

Supplemental Table S2. Univariable Analysis on Risk Factors Associated with Treatment Failure among Graves' Disease Patients

Variable	Total (n=452,001)	P value	ATD (n=442,990)	P value	RAI (n=2,981)	P value	Thyroidectomy (n=6,030)	P value
Initial treatment								
ATD	2.61 (2.39–2.85)	<0.001						
RAI	1 (Reference)							
Thyroidectomy	0.11 (0.09–0.13)	<0.001						
RAI dose at initial treatment								
< 10 mCi					1 (Reference)			
≥ 10 mCi					0.81 (0.67–0.99)	0.036		
Age per 5 years	0.997 (0.995–0.999)	<0.001	0.999 (0.997–1.000)	0.105	0.988 (0.958–1.019)	0.437	0.953 (0.89–1.02)	0.161
Female sex	0.87 (0.86–0.88)	<0.001	0.88 (0.87–0.89)	<0.001	0.79 (0.65–0.97)	0.023	1.19 (0.71–1.98)	0.512
Socioeconomical status								
Low (1st tertile)	1.00 (0.99–1.02)	0.503	1.00 (0.99–1.02)	0.499	1.09 (0.87–1.36)	0.473	1.68 (1.06–2.68)	0.029
Middle (2nd tertile)	1 (Reference)							
High (3rd tertile)	0.97 (0.96–0.99)	<0.001	0.98 (0.96–0.99)	<0.001	0.89 (0.72–1.09)	0.262	1.30 (0.83–2.03)	0.248
Comorbidities								
Hypertension	1.09 (1.08–1.11)	<0.001	1.1 (1.09–1.12)	<0.001	1.17 (0.97–1.42)	0.103	0.55 (0.35–0.87)	0.010
Diabetes mellitus	1.19 (1.17–1.21)	<0.001	1.19 (1.17–1.21)	<0.001	1.03 (0.76–1.39)	0.839	1.24 (0.68–2.25)	0.483
Dyslipidemia	1.01 (0.996–1.02)	0.153	1.01 (1.000–1.03)	0.049	0.87 (0.67–1.13)	0.281	0.91 (0.55–1.51)	0.723
Cardiovascular disease	1.04 (1.02–1.05)	<0.001	1.04 (1.03–1.06)	<0.001	1.21 (0.98–1.49)	0.083	1.20 (0.76–1.91)	0.434
Ischemic heart disease	1.01 (0.99–1.03)	0.255	1.02 (0.999–1.03)	0.064	1.01 (0.78–1.3)	0.962	1.22 (0.72–2.06)	0.461
Stroke	1.02 (0.99–1.04)	0.242	1.02 (0.99–1.05)	0.149	0.98 (0.64–1.52)	0.943	1.57 (0.73–3.37)	0.247
Ischemic stroke	1.02 (0.98–1.06)	0.308	1.03 (0.99–1.07)	0.204	1.09 (0.6–1.98)	0.779	1.55 (0.49–4.87)	0.455
Hemorrhagic stroke	0.98 (0.91–1.06)	0.675	0.98 (0.91–1.07)	0.695	1.94 (0.72–5.18)	0.188	1.94 (0.27–13.91)	0.508
Heart failure	1.10 (1.08–1.13)	<0.001	1.11 (1.08–1.14)	<0.001	1.39 (1.04–1.84)	0.025	1.12 (0.50–2.55)	0.781
Atrial fibrillation	1.07 (1.05–1.09)	<0.001	1.08 (1.06–1.10)	<0.001	1.42 (1.14–1.77)	0.002	1.11 (0.61–2.02)	0.722
Body mass index, kg/m ²	1.002 (0.998–1.006)	0.314	1.005 (1.001–1.009)	<0.001	1.085 (1.007–1.169)	0.031	0.912 (0.784–1.062)	0.237
Smoking status								
Non-smoker	1 (Reference)		1 (Reference)		1 (Reference)		1 (Reference)	
Ex-smoker	1.03 (1.01–1.05)	0.003	1.02 (1.001–1.04)	0.039	0.78 (0.48–1.24)	0.292	0.59 (0.14–2.42)	0.462
Current smoker	1.26 (1.24–1.28)	<0.001	1.24 (1.22–1.26)	<0.001	1.58 (1.16–2.15)	0.004	2.07 (1.11–3.88)	0.022
Alcohol consumption								
None	1 (Reference)		1 (Reference)		1 (Reference)		1 (Reference)	
≤2 times/wk	0.98 (0.97–0.99)	0.004	0.97 (0.96–0.99)	<0.001	0.91 (0.69–1.21)	0.523	1.18 (0.69–2.02)	0.556
≥3 times/wk	1.03 (1.01–1.06)	0.018	1.03 (0.999–1.05)	0.056	0.69 (0.37–1.31)	0.258	0.33 (0.05–2.40)	0.274

Values are expressed as crude hazard ratio (95% confidence interval).

ATD, antithyroid drug; RAI, radioactive iodine.