

Supplementary Table 1. The number of metabolic syndrome diagnoses and risk of thyroid cancer

	Number of patients	Thyroid cancer	IR 1,000 py	Model 1 HR (95% CI)	Model 2 HR (95% CI)	Model 3 HR (95% CI)	p value for trend
Metabolic syndrome							
0	902,696	4,373	0.779	1 (reference)	1 (reference)	1 (reference)	< 0.001
1	147,850	669	0.728	0.94 (0.86–1.02)	1.12 (1.03–1.23)	1.12 (1.02–1.23)	
2	72,650	376	0.834	1.07 (0.97–1.19)	1.27 (1.13–1.42)	1.25 (1.10–1.42)	
3	46,042	267	0.936	1.20 (1.06–1.36)	1.36 (1.19–1.56)	1.33 (1.15–1.55)	
4	35,408	244	1.114	1.43 (1.26–1.63)	1.51 (1.31–1.75)	1.48 (1.25–1.75)	
Waist circumference							
0	913,824	4,242	0.746	1 (reference)	1 (reference)	1 (reference)	< 0.001
1	107,160	572	0.861	1.16 (1.06–1.26)	1.12 (1.02–1.23)	1.22 (1.12–1.33)	
2	59,167	338	0.923	1.24 (1.11–1.39)	1.28 (1.14–1.45)	1.47 (1.31–1.64)	
3	50,570	316	1.010	1.36 (1.21–1.52)	1.41 (1.23–1.60)	1.66 (1.48–1.87)	
4	73,925	461	1.009	1.36 (1.23–1.49)	1.31 (1.15–1.49)	1.67 (1.51–1.86)	
HTN							
0	525,580	2,975	0.911	1 (reference)	1 (reference)	1 (reference)	< 0.001
1	269,990	1,197	0.712	0.78 (0.73–0.84)	1.05 (0.98–1.13)	1.09 (1.01–1.17)	
2	179,743	698	0.624	0.69 (0.63–0.74)	1.00 (0.91–1.09)	1.05 (0.96–1.15)	
3	127,822	575	0.723	0.80 (0.73–0.87)	1.16 (1.05–1.28)	1.23 (1.12–1.36)	
4	101,511	484	0.768	0.84 (0.77–0.93)	1.15 (1.04–1.29)	1.24 (1.11–1.38)	
TG							
0	627,810	3,334	0.857	1 (reference)	1 (reference)	1 (reference)	< 0.001
1	215,619	968	0.721	0.84 (0.78–0.90)	1.01 (0.94–1.09)	1.02 (0.95–1.10)	
2	133,374	537	0.647	0.76 (0.69–0.83)	1.01 (0.92–1.11)	1.03 (0.93–1.13)	
3	108,375	487	0.722	0.84 (0.77–0.93)	1.17 (1.05–1.29)	1.18 (1.06–1.31)	
4	119,468	593	0.798	0.93 (0.85–1.02)	1.28 (1.16–1.41)	1.27 (1.14–1.40)	
HDL-C							
0	806,013	3,528	0.704	1 (reference)	1 (reference)	1 (reference)	< 0.001
1	189,888	989	0.838	1.19 (1.11–1.28)	1.07 (0.99–1.15)	1.08 (1.01–1.16)	
2	96,452	584	0.974	1.38 (1.27–1.51)	1.17 (1.07–1.28)	1.20 (1.09–1.31)	
3	63,935	431	1.083	1.54 (1.39–1.70)	1.24 (1.12–1.38)	1.28 (1.15–1.42)	
4	48,358	397	1.312	1.87 (1.69–2.08)	1.43 (1.29–1.59)	1.48 (1.33–1.65)	
IFG							
0	689,290	3,598	0.839	1 (reference)	1 (reference)	1 (reference)	0.194
1	292,816	1,313	0.721	0.86 (0.81–0.92)	0.96 (0.90–1.02)	0.96 (0.90–1.02)	
2	128,595	611	0.765	0.91 (0.84–1.00)	1.04 (0.95–1.34)	1.04 (0.96–1.14)	
3	59,497	255	0.690	0.83 (0.73–0.94)	0.93 (0.82–1.06)	0.93 (0.82–1.06)	
4	34,448	152	0.712	0.85 (0.72–1.00)	0.89 (0.75–1.05)	0.87 (0.73–1.02)	

IR py, incidence rate person-years; Model 1, non-adjusted; HR, hazard ratio; CI, confidence interval; Model 2, adjusted for age, sex, smoking, alcohol consumption, regular exercise, low income, and body mass index; Model 3, adjusted for age, sex, smoking, alcohol consumption, regular exercise, low income, and baseline metabolic status (waist circumference, HTN, TG, HDL-C, and IFG); HTN, hypertension; TG, triglycerides; HDL-C, high-density lipoprotein cholesterol; IFG, impaired fasting glucose.