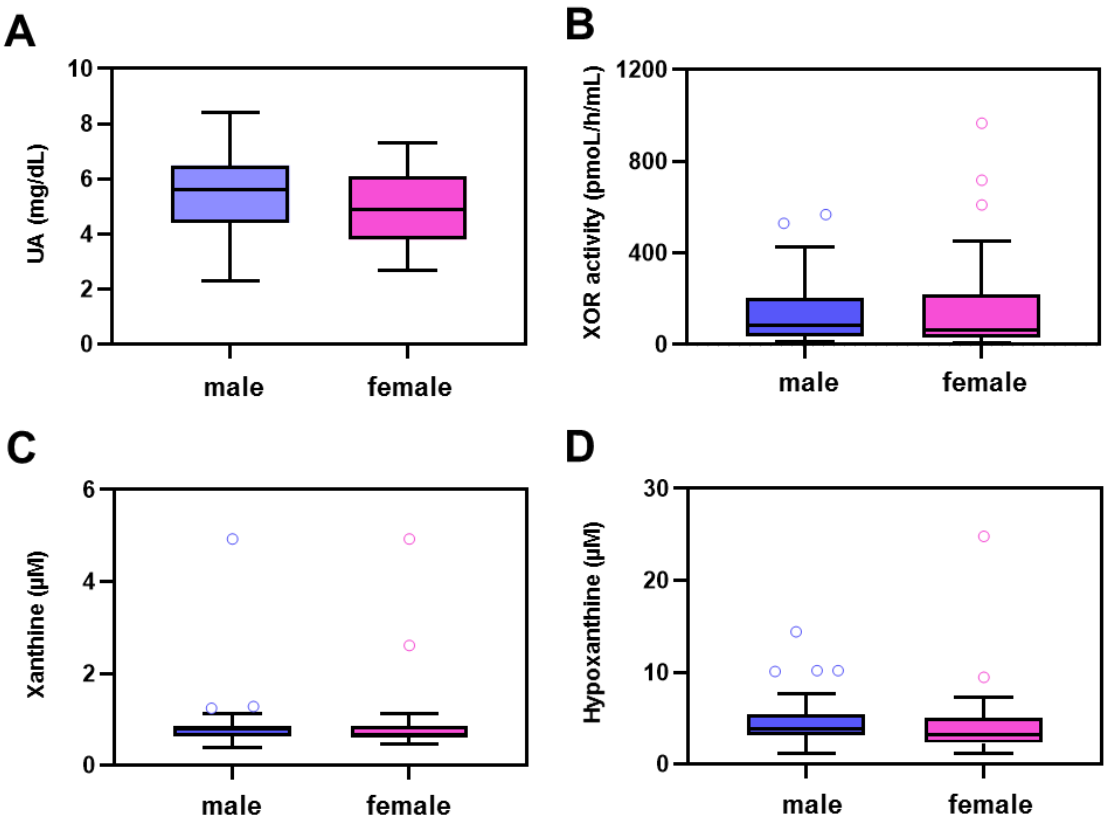
Supplementary Figure 1



Supplementary Figure 1. Plasma XOR activity, purine catabolism, and uric acid levels in males and females.

(A) serum uric acid levels (mg/dL), (B) plasma XOR activity (pmol/h/mL), (C) plasma xanthine (μM), and (D) plasma hypoxanthine (μM) levels in males and females.

Supplementary Table 1. Correlation analyses for plasma XOR activity.

