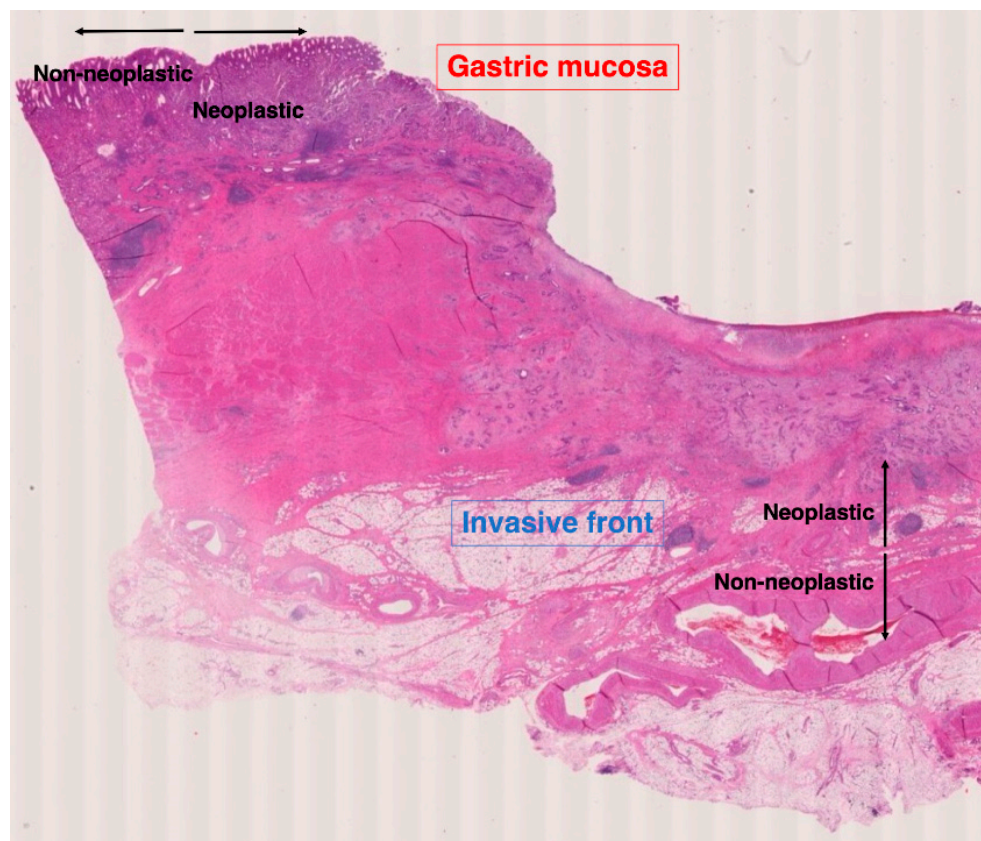


## Supplementary Materials



**Figure S1.** Four areas (non-neoplastic gastric mucosa, neoplastic mucosa, neoplastic invasive front, and non-neoplastic stroma) for evaluating inflammatory cells on HE slides of GC tissues.

**Table S1.** Information on antibodies used in this study and their rates of positivity.

Antibody	Clone	Dilution	Source	Cutoff-point	Positivity (%)
PD-L1	E1L3N	1: 200	Cell Signaling Technology	5%≤	18/116 (16%)
MLH1	ES05	1: 50	DAKO	Loss or reduction	26/116 (10%)
MSH2	FE11	1: 50	DAKO	Loss or reduction	5/116 (4%)
HER2	SV2-61γ	Diluted	Nichirei	2+, 3+	25/116 (23%)
EGFR	2-18C9	Diluted	DAKO	10%≤	29/116 (19%)
c-MET	SP44	Diluted	Ventana Medical Systems	2+, 3+	20/116 (19%)
CD44	DF1485	1: 50	Novocastra	10%≤	54/116 (45%)
ALDH1	44/ALDH	1: 200	BD Biosciences	10%≤	71/116 (63%)
CD133	AC133	1: 100	Miltenyi Biotec	10%≤	20/116 (17%)
p53	DO-7	1: 50	Novocastra	50%≤	45/116 (21%)

**Table S2.** Relationship between high or low presence of blood cells and clinicopathological parameters in the neoplastic area of gastric mucosa.

