Supplemental Table S1. Multivariate Analysis of Hazard Ratios in Subclinical Hypothyroidism Patients Relative to Euthyroid Patients with Valvular Heart Disease

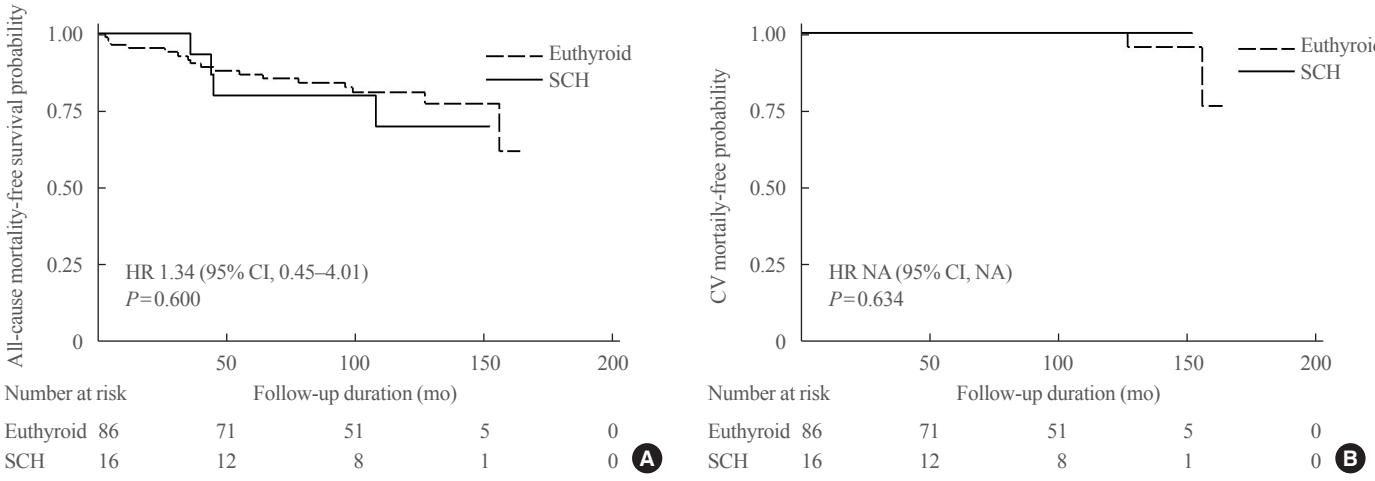
Variable	HR	95% CI	*P* value
All-cause mortality			
Unadjusted	1.14	0.43–3.01	0.792
Model 1	1.20	0.45–3.20	0.715
Model 2	1.24	0.43–3.58	0.688
Model 3	0.96	0.33–2.78	0.945
Cardiovascular mortality			
Unadjusted	0.81	0.18–3.62	0.784
Model 1	0.87	0.19–3.92	0.851
Model 2	0.92	0.19–4.55	0.917
Model 3	0.47	0.08–2.86	0.414
MACE			
Unadjusted	0.54	0.12–2.33	0.407
Model 1	0.59	0.14–2.56	0.478
Model 2	0.33	0.05–2.02	0.228
Model 3	0.43	0.07–2.61	0.361
Hospitalization for heart failure			
Unadjusted	-	-	-
Model 1	-	-	-
Model 2	-	-	-
Model 3	-	-	-
Fatal or nonfatal stroke			
Unadjusted	0.62	0.08–4.97	0.617
Model 1	0.59	0.07–4.83	0.621
Model 2	0.24	0.02–3.47	0.291
Model 3	0.32	0.02–5.03	0.420
Coronary revascularization			
Unadjusted	-	-	-
Model 1	-	-	-
Model 2	-	-	-
Model 3	-	-	-

Multivariable Cox regression analysis was done. Model 1 adjusted for age and sex. Model 2 adjusted for the factors in model 1 and additionally adjusted for body mass index, smoking status, history of diabetes and hypertension, dyslipidemia, and chronic kidney disease. Model 3 adjusted for the factors in model 2 and additionally adjusted for left ventricular dysfunction (ejection fraction <40%) and emergent surgery.
HR, hazard ratio; CI, confidence interval; MACE, major adverse cardiovascular events.

