S13 Table. Incidence and risk of early onset colorectal cancer according to the change of TG status among participants aged 20-49 years (National Health Insurance Service 2009-2019) by subgroup components, full F/U to study end-date even if age > 50 (age-not-censored)

Subgroup	Colorectal cancer HRs to TG change (95% CI)				
	Group 1	Group 2	Group 3	Group 4	p for interaction
Total	1 (reference)	1.013 (0.952-1.078)	1.008 (0.945-1.075)	1.107 (1.049-1.168)[a]	
Sex					
Male	1 (reference)	1.046 (0.969-1.129)	1.078 (0.998-1.165)	1.149 (1.082-1.221)[a]	0.025[a]
Female	1 (reference)	0.987 (0.885-1.100)	0.878 (0.777-0.991)	1.038 (0.917-1.175)	
Age (yr)					
20-29	1 (reference)	0.981 (0.696-1.384)	1.010 (0.668-1.528)	1.336 (0.942-1.895)	
30-39	1 (reference)	0.916 (0.804-1.043)	0.975 (0.850-1.118)	1.098 (0.990-1.218)	0.581
40-49	1 (reference)	1.052 (0.980-1.130)	1.020 (0.947-1.098)	1.116 (1.050-1.186)[a]	
Smoking status					
Non	1 (reference)	0.995 (0.921-1.076)	1.007 (0.930-1.091)	1.148 (1.070-1.231)[a]	0.446
Current	1 (reference)	1.052 (0.949-1.166)	1.014 (0.909-1.130)	1.083 (0.999-1.175)	
Alcohol consumption					
Non	1 (reference)	1.015 (0.951-1.084)	0.986 (0.920-1.056)	1.114 (1.052-1.180)[a]	0.179
Heavy Drinker	1 (reference)	1.060 (0.875-1.286)	1.237 (1.020-1.499)[a]	1.159 (0.999-1.344)	
Regular exercise					
Non	1 (reference)	1.033 (0.965-1.106)	1.012 (0.941-1.088)	1.106 (1.042-1.173)[a]	0.539
Regular	1 (reference)	0.946 (0.817-1.095)	1.005 (0.878-1.150)	1.161 (1.037-1.300)[a]	
Income status					
Q2-4	1 (reference)	1.014 (0.949-1.084)	1.014 (0.946-1.086)	1.094 (1.033-1.159)[a]	0.132
Low Q1	1 (reference)	1.033 (0.880-1.213)	0.982 (0.827-1.165)	1.292 (1.127-1.481)[a]	
Obesity					
No	1 (reference)	1.041 (0.962-1.127)	0.968 (0.891-1.051)	1.153 (1.073-1.239)[a]	0.126
Yes	1 (reference)	0.983 (0.891-1.086)	1.070 (0.965-1.186)	1.082 (1.002-1.170)[a]	
Diabetes mellitus					
No	1 (reference)	1.022 (0.959-1.090)	0.990 (0.926-1.059)	1.095 (1.035-1.159)[a]	0.013[a]

Yes	1 (reference)	1.033 (0.793-1.346)	1.371 (1.076-1.745)[a]	1.409 (1.169-1.699)[a]	
Hypertension					
No	1 (reference)	1.018 (0.951-1.091)	0.983 (0.914-1.056)	1.093 (1.029-1.162)[a]	0.188
Yes	1 (reference)	1.035 (0.899-1.191)	1.136 (0.987-1.308)	1.205 (1.083-1.341)[a]	
Anti-dyslipidemia medications					
No	1 (reference)	1.013 (0.951-1.079)	0.990 (0.926-1.058)	1.109 (1.049-1.172)[a]	0.060
Yes	1 (reference)	1.219 (0.892-1.667)	1.434 (1.105-1.861)[a]	1.341 (1.073-1.677)[a]	
Total cholesterol (mg/dL)					
< 200	1 (reference)	1.031 (0.945-1.124)	1.008 (0.926-1.097)	1.116 (1.034-1.205)[a]	0.976
≥ 200	1 (reference)	1.002 (0.917-1.095)	1.010 (0.917-1.113)	1.111 (1.033-1.194)[a]	
Total cholesterol (mg/dL)					
< 240	1 (reference)	1.020 (0.954-1.090)	0.999 (0.933-1.070)	1.106 (1.044-1.173)[a]	0.805
≥ 240	1 (reference)	0.970 (0.813-1.157)	1.071 (0.882-1.302)	1.108 (0.966-1.270)	
HDL-C					
M > 40 mg/dL/F > 50 mg/dL	1 (reference)	1.027 (0.956-1.104)	1.021 (0.951-1.096)	1.126 (1.057-1.199)[a]	0.787
M ≤ 40 mg/dL/F ≤50 mg/dL	1 (reference)	0.981 (0.868-1.108)	0.960 (0.828-1.112)	1.079 (0.977-1.190)	
LDL-C (mg/dL)					
< 130	1 (reference)	1.009 (0.938-1.086)	1.026 (0.947-1.111)	1.122 (1.054-1.196)[a]	0.881
≥ 130	1 (reference)	1.040 (0.928-1.165)	0.990 (0.889-1.102)	1.104 (1.007-1.210)[a]	
LDL-C (mg/dL)					
< 160	1 (reference)	1.026 (0.962-1.095)	0.998 (0.931-1.069)	1.122 (1.060-1.187)[a]	0.486
≥ 160	1 (reference)	0.918 (0.737-1.144)	1.069 (0.887-1.288)	1.047 (0.888-1.235)	

HR was adjusted for sex, age, smoking status, alcohol consumption, regular exercise, low-income status, obesity, diabetes mellitus, hypertension, and anti-dyslipidemia medications. Group 1 (normal TG-persisted), group 2 (normal to HTG), group 3 (HTG to normal), group 4 (HTG-persisted). Analyses were done using the variables measured in 2011. HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; Q, quartile; TG, triglyceride. [a]Indicates statistical significance.