

Supplementary Table 5. Sensitivity analysis excluding participants using diuretics or urate-lowering therapy

	No. of events/ total No.	Absolute risk (%)	Crude		Model 1		Model 2		Model 3		Model 4	
			HR (95% CI)	<i>p</i> value	HR (95% CI)	<i>p</i> value	HR (95% CI)	<i>p</i> value	HR (95% CI)	<i>p</i> value	HR (95% CI)	<i>p</i> value
All type VHD												
SUA per 1.0 mg/dL			1.25 (1.23–1.26)	< 0.0001	1.14 (1.13–1.16)	< 0.0001	1.09 (1.07–1.10)	< 0.0001	1.08 (1.05–1.11)	< 0.0001	1.07 (1.05–1.10)	< 0.0001
SUA < 6.0	8,608/334,697	2.57	Ref		Ref		Ref		Ref		Ref	
SUA 6.0–8.9	4,847/115,639	4.19	1.61 (1.55–1.66)	< 0.0001	1.26 (1.21–1.31)	< 0.0001	1.13 (1.09–1.18)	< 0.0001	1.11 (1.04–1.18)	0.0025	1.09 (1.02–1.17)	0.0115
SUA ≥ 9.0	252/2,882	8.74	3.17 (2.80–3.59)	< 0.0001	2.31 (2.04–2.62)	< 0.0001	1.87 (1.63–2.15)	< 0.0001	1.62 (1.35–1.95)	< 0.0001	1.55 (1.29–1.86)	< 0.0001
Mitral VHD												
SUA per 1.0 mg/dL			1.23 (1.20–1.25)	< 0.0001	1.14 (1.12–1.17)	< 0.0001	1.13 (1.10–1.16)	< 0.0001	1.13 (1.08–1.18)	< 0.0001	1.12 (1.07–1.17)	< 0.0001
SUA < 6.0	2,768/334,697	0.83	Ref		Ref		Ref		Ref		Ref	
SUA 6.0–8.9	1,431/115,639	1.24	1.50 (1.40–1.60)	< 0.0001	1.23 (1.15–1.32)	< 0.0001	1.19 (1.10–1.28)	< 0.0001	1.18 (1.04–1.33)	0.0099	1.16 (1.03–1.31)	0.0178
SUA ≥ 9.0	74/2,882	2.57	3.12 (2.47–3.92)	< 0.0001	2.41 (1.91–3.04)	< 0.0001	2.18 (1.69–2.82)	< 0.0001	1.73 (1.21–2.47)	0.0027	1.67 (1.17–2.39)	0.0047
Aortic VHD												
SUA per 1.0 mg/dL			1.31 (1.29–1.34)	< 0.0001	1.18 (1.15–1.20)	< 0.0001	1.08 (1.05–1.10)	< 0.0001	1.05 (1.01–1.09)	0.011	1.04 (1.01–1.08)	0.0395
SUA < 6.0	3,106/334,697	0.93	Ref		Ref		Ref		Ref		Ref	
SUA 6.0–8.9	1,884/115,639	1.63	1.76 (1.66–1.86)	< 0.0001	1.28 (1.21–1.37)	< 0.0001	1.07 (1.01–1.15)	0.0398	1.00 (0.90–1.11)	0.6103	0.98 (0.89–1.09)	0.7595
SUA ≥ 9.0	109/2,882	3.78	4.12 (3.40–4.98)	< 0.0001	2.73 (2.25–3.32)	< 0.0001	1.85 (1.50–2.29)	< 0.0001	1.58 (1.19–2.08)	0.0014	1.47 91.11–1.95)	0.0068
Aortic stenosis												
SUA per 1.0 mg/dL			1.35 (1.32–1.38)	< 0.0001	1.20 (1.17–1.23)	< 0.0001	1.08 (1.05–1.11)	< 0.0001	1.07 (1.02–1.12)	0.0037	1.06 (1.01–1.11)	0.0107
SUA < 6.0	2,091/334,697	0.63	Ref		Ref		Ref		Ref		Ref	
SUA 6.0–8.9	1,336/115,639	1.16	1.85 (1.73–1.98)	< 0.0001	1.32 (1.22–1.42)	< 0.0001	1.06 (0.98–1.14)	< 0.0001	1.01 (0.89–1.14)	0.9261	0.99 (0.88–1.12)	0.8722
SUA ≥ 9.0	83/2,882	2.88	4.64 (3.72–5.78)	< 0.0001	2.99 (2.39–3.73)	< 0.0001	1.85 (1.45–2.36)	< 0.0001	1.67 (1.22–2.29)	0.0013	1.56 (1.14–2.14)	0.0051

HR, hazard ratio; CI, confidence interval; VHD, valvular heart disease; SUA, serum uric acid; BMI, body mass index; SBP, systolic blood pressure; DBP, diastolic blood pressure; LDL, low-density lipoprotein; eGFR, estimated glomerular filtration rate; DM, diabetes mellitus.

Model 1: adjusted for age, sex, and race.

Model 2: Model 1 + BMI + smoking + physical activity + eating habit + alcohol frequency.

Model 3: Model 2 + SBP + DBP + LDL-cholesterol + HbA1c + eGFR + albuminuria.

Model 4: Model 3 + aspirin + anti-hypertensive agents + DM medications + lipid lowering medications + uric acid-lowering therapy + diuretics.