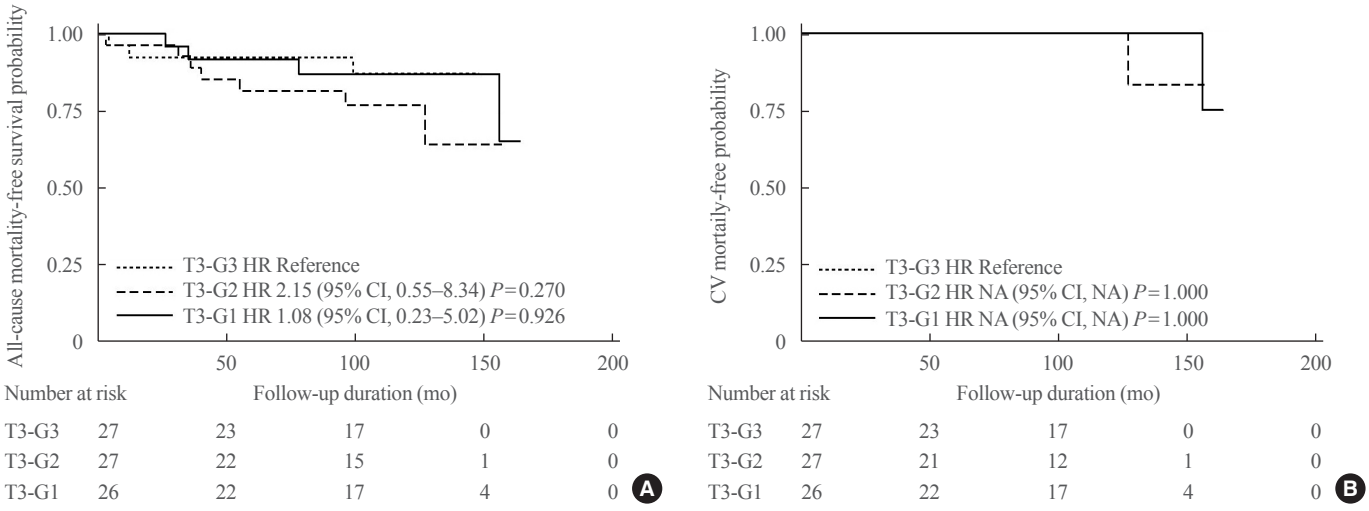
Supplemental Table S2. Long-Term Cardiovascular Outcomes According to fT4 Tertiles in Euthyroid Patients

Outcomes	Patients with IHD (*n*=395)				Patients with VHD (*n*=87)			
	fT4-G1 (*n*=126)	fT4-G2 (*n*=135)	fT4-G3 (*n*=133)	*P* value	fT4-G1 (*n*=28)	fT4-G2 (*n*=31)	fT4-G3 (*n*=28)	*P* value
All-cause mortality	38 (30.2)	38 (28.1)	44 (33.1)	0.751	8 (28.6)	10 (32.3)	7 (25.0)	0.920
Cardiovascular mortality	18 (14.3)	19 (14.1)	23 (17.3)	0.726	6 (21.4)	6 (19.4)	3 (10.7)	0.532
MACE	23 (18.3)	30 (22.2)	29 (21.8)	0.706	10 (35.7)	7 (22.6)	6 (21.4)	0.303
Hospitalization for heart failure	6 (4.8)	6 (4.4)	8 (6.0)	0.831	5 (17.9)	1 (3.2)	0 (0.0)	0.014
Fatal or nonfatal stroke	13 (10.3)	17 (12.6)	15 (11.3)	0.806	5 (17.9)	2 (6.5)	5 (17.9)	0.207
Coronary revascularization	9 (7.1)	11 (8.1)	6 (4.5)	0.484	1 (3.6)	0 (0.0)	0 (0.0)	0.361

