

**Supplement Table 1 Clinicopathological characteristics of lymph node metastasis early gastric cancers**

<b>Variables</b>	<b>B</b>	<b>SE</b>	<b>OR (95%CI)</b>	<b>P value</b>
Tumour size (>2 cm <i>vs</i> ≤ 2 cm)	1.363	0.423	3.908 (1.704-8.961)	0.001
Gross type (elevated <i>vs</i> flat/depressed)	0.238	0.379	1.268 (0.603-2.666)	0.532
Depth of invasion (mucosal <i>vs</i> submucosa)	1.217	0.335	3.376 (1.715-6.511)	< 0.0001
Lymphovascular invasion	1.421	0.423	4.139 (1.806-9.487)	0.001
Perineural invasion	0.580	0.370	1.787 (0.865-3.692)	0.117
Site (lower <i>vs</i> middle + upper)	0.747	0.389	2.112 (0.985-4.527)	0.055

The independent factors for lymph node metastasis were analyzed by binary logistic regression analysis (backward, stepwise). B: Coefficient; SE: Standard error; OR: Odds ratio; CI: Confidence interval.

**Supplement Table 2 Clinicopathological factors and lymph node metastasis in 302 diffuse-type early gastric cancers *n* (%)**

		Total	Lymph node status		<i>P</i> value
			Negative ( <i>n</i> = 274)	Positive ( <i>n</i> = 28)	
Sex	Male	156	142 (91.0)	14 (9.0)	0.854
	Female	146	131 (90.4)	14 (9.6)	
Age (yr)		550	56.1 ± 0.6	58.9 ± 1.4	0.071
Site <sup>1</sup>	Upper	78	73 (93.6)	5 (6.4)	0.415
	Middle	144	131 (91.0)	13 (9.0)	
	Lower	80	70 (93.6)	10 (12.5)	
Gross type	Elevated	18	14 (77.8)	4 (22.2)	0.092
	Flat	30	26 (86.7)	4 (13.3)	
	Depressed	254	234 (92.1)	20 (7.9)	
Ulceration	Negative	236	213 (90.3)	23 (9.7)	0.591
	Positive	66	61 (92.4)	5 (7.6)	
Tumour size (cm) <sup>2</sup>	≤ 1	31	31 (100.0)	0 (0.0)	0.003
	≤ 2	80	77 (96.3)	3 (3.8)	
	≤ 3	80	73 (91.3)	7 (8.8)	
	> 3	111	93 (83.8)	48 (16.2)	
Depth of Invasion <sup>3</sup>	Mucosa	188	179 (95.2)	9 (4.8)	0.001
	M2	41	40 (97.6)	1 (2.4)	
	M3	147	139 (94.6)	8 (5.4)	
	Submucosa	114	95 (83.3)	19 (16.7)	
	SM1	19	17 (89.5)	2 (10.5)	
	SM2	32	26 (81.3)	6 (18.8)	
	SM3	63	52 (82.5)	11 (17.5)	
Depth (µm)		118	1794.2 ± 144.9	1754.0 ± 210.8	0.905
Perineural invasion	Negative	278	256 (92.1)	22 (7.9)	0.015
	Positive	24	18 (75.0)	6 (25.0)	

LV	Negative	287	265 (92.3)	22 (7.7)	< 0.0001
invasion	Positive	15	9 (60.0)	6 (40.0)	

<sup>1</sup>Between upper *vs* middle + lower; <sup>2</sup>Between  $\leq 2$  cm *vs*  $>2$  cm, <sup>3</sup>Between M *vs* SM. LV: Lymphovascular; M2: Lamina propria invasion; M3: Muscularis mucosae invasion without penetration; SM1: Upper third; SM2: Middle third; SM3: Lower third.

**Supplement Table 3 Clinicopathological factors and lymph node metastasis in 248 mixed-type early gastric cancers *n* (%)**

		Lymph node status			<i>P</i> value
		Total	Negative ( <i>n</i> = 205)	Positive ( <i>n</i> = 43)	
Sex	Male	148	123 (83.1)	25 (16.9)	0.821
	Female	100	82 (82.0)	18 (18.0)	
Age (yr)		248	58.2 ± 0.8	61.0 ± 1.5	0.144
Site <sup>1</sup>	Upper	51	47 (92.2)	4 (7.8)	0.044
	Middle	108	86 (79.6)	22 (20.4)	
	Lower	89	72 (80.9)	17 (19.1)	
Gross type	Elevated	41	31 (75.6)	10 (24.4)	0.154
	Flat	21	20 (95.2)	1 (4.8)	
	Depressed	186	154 (82.8)	32 (17.2)	
Ulceration	Negative	209	176 (84.2)	33 (15.8)	0.136
	Positive	39	29 (74.4)	10 (25.6)	
Tomour size (cm) <sup>2</sup>	≤ 1	9	8 (88.9)	1 (11.1)	0.025
	≤ 2	46	43 (93.5)	3 (6.5)	
	≤ 3	61	52 (85.2)	9 (14.8)	
	> 3	132	102 (77.3)	30 (22.7)	
Depth of Invasion <sup>3</sup>	Mucosa	100	94 (94.0)	6 (6.0)	< 0.0001
	M2	9	9 (100.0)	0 (0.0)	
	M3	91	85 (93.4)	6 (6.6)	
	Submucosa	148	111 (75.0)	37 (25.0)	
	SM1	14	13 (92.9)	1 (7.1)	
	SM2	35	29 (82.9)	6 (17.1)	
	SM3	99	69 (69.7)	30 (30.03)	
Depth (µm)		148	1719.9 ± 110.7	2153.5 ± 162.4	0.044
Perineural invasion	Negative	217	186 (85.7)	31 (14.3)	0.001
	Positive	31	19 (61.3)	12 (38.7)	

LV invasion	Negative	231	199 (86.1)	32 (13.9)	< 0.0001
	Positive	17	6 (35.3)	11 (64.7)	

<sup>1</sup>Between upper *vs* middle + lower; <sup>2</sup>Between  $\leq 2$  cm *vs*  $>2$  cm, <sup>3</sup>Between M *vs* SM. LV: Lymphovascular; M2: Lamina propria invasion; M3: Muscularis mucosae invasion without penetration; SM1: Upper third; SM2: Middle third; SM3: Lower third.