

TableS1 Correlation among the gastric function markers and Hp-IgG

		PGI	PGII	PGI/II	G17	Hp-IgG
PGI	<i>P</i>	-	<0.001	0.665	0.025	0.012
	<i>r^a</i>		0.633	0.013	0.083	-0.090
PGII	<i>P</i>	<0.001	-	<0.001	<0.001	<0.001
	<i>r^a</i>	0.633		-0.332	0.268	-0.218
PGI/II	<i>P</i>		<0.001	-	<0.001	<0.001
	<i>r^a</i>	0.013	-0.332		-0.230	-0.242
G17	<i>P</i>	0.025	<0.001	<0.001	-	<0.001
	<i>r^a</i>	0.083	0.268	-0.230		-0.146
Hp-IgG	<i>P</i>	0.012	<0.001	<0.001	<0.001	-
	<i>r^a</i>	-0.090	-0.218	-0.242	-0.146	

a: r: Pearson Correlation

Table S2. Association of serum markers reflecting gastric function and *H. pylori* infection with CRC**risk**

Indexes	CRC	Controls	CRC vs Controls	
	n = 569 (% ^b)	n = 569 (% ^b)	<i>P</i> ^a	OR (95% CI) ^a
PGI ⁺ /PGI ⁻	106/463(18.63)	133/436(23.37)	0.410	0.88(0.64-1.20)
PGII ⁺ /PGII ⁻	339/230(59.58)	278/291(48.86)	0.206	1.22(0.90-1.65)
PGI/II ⁺ /PGI/II ⁻	134/435(23.55)	127/442(22.32)	0.179	0.71(0.51-0.98)
G-17 ⁺ /G-17 ⁻	197/372(34.62)	124/445(21.79)	<0.001	1.80(1.34-2.41)
Hp ⁺ /Hp ⁻	265/304(46.57)	205/364(36.03)	0.086	1.37 (1.06-1.78)

a: Adjusted by age, sex, and all correlated markers(PGI: adjusted by PGII, G-17,and Hp-IgG; PGII: adjusted by PGI, PGI/II, G-17, and Hp-IgG; PGI/II: adjusted by PGII, G-17, and Hp-IgG; G-17: adjusted by PGI, PGII, PGI/II, and Hp-IgG; Hp-IgG: adjusted by PGI, PGII, PGI/II, and G-17)

b: Percentages of positivity

Table S3. Association of serum markers reflecting gastric function and *H. pylori* infection with CRC risk in subgroups

	PGI+ /PGI-				PGII+ /PGII-				PGI/II+ /PGI/II-			
	CRC	Controls	<i>P</i>	OR(95%CI)	CRC	Controls	<i>P</i>	OR(95%CI)	CRC	Controls	<i>P</i>	OR(95%CI)
Age ^a												
≥60	56/274	70/269	0.573	0.89(0.59-1.34)	223/107	194/145	0.134	1.35(0.91-1.99)	89/241	88/251	0.171	0.76(0.51-1.13)
<60	50/189	63/167	0.614	0.89(0.55-1.42)	116/123	84/146	0.360	1.26(0.77-2.04)	45/194	39/191	0.159	0.66(0.37-1.18)
Gender ^b												
Male	47/284	55/249	0.405	0.83(0.53-1.30)	205/126	152/152	0.142	1.34(0.91-1.98)	60/271	57/247	0.206	0.63(0.40-0.98)
Female	59/179	78/187	0.762	0.94(0.61-1.44)	134/104	126/139	0.997	1.00(0.61-1.64)	74/164	70/195	0.576	0.87(0.54-1.41)

	G-17+ /G-17-				Hp+ /Hp-			
	CRC	Controls	<i>P</i>	OR(95%CI)	CRC	Controls	<i>P</i>	OR(95%CI)
Age ^a								
≥60	118/212	82/257	0.037	1.67(1.15-2.43)	154/176	136/203	0.430	1.15(0.82-1.61)
<60	79/160	42/188	0.033	1.94(1.20-3.13)	111/128	69/161	0.035	1.76(1.17-2.66)
Gender ^b								
Male	107/224	55/249	0.004	1.99(1.33-2.98)	145/186	102/202	0.084	1.36(0.96-1.93)
Female	90/148	69/196	0.187	1.59(1.03-2.45)	120/118	103/162	0.092	1.41(0.95-2.10)