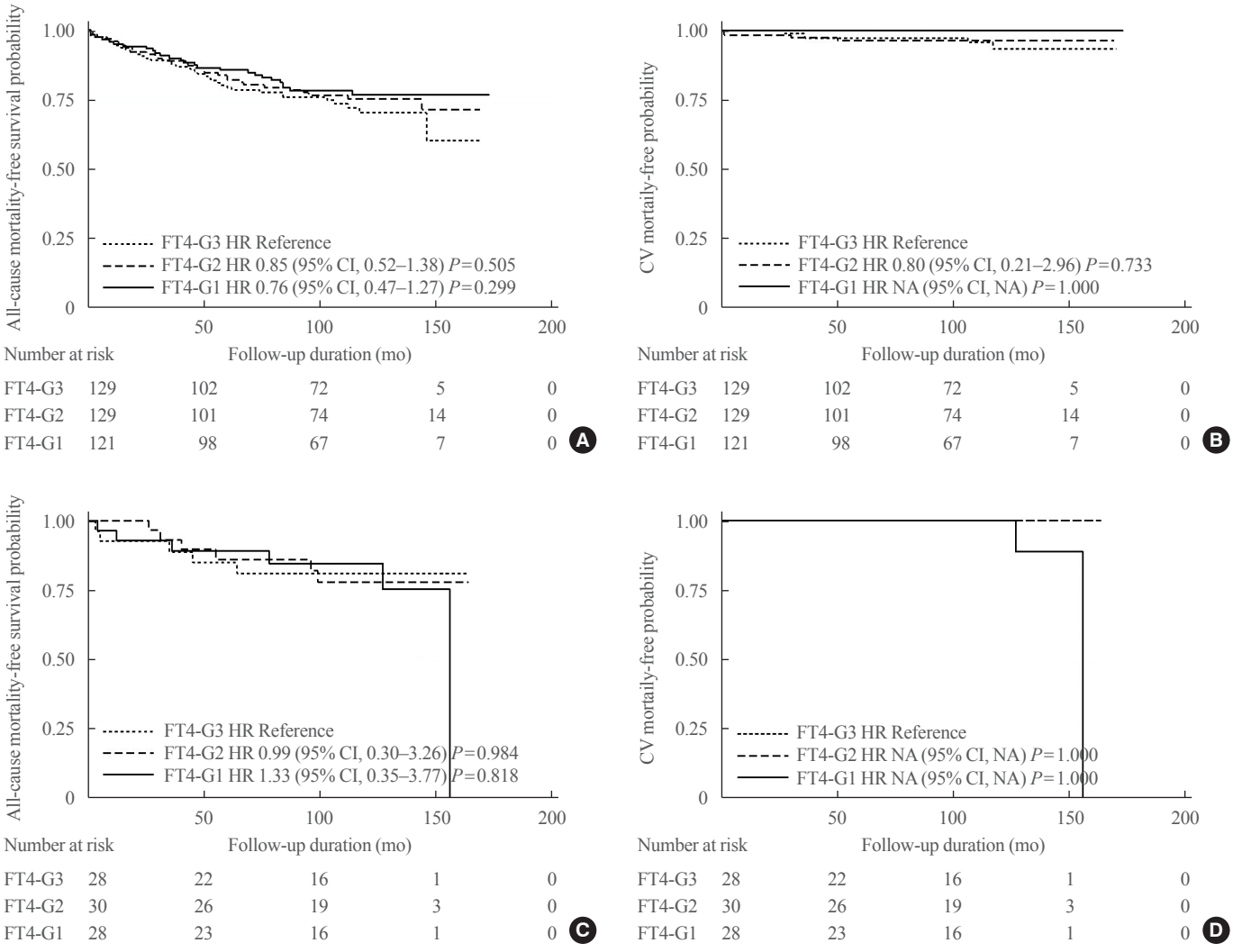
Values are expressed as number (%). *P* values were analyzed by the log-rank test. fT4 tertiles in patients with IHD: fT4-G1, 0.70 to 1.03 ng/dL; fT4-G2, 1.04 to 1.22 ng/dL; fT4-G3, 1.23 to 1.77 ng/dL. fT4 tertiles in patients with VHD: fT4-G1, 0.78 to 1.13 ng/dL; fT4-G2, 1.14 to 1.27 ng/dL; fT4-G3, 1.29 to 1.73 ng/dL.
fT4, free thyroxine; IHD, ischemic heart disease; VHD, valvular heart disease; MACE, major adverse cardiovascular events.



