

Supplementary Table 1. Clinical information

	Gender	Age	Diagnosis	Lauren	Atrophy	Cancer location*	<i>H.pylori</i>	MSI*	EBV*	#Cells (Adjacent noncancer)	#Cells (Cancer)
Patient01	M	75	EGC	Intestinal	N	LB, AW	+	MSS		80	91
Patient02	M	72	AGC	Diffuse	N	LB, GC	+	MSS	-	553	679
Patient03	F	66	EGC	Diffuse	Y	Antrum, GC, PW	-	MSS		260	409
Patient04	F	56	EGC	Diffuse	Y	Antrum, PW	+	MSS		236	244
Patient05	M	45	EGC	Diffuse	N	MB, LC	+	MSS		427	208
Patient06	M	58	EGC	Diffuse	N	UB, PW	Equivocal	MSS		1111	383
Patient07	M	76	EGC	Intestinal	Y	Angle, PW	+	MSS		275	111
Patient08	F	56	EGC	Diffuse	N	LB, LC	+	MSS		202	389
Patient09	M	55	EGC	Intestinal	Y	MB, LC	+	MSS		580	216
Patient10	M	54	EGC	Diffuse	N	LB, LC	+	MSS		154	208
Patient11	F	55	AGC	Diffuse	Y	MB, LC	+	MSS	-	170	162
Patient12	F	62	AGC	Diffuse	N	LB, LC	+	MSS	-	419	544
Patient13	M	70	EGC	Intestinal	N	Angle-antum, AW	+	MSS		317	155
Patient14	F	45	AGC	Diffuse	N	Antrum, PW	+	MSS	-	148	274
Patient15	M	66	AGC	Diffuse	N	MB, AW	-	MSS	-	442	269
Patient16	M	57	EGC	Diffuse	N	Angle, LC	Equivocal	MSS		84	331
Patient17	M	51	EGC	Intestinal	N	Antrum, AW	+	MSS		82	118
Patient18	M	58	EGC	Intestinal	N	Antrum, GC	+	MSS		401	203
Patient19	M	80	EGC	Intestinal	N	Angle, LC	+	MSS		83	163
Patient20	F	41	AGC	Diffuse	N	UB, LC	+	MSS		173	39
Patient21	M	63	AGC	Intestinal	Y	Antrum, LC	-	MSS		110	-
Patient22	M	46	EGC	Intestinal	Y	Antrum, PW	+	MSS		463	363

Patient23	M	76	AGC	Diffuse	Y	Angle, LC Antrum, AW	+	MSS		162	43
Patient24	F	44	AGC	Diffuse	N	LB, GC	+	MSS	+	163	325
Patient25	F	72	CAG with IM	-		-	+	-	-	253	
Patient26	F	59	CSG	-		-	+	-	-	479	
Patient27	F	61	CSG	-		-	+	-	-	2032	
Patient28	F	48	CSG	-		-	+	-	-	163	
Patient29	F	43	CAG with IM	-		-	+	-	-	1886	

\*Abbreviation

EGC	Early gastric cancer	+	positive
AGC	Advanced gastric cancer	-	negative
CAG	Chronic atrophic gastritis	blank	not tested
IM	Intestinal metaplasia		
CSG	Chronic superficial gastritis		
LB	Lower body		
AW	Anterior wall		
GC	Great Curvature		
PW	Post wall		
MB	Midbody		
UB	Upper body		
LC	Less curvature		
MSS	Microsatellite stability		
MSI	Microsatellite instability		

EBV      EpsteinBarr virus