a: Adjusted by sex and all correlated markers(PGI: adjusted by PGII, G-17,and Hp-IgG; PGII: adjusted by PGI, PGI/II, G-17, and Hp-IgG; PGI/II: adjusted by PGII, G-17, and Hp-IgG; G-17: adjusted by PGI, PGII, PGI/II, and Hp-IgG; Hp-IgG: adjusted by PGI, PGII, PGI/II, and G-17)

b: Adjusted by age and all correlated markers(PGI: adjusted by PGII, G-17,and Hp-IgG; PGII: adjusted by PGI, PGI/II, G-17, and Hp-IgG; PGI/II: adjusted by PGII, G-17, and Hp-IgG; G-17: adjusted by PGI, PGII, PGI/II, and Hp-IgG; Hp-IgG: adjusted by PGI, PGII, PGI/II, and G-17)

Table S4. Association of serum markers reflecting gastric function and *H. pylori* infection with CRC clinicopathological parameters

Clinicopathological parameters		PGI		PGII		PGI/II		G17		Hp-IgG	
		+/- (%)	<i>P</i> ^a	+/- (%)	<i>P</i> ^a	+/- (%)	<i>P</i> ^a	+/- (%)	<i>P</i> ^a	+/- (%)	<i>P</i> ^a
Histopathological grade	Well & medium differentiated	61/311(16.4)	0.072	216/156(58.06)	0.827	89/283(23.92)	0.608	126/246(33.87)	0.529	177/195(47.58)	0.525
	Poorly differentiated & mucinous	41/143(22.28)		109/75(59.24)		40/144(21.74)		67/117(36.41)		82/102(44.57)	
Gross types	Ulcer	86/364(19.11)	0.218	261/189(58.00)	0.565	103/347(22.89)	0.901	157/293(34.89)	0.773	211/239(46.89)	0.680
	Protruded	16/90(15.09)		64/42(60.38)		26/80(24.53)		36/70(33.96)		48/58(45.28)	
Depth of infiltration	Penetrate the serosa	70/279(20.06)	0.182	193/156(55.30)	0.061	70/279(20.06)	0.125	121/228(34.67)	0.967	168/181(48.14)	0.335
	Not penetrate the serosa	32/175(15.46)		132/75(63.77)		59/148(28.50)		72/135(34.78)		91/116(43.96)	
Lymph node metastasis	Positive	43/165(20.67)	0.324	121/87(58.17)	0.934	45/163(21.63)	0.415	75/133(36.06)	0.639	104/104(50.00)	0.232
	Negative	59/289(16.95)		204/144(58.62)		84/264(24.14)		118/230(33.91)		155/193(44.54)	
TNM stage	III	87/364(19.29)	0.169	260/191(57.65)	0.337	98/353(21.73)	0.106	153/298(33.92)	0.461	214/237(47.45)	0.363
	I+II	15/90(14.29)		65/40(61.90)		31/74(29.52)		40/65(38.10)		45/60(42.86)	
Growth mode	Invasive	71/256(21.71)	0.075	185/142(56.57)	0.320	73/254(22.32)	0.585	112/215(34.25)	0.775	150/177(45.87)	0.692
	Nested/Cloddy	31/198(13.54)		140/89(61.14)		56/173(24.45)		81/148(35.37)		109/120(47.60)	
Vascular carcinoma embolus	Positive	32/104(23.53)	0.062	79/57(58.09)	0.874	30/106(22.06)	0.745	54/82(39.71)	0.142	64/72(47.06)	0.857
	Negative	70/349(16.71)		246/173(58.71)		99/320(23.63)		138/281(32.94)		194/225(46.30)	
Perineural invasion	Missing	1	0.191	1	0.623	1	0.835	1	0.628	1	0.922
	Positive	78/318(19.70)		229/167(57.83)		91/305(22.98)		135/261(34.09)		185/211(46.72)	
ENTD	Negative	24/136(15.00)	0.341	96/64(60.00)	0.207	38/122(23.75)	0.207	58/102(36.25)	0.081	74/86(46.25)	0.991
	Positive	8/41(16.33)		31/18(63.27)		8/41(16.33)		25/24(51.02)		23/26(46.94)	
	Missing	93/412(18.42)		293/212(58.02)		121/384(23.96)		167/338(33.07)		235/270(46.53)	
		2		2		2		2		2	

a: Adjusted by age and sex