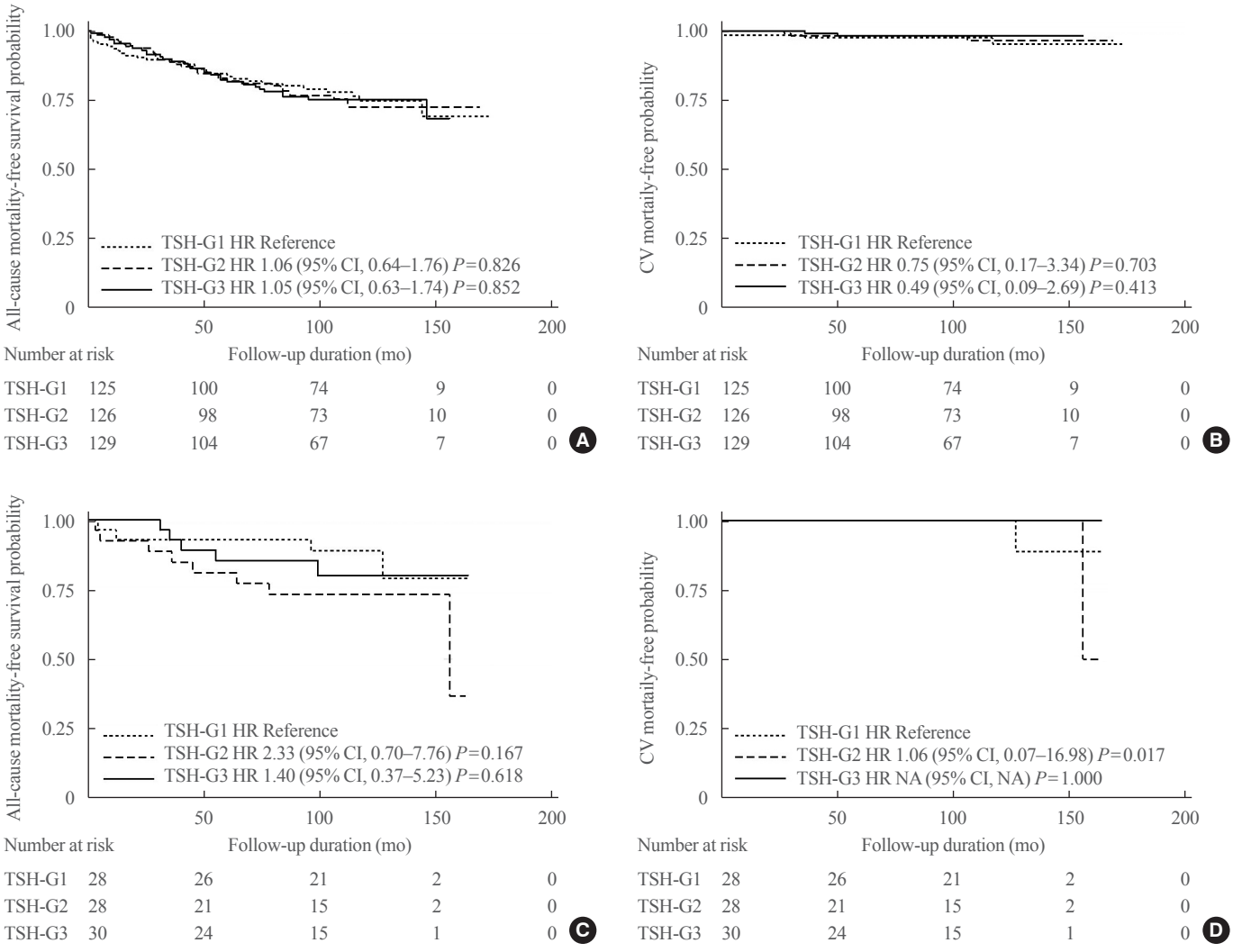
Supplemental Fig. S1. Kaplan-Meier curves of cardiovascular (CV) outcomes in subclinical hypothyroidism (SCH) patients relative to euthyroid patients with valvular heart disease (A) All-cause mortality. (B) CV mortality. Cox regression analysis was performed. The hazard ratios (HRs) are of subclinical hypothyroidism participants with euthyroid participants as reference. CI, confidence interval; NA, not available.



