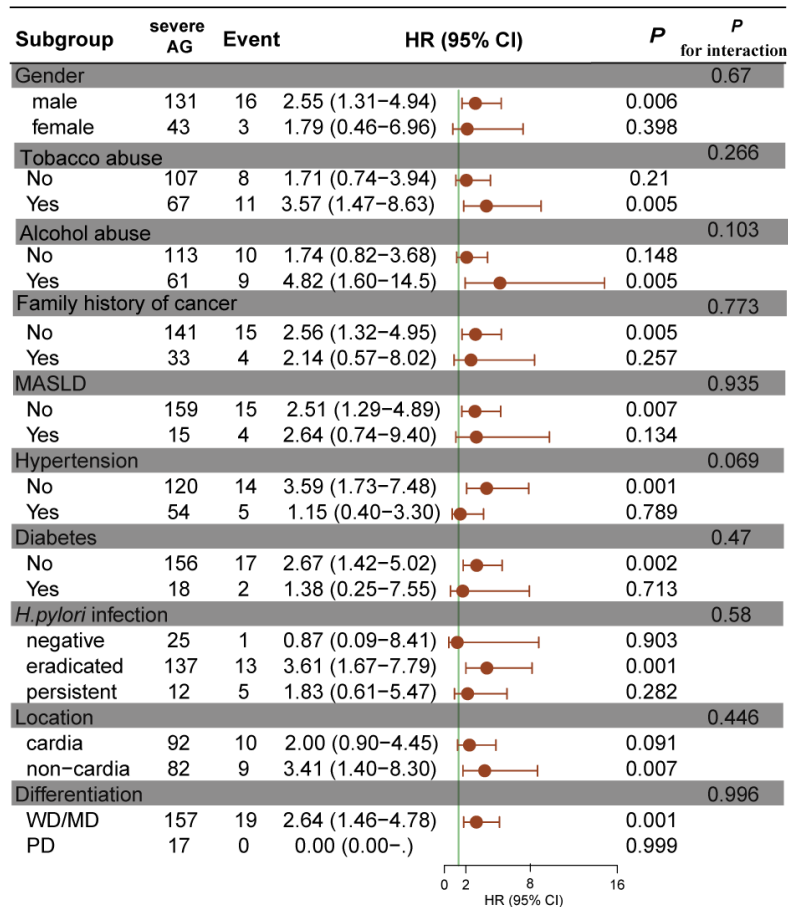
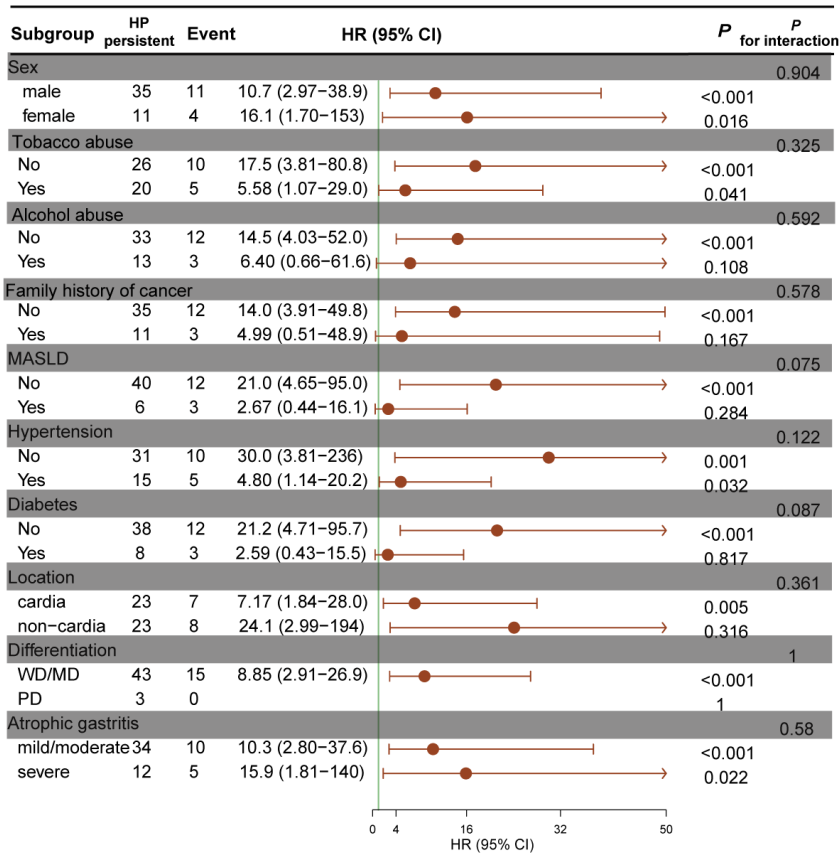


