

Table 1. The correlation between the n ratio and clinicopathological characteristics

Variables	N ratio (mean+SD)	P value
Age		0.06
< 60 (n = 98)	0.40+0.31	
> 60 (n = 104)	0.32+0.32	
Gender		0.77
Male (n = 136)	0.36+0.31	
Female (n = 66)	0.35+0.32	
Tumor differentiation		0.002
Well differentiated (n = 27)	0.28+0.22	
Moderately differentiated (n = 89)	0.28+0.3	
Poorly differentiated (n = 86)	0.45+0.33	
Tumor size		0.008
<3 cm (n = 39)	0.23+0.29	
<6 cm (n = 82)	0.38+0.31	
>6 cm (n = 81)	0.40+0.33	
Depth of invasion		<0.0001
T1 (n = 11)	0.06+0.1	
T2 (n = 61)	0.22+0.24	
T3 (n = 108)	0.45+0.33	
T4 (n = 22)	0.44+0.33	
Stage		<0.0001
I (n = 25)	0.01+0.05	
II (n = 38)	0.10+0.14	
III (n = 89)	0.43+0.27	
IV (n = 50)	0.59+0.3	
Number of lymph node metastasis		<0.0001
No (n = 39)	0	
N1 (n = 74)	0.24+0.24	
N2 (n = 54)	0.51+0.19	
N3 (n = 35)	0.77+0.17	
Lymphatic vessel invasion		<0.0001
Absence (n = 44)	0.10+0.23	
Presence (n = 158)	0.43+0.3	
Blood vessel invasion		<0.0001
Absence (n = 52)	0.15+0.26	
Presence (n = 150)	0.43+0.3	
Perineural invasion		<0.0001
Absence (n = 45)	0.14+0.25	
Presence (n = 157)	0.42+0.31	

Table 2. Overall Survival (OS) univariate analysis according to clinicopathological factors.

Factor	No. of patients (%)	Median OS time (months)	95% CI	p
All	202	28.1	21.7–34.5	
Gender				0.89
Male	136 (32.7)	28.1	17.8–38.3	
Female	66 (67.3)	29.3	17.4–41.2	
Age (year)				0.157
< 60	98 (48.5)	64.9	16.4–113–3	
> 60	104 (51.5)	27.9	17.5–38.2	
Tumor site				0.97
Upper	39 (19.3)	27.9	19.1–36.7	
Middle	69 (34.2)	29.2	20.3–39.9	
Lower	86 (42.6)	28.1	16.5–39.7	
Diffuse	8 (4.0)	26.2	17.7–36.4	
Tumor size				0.013
< 3 cm	39 (19.3)	64.9	41.3–70.8	
< 6 cm	82 (40.6)	26	12.7–39.2	
> 6 cm	81 (40.1)	21	10.7–31.4	
Surgery type				0.95
Proximal	39 (19.3)	27.9	19.0–36.7	
Distal	75 (37.1)	28.1	19.5–36.7	
Total	88 (43.6)	26.5	18.4–33.6	
Tumor differentiation				0.47
Well differentiated	27 (13.3)	29.3	20.7–39.2	
Moderately differentiated	89 (44.1)	26.0	16.0–35.9	
Poorly differentiated	86 (42.6)	25.1	15.6–34.2	
Bormann classification				0.63
Type I	10 (4.9)	36.3	18.1–49.6	
Type II	16 (7.9)	14.3	0–37.4	
Type III	70 (34.6)	34.6	10.3–58.5	
Type IV	106 (52.6)	33.8	10.6–57.0	
Histological type				0.46
Intestinal	97 (48)	29.3	17.0–41.7	
Diffuse	105 (52)	64.9	9.5–120.2	
Lymphatic vessel invasion				0.005
Absence	44 (21.8)	64.9	22.4–93.7	
Presence	158 (78.2)	25.4	16.8–34.0	
Blood vessel invasion				0.001
Absence	52 (25.7)	64.9	19.3–110.4	
Presence	150 (74.3)	21.2	13.2–29.3	
Perineural invasion				0.002
Absence	45 (22.2)	64.9	22.5–106.5	
Presence	157 (77.8)	25.4	17.0–33.8	
T stage				0.001
T1	11 (5.4)	34.4	22.1–45.6	
T2	61 (30.2)	30.1	19.3–40.1	
T3	108 (53.5)	25.4	16.7–34.1	
T4	22 (10.9)	13.0	7.8–18.2	
Number of Lymph node metastasis				<0.001
N0	39 (19.3)	64.9	28.7–96.8	
N1	74 (36.6)	32.5	2.5–62.4	
N2	54 (26.7)	29.3	14.7–44.0	
N3	35 (17.3)	9.7	8.0–11.4	
Metastatic/resected nodes				0.001
N ratio 0	39 (19.3)	64.9	28.7–96.8	
N ratio 1	19 (9.4)	NR	-	0.04
N ratio 2	39 (19.3)	32.5	0–71.4	
N ratio 3	105 (52)	16.8	10.9–22.6	
Number of dissected lymph nodes				
<16	81 (40.1)	25.6	17.8–33.4	
>16	121 (59.9)	64.9	34.4–69.8	

* CI: Confidence interval, NR: Not reached

Table 3. Multivariate analysis of various clinicopathological factors in patients with radically resected gastric cancer.

Factors	Wald	P	HR	95% CI
Gender	0.66	0.41	0.76	0.39–1.47
Age (<60 vs. >60)	4.29	0.038	0.50	0.26–0.96
Tumor location	0.91	0.34	1.22	0.81–1.83
Tumor size	9.46	0.002	1.63	1.19–2.24
Depth of invasion	3.43	0.064	2.44	0.94–6.31
Bormann classification	3.84	0.045	1.78	1.00–3.18
Histological type	0.01	0.89	0.96	0.51–1.79
Lymphatic vessel invasion	0.35	0.55	0.66	0.16–2.61
Blood vessel invasion	0.15	0.69	0.68	0.10–4.66
Perineural invasion	8.98	0.03	0.37	0.19–0.71
Tumor differentiation	4.38	0.03	0.50	0.26–0.96
Number of lymph node metastasis (pN stage)	15.8	<0.0001	11.6	3.47–38.9
N ratio	10.6	0.001	1.45	1.16–1.81
Number of dissected lymph nodes (<16 vs. >16)	0.94	0.33	1.33	0.74–2.37

* HR: Hazards ratio, CI: confidence interval