Supplemental Fig. S2. Kaplan-Meier curves of cardiovascular outcomes according to total triiodothyronine (T3) tertiles in euthyroid patients with valvular heart disease (A) All-cause mortality. (B) Cardiovascular mortality. Cox regression analysis was performed. The hazard ratios (HRs) are for T3-G1 and T3-G2 participants, with T3-G3 as reference. Total T3 tertiles: T3-G1, 0.3 to 80 ng/dL; T3-G2, 83 to 118 ng/dL; T3-G3, 119 to 167 ng/dL. CI, confidence interval; NA, not available.



Supplemental Fig. S3. Kaplan-Meier curves of cardiovascular (CV) outcomes according to the free thyroxine (fT4) tertile in euthyroid patients. (A) All-cause mortality in ischemic heart disease (IHD). (B) CV mortality in IHD. (C) All-cause mortality in valvular heart disease (VHD). (D) CV mortality in VHD. Cox regression analysis was performed. The hazard ratios (HRs) are for fT4-G1 and fT4-G2 participants, with fT4-G3 as reference. fT4 tertiles in patients with IHD: fT4-G1, 0.70 to 1.03 ng/dL; fT4-G2, 1.04 to 1.22 ng/dL; fT4-G3, 1.23 to 1.77 ng/dL. fT4 tertiles in patients with VHD fT4-G1, 0.78 to 1.13 ng/dL; fT4-G2, 1.14 to 1.27 ng/dL; fT4-G3, 1.29 to 1.73 ng/dL. CI, confidence interval; NA, not available.



Supplemental Fig. S4. Kaplan-Meier curves of cardiovascular (CV) outcomes according to the thyroid-stimulating hormone (TSH) tertile in euthyroid patients. (A) All-cause mortality in ischemic heart disease (IHD). (B) CV mortality in IHD. (C) All-cause mortality in valvular heart disease (VHD). (D) CV mortality in VHD. Cox regression analysis was performed. The hazard ratios (HRs) are for TSH-G1 and TSH-G2 participants, with TSH-G3 as reference. TSH tertiles in patients with IHD: TSH-G1, 0.4 to 1.45 mIU/L; TSH-G2, 1.46 to 2.18 mIU/L; TSH-G3, 2.21 to 4.0 mIU/L. TSH tertiles in patients with VHD: TSH-G1, 0.44 to 1.65 mIU/L; TSH-G2, 1.68 to 2.45 mIU/L; TSH-G3, 2.46 to 3.86 mIU/L. CI, confidence interval; NA, not available.