	Eosinophils			Neutrophils			Lymphocytes			Plasma cells		
	High	Low	P	High	low	P	High	low	P	High	low	P
Age												
<65	69 (61%)	44	0.0081	56 (50%)	57	1.0000	54 (48%)	59	0.02889	52 (46%)	61	1.0000
>65	50 (42%)	66		57 (49%)	59		47 (41%)	69		53 (46%)	63	
Sex												
Female	57 (55%)	47	0.5067	57 (55%)	47	0.1455	53 (51%)	51	0.0623	48 (46%)	56	1.0000
Man	62 (50%)	63		56 (45%)	69		48 (38%)	77		57 (46%)	68	

Histology												
tub/pap	62 (53%)	55	0.8947	63 (54%)	54	0.1848	44 (38%)	73	<b>0.0335</b>	57 (49%)	60	0.4242
por/sig	57 (52%)	53		49 (45%)	61		57 (52%)	53		47 (43%)	63	
T grade												
Tis/T1	64 (67%)	32	<b>0.0002</b>	51 (53%)	45	0.3309	37 (39%)	59	0.1777	53 (55%)	43	<b>0.0221</b>
T2/3/4	55 (41%)	78		62 (47%)	71		64 (48%)	69		52 (39%)	81	
N grade												
N0	69 (56%)	55	0.2854	67 (54%)	57	0.1105	53 (43%)	71	0.5910	58 (47%)	66	0.8934
N1/2/3	49 (48%)	53		44 (43%)	58		48 (47%)	54		46 (45%)	56	
Stage												
Stage 0/1	70 (60%)	47	<b>0.0174</b>	66 (56%)	51	<b>0.00345</b>	46 (39%)	71	0.1452	51 (52%)	56	0.0633
Stage 2/3/4	49 (44%)	63		47 (42%)	65		55 (49%)	57		44 (39%)	68	

*p* values were calculated using Fisher's exact test.  
Bold values indicate statistical significance ( $p < 0.05$ )

**Table S3.** Relationship between high or low presence of blood cells and clinicopathological parameters in the neoplastic area of the invasive front.

	Eosinophils			Neutrophils			Lymphocytes			Plasma cells		
	High (%)	Low	<i>P</i>	High	low	<i>P</i>	High	low	<i>P</i>	High	Low	<i>P</i>
Age												
<65	34 (45%)	42	1.0000	32 (42%)	44	0.2745	36 (47%)	40	0.4333	29 (38%)	47	0.3424
>65	39 (44%)	49		45 (51%)	43		36 (41%)	52		41 (47%)	47	
Sex												
Female	36 (47%)	40	0.5309	36 (47%)	40	1.0000	37 (49%)	39	0.2725	29 (38%)	47	0.3424
Man	37 (42%)	51		41 (47%)	47		35 (40%)	53		41 (47%)	47	
Histology												
tub/pap	38 (38%)	41	0.4341	47 (59%)	32	<b>0.0029</b>	28 (35%)	51	0.0576	39 (49%)	40	0.0837
por/sig	35 (42%)	49		30 (36%)	54		43 (52%)	41		30 (36%)	54	
T grade												
Tis/T1	24 (63%)	14	<b>0.0096</b>	51 (53%)	45	0.3309	18 (43%)	20	0.7100	22 (58%)	16	<b>0.0395</b>
T2/3/4	49 (39%)	77		62 (47%)	71		54 (43%)	72		48 (38%)	78	
N grade												
N0	31 (48%)	34	0.6324	33 (51%)	32	0.5207	33 (51%)	32	0.1961	31 (48%)	34	0.4196
N1/2/3	42 (44%)	54		43 (45%)	53		38 (40%)	58		39 (41%)	57	
Stage												
Stage 0/1	33 (58%)	24	<b>0.0137</b>	28 (49%)	29	0.7435	28 (49%)	29	0.4089	31 (54%)	26	<b>0.0318</b>
Stage 2/3/4	40 (37%)	67		49 (46%)	58		44 (41%)	63		39 (36%)	68	

*p* values were calculated using Fisher's exact test.  
Bold values indicate statistical significance ( $p < 0.05$ )

**Table S4.** Relationship between presence of Mott cells in non-neoplastic gastric mucosa and clinicopathological characteristics.

	Mott cell		<i>p</i> value
	Existence n=203	Non-existence n=351	
Age			
< 65 (n=274)	106 (39%)	168	0.3234
≥ 65 (n=280)	97 (35%)	183	
Sex			
Male (n=352)	120 (34%)	232	0.0999

Histologic classification	Female (n=202)	83 (41%)	119	0.4254
	Differentiated (n=307)	108 (35%)	199	
<b>T classification</b>	Un-differentiated (n=247)	95 (38%)	95	<b>0.0005</b>
	<b>T1</b> (n=293)	127 (43%)	166	
N classification	T2/T3/T4 (n=261)	76 (29%)	185	0.1316
	N0 (n=357)	139 (38%)	218	
<b>Stage</b>	N1/N2/N3 (n=197)	64 (32%)	133	<b>0.0435</b>
	<b>I</b> (n=352)	140 (40%)	212	
<b>H. pylori</b>	II/III/IV (n=202)	63 (31%)	139	<b>0.0002</b>
	Negative (n=454)	150 (33%)	304	
	<b>Positive</b> (n=100)	53 (53%)	47	

*p* values were calculated using Fisher's exact test.

Bold values indicate statistical significance ( $p < 0.05$ )