Supplementary Figure 1 Hazard ratios for the cumulative incidence of metachronous gastric cancer based on restricted cubic spine function for the age of initial endoscopic submucosal dissection. The purple line represents the reference of the hazard ratios, and the purple area represents 95% confidence intervals.



Supplementary Figure 2 The forest plot of subgroup analyses of the risk factor of severe atrophic gastritis associated with metachronous gastric cancer. MGC: Metachronous gastric cancer; AG: Atrophic gastritis; MASLD: Metabolic dysfunction-associated steatotic liver disease; WD: Well differentiated; MD: Moderately differentiated; PD: Poorly differentiated.



Supplementary Figure 3 The forest plot of subgroup analyses of *Helicobacter pylori* infection status associated with metachronous gastric cancer. MGC: Metachronous gastric cancer; MASLD: Metabolic dysfunction-associated steatotic liver disease; WD: Well differentiated; MD: Moderately differentiated; PD: Poorly differentiated.

Supplementary Table 1 Subgroup analysis of Differentiation Associated with metachronous gastric cancer

Characteristics	WD/MD	Event	HR (95%CI)	P	P for interaction
Sex					0.995
Male	415	36	79625665 (0.00-.)	0.997	
Female	166	9	1.66 (0.21-13.2)	0.631	
Tobacco abuse					0.995
No	379	26	81616485 (0.00-.)	0.997	
Yes	202	19	2.18 (0.29-16.4)	0.447	
Alcohol abuse					0.995
No	423	32	80177623 (0.00-.)	0.997	
Yes	158	13	1.78 (0.23-13.7)	0.578	
Family history of cancer					0.997
No	489	36	5.20 (0.71-37.9)	0.104	
Yes	92	9	75779098 (0.00-.)	0.998	
MASLD					0.996
No	525	36	81282583 (0.00-.)	0.996	
Yes	56	9	0.79 (0.10-6.45)	0.825	
Hypertension					0.997
No	405	28	3.69 (0.50-27.2)	0.2	

Yes	176	17	82269211 (0.00-.)	0.998	
Diabetes					0.997
No	520	39	5.34 (0.73-38.9)	0.098	
Yes	61	6	82407332 (0.00-.)	0.999	
<i>H.pylori</i> infection					1
Negative	72	4	298156839 (0.00-.)	0.999	
Eradicated	466	26	2.57 (0.35-18.9)	0.355	
Persistent	43	15	72276844 (0.00-.)	0.998	
Location					0.995
Cardia	292	24	2.59 (0.35-19.2)	0.352	
Non-cardia	289	21	84010308 (0.00-.)	0.997	
Atrophic gastritis					0.996
Mild/moderate	424	26	3.45 (0.47-25.4)	0.225	
Severe	157	19	86036325 (0.00-.)	0.997	

MASLD: Metabolic dysfunction-associated steatotic liver disease; MD: Moderately differentiated; O: Open; PD: Poorly differentiated; WD: Well-differentiated; *H. pylori*: *Helicobacter pylori*; MGC: Metachronous gastric cancer.