	R	*P* value
Age	-0.146	0.161
BMI	0.502	0.000
Waist circumference	0.322	0.009
Duration conduction velocity	-0.295	0.006
HbA1c	0.083	0.427
Glycated albumin	-0.266	0.010
Fasting blood glucose	0.002	0.983
Fasting IRI	0.539	0.000
Fasting CPR	0.512	0.000
HOMA-IR	0.466	0.000
eGFR	0.005	0.964
Cystatin C	0.081	0.440
UA	0.417	0.000
LDL-C	0.156	0.134
HDL-C	-0.303	0.003
TG	0.318	0.002
AST	0.808	0.000
ALT	0.881	0.000
γ-GTP	0.759	0.000
Fib4-index	0.310	0.054
ACR	0.037	0.723
Urinary CPR	0.406	0.010

XOR, xanthine oxidoreductase; BMI, body mass index; HbA1c, glycosylated hemoglobin; IRI, immunoreactive insulin; CPR, C-peptide immunoreactivity; HOMA-IR, homeostasis model assessment of insulin resistance; eGFR, estimated glomerular filtration rate; UA, serum uric acid level; T-Chol, serum total cholesterol level; HDL-C, serum high-density lipoprotein cholesterol level; LDL-C, serum low density lipoprotein cholesterol level; TG, serum triglyceride level; AST, serum aspartate aminotransferase level; ALT, serum alanine aminotransferase level; γ-GTP, serum γ-glutamyl transpeptidase level; ACR, urinary albumin to creatinine ratio

Supplementary Table 2. Correlation analyses for plasma xanthine.

	R	*P* value
Age	0.057	0.586
BMI	0.386	0.000
Waist circumference	0.419	0.001
Duration	-0.128	0.239
HbA1c	-0.003	0.975
Glycated albumin	-0.165	0.111
Fasting blood glucose	-0.075	0.472
Fasting IRI	0.347	0.001
Fasting CPR	0.320	0.002
HOMA-IR	0.271	0.009
eGFR	-0.122	0.241
Cystatin C	0.191	0.065
UA	0.392	0.000
LDL-C	0.147	0.157
HDL-C	-0.207	0.045
TG	0.178	0.086
AST	0.620	0.000
ALT	0.562	0.000
γ-GTP	0.535	0.000
Fib4-index	0.427	0.007
ACR	0.124	0.234
Urinary CPR	0.133	0.421

BMI, body mass index; HbA1c, glycosylated hemoglobin; IRI, immunoreactive insulin; CPR, C-peptide immunoreactivity; HOMA-IR, homeostasis model assessment of insulin resistance; eGFR, estimated glomerular filtration rate; UA, serum uric acid level; T-Chol, serum total cholesterol level; HDL-C, serum high-density lipoprotein cholesterol level; LDL-C, serum low density lipoprotein cholesterol level; TG, serum triglyceride level; AST, serum aspartate aminotransferase level; ALT, serum alanine aminotransferase level; γ-GTP, serum γ-glutamyl transpeptidase level; ACR, urinary albumin to creatinine ratio

Supplementary Table 3. Correlation analyses for plasma hypoxanthine.

	R	P value
Age	-0.108	0.301
BMI	0.141	0.176
Waist circumference	0.232	0.063
Duration	-0.144	0.182
HbA1c	0.178	0.086
Glycated albumin	-0.022	0.836
Fasting blood glucose	-0.013	0.898
Fasting IRI	0.089	0.400
Fasting CPR	0.057	0.589
HOMA-IR	0.052	0.623
eGFR	0.104	0.318
Cystatin C	-0.082	0.434
UA	0.046	0.662
LDL-C	0.075	0.471
HDL-C	-0.234	0.023
TG	0.190	0.067
AST	0.085	0.605
ALT	0.053	0.746
γ-GTP	0.107	0.517
Fib4-index	0.007	0.967
ACR	-0.143	0.170
Urinary CPR	0.101	0.543

BMI, body mass index; HbA1c, glycosylated hemoglobin; IRI, immunoreactive insulin; CPR, C-peptide immunoreactivity; HOMA-IR, homeostasis model assessment of insulin resistance; eGFR, estimated glomerular filtration rate; UA, serum uric acid level; T-Chol, serum total cholesterol level; HDL-C, serum high-density lipoprotein cholesterol level; LDL-C, serum low density lipoprotein cholesterol level; TG, serum triglyceride level; AST, serum aspartate aminotransferase level; ALT, serum alanine aminotransferase level; γ-GTP, serum γ-glutamyl transpeptidase level; ACR, urinary albumin to creatinine ratio