

Supplementary Table 1 Subgroup analysis of baseline characteristics of patients.

	Total gastrectomy			Distal gastrectomy		
Variables	TLTG group (n = 76)	LATG group (n = 76)	p-value	TLDG group (n = 114)	LADG group (n = 114)	p-value
Age (years), (mean $\pm$ SD)	65.0 $\pm$ 10.7	66.0 $\pm$ 10.4	0.60	60.0 $\pm$ 10.2	60.1 $\pm$ 10.5	0.89
Sex			0.67			0.95
Male	59	55		79	80	
Female	18	21		33	34	
BMI (kg/m ²), (mean $\pm$ SD)	22.2 $\pm$ 2.7	22.8 $\pm$ 2.9	0.38	23.3 $\pm$ 2.9	22.4 $\pm$ 2.9	0.03
Charlson Comorbidity Index (CCI)			0.55			0.47
0–1	71	69		106	103	
> 1	5	7		8	11	
ASA score			0.26			0.31
I & II	34	41		30	37	
III	42	35		84	77	
History of abdominal surgery			0.12			0.70
Yes	3	8		15	17	
No	73	68		99	97	
Preoperative WBC ($\times 10^9$ /L), (mean $\pm$ SD)	5.8 $\pm$ 1.6	5.6 $\pm$ 1.4	0.29	5.9 $\pm$ 1.5	5.7 $\pm$ 1.8	0.28
Preoperative NLR, (mean $\pm$ SD)	2.2 $\pm$ 1.7	2.2 $\pm$ 1.5	0.27	2.6 $\pm$ 1.6	2.3 $\pm$ 1.4	0.15
Preoperative Hb (g/L), (mean $\pm$ SD)	123 $\pm$ 25	119 $\pm$ 21	0.28	127 $\pm$ 21	126 $\pm$ 19	0.78
Preoperative ALB (g/L), (mean $\pm$ SD)	40.8 $\pm$ 5.1	38.1 $\pm$ 5.6	0.49	40.4 $\pm$ 4.9	40.4 $\pm$ 4.6	0.97

SD, Standard Deviation; BMI, Body Mass Index; WBC, White Blood Cell; NLR, Neutrophil to Lymphocyte Ratio; Hb, Haemoglobin;

ALB, Albumin; TLTG, Totally Laparoscopic Total Gastrectomy; LATG, Laparoscopy-Assisted Total Gastrectomy; TLDG, Totally Laparoscopic Distal Gastrectomy; LADG, Laparoscopy-Assisted Distal Gastrectomy.

Supplementary Table 2 Subgroup analysis of surgical outcomes and postoperative recovery.

	Total gastrectomy			Distal gastrectomy		
Variables	TLTG group (n = 76)	LATG group (n = 76)	p-value	TLDG group (n = 114)	LADG group (n = 114)	p-value
Operative time (min), median (IQR)	235 (200–277)	260 (225–300)	0.005	210 (189–236)	230 (200–261)	0.001
Estimated blood loss (mL), median (IQR)	90 (50–100)	100 (100–150)	<0.001	50 (50–100)	100 (50–200)	<0.001
First flatus (days), median (IQR)	3.9 (3.3–4.6)	4 (4–5)	0.004	3 (3–3)	4 (4–5)	<0.001
Liquid diet (days), median (IQR)	4 (4–4)	6 (5–6)	<0.001	3 (3–4)	5 (4–6)	<0.001
Postoperative hospital stay (days), median (IQR)	8 (7–9)	9 (8–10)	0.13	7 (7–8)	8 (7–9)	<0.001
WBC ($\times 10^9/L$), mean (SD)						
POD1	11.33 $\pm$ 3.10	13.05 $\pm$ 3.48	<0.001	12.00 $\pm$ 3.08	12.54 $\pm$ 3.60	0.23
POD3	8.07 $\pm$ 2.14	7.34 $\pm$ 2.85	0.03	8.00 $\pm$ 2.42	7.97 $\pm$ 2.42	0.94
NLR, mean (SD)						
POD1	15.95 $\pm$ 22.41	18.09 $\pm$ 13.09	0.44	14.63 $\pm$ 13.17	18.45 $\pm$ 19.46	0.08
POD3	8.05 $\pm$ 7.88	7.23 $\pm$ 6.20	0.43	6.93 $\pm$ 4.69	8.51 $\pm$ 6.70	0.04
ALB (g/L), mean (SD)						
POD1	34.3 $\pm$ 3.69	33.26 $\pm$ 4.63	0.07	35.72 $\pm$ 3.95	35.28 $\pm$ 3.95	0.40
POD3	34.86 $\pm$ 4.37	32.79 $\pm$ 3.58	0.001	36.04 $\pm$ 4.06	35.94 $\pm$ 4.84	0.87
Medical cost (CNY), median (IQR)	49229 (30696–107079)	46770 (35700–78694)	0.19	56744 (52454–62612)	44232 (52454–62612)	<0.001

IQR, Interquartile; SD, Standard Deviation; WBC, White Blood Cell; NLR, Neutrophil to Lymphocyte Ratio; ALB, Albumin; TLTG, Totally Laparoscopic Total Gastrectomy; LATG, Laparoscopy-Assisted Total Gastrectomy; TLDG, Totally Laparoscopic Distal Gastrectomy; LADG, Laparoscopy-Assisted Distal Gastrectomy.

Supplementary Table 3 Subgroup analysis of postoperative complications after surgery.

	Total gastrectomy			Distal gastrectomy		
Variable	TLTG group (n = 76)	LATG group (n = 76)	p-value	TLDG group (n = 114)	LADG group (n = 114)	p-value
Postoperative hemorrhage	0	2	0.16	2	3	0.65
Anastomotic leakage	1	1	1.00	0	0	NA
Abdominal abscess	0	1	0.24	0	0	NA
Impaired gastric emptying	–	–	NA	2	1	0.56
Wound infection	0	2	0.09	0	2	0.10
DVT	0	0	NA	0	1	0.24
Pulmonary infection	1	4	0.18	3	6	0.51
Major complication	0	1	1.00	1	2	1.00
Overall complication	2	8	0.05	7	12	0.23
Re-operation	0	1	0.24	1	1	1.00

DVT, Deep Vein Thrombosis; TLTG, Totally Laparoscopic Total Gastrectomy; LATG, Laparoscopy-Assisted Total Gastrectomy; TLDG, Totally Laparoscopic Distal Gastrectomy; LADG, Laparoscopy-Assisted Distal Gastrectomy; NA, Not Applicable.

Supplementary Table 4 Subgroup analysis of pathological outcomes.

	Total gastrectomy			Distal gastrectomy		
	TLTG group	LATG group	p-value	TLDG group	LADG group	p-value

	(n = 76)	(n = 76)		(n = 114)	(n = 114)	
Tumor location			0.37			0.16
Upper	42	45		0	0	
Middle	24	17		10	18	
Lower	10	14		104	96	
Tumor diameter (cm), median (IQR)	3.5 (2.0–5.0)	4.0 (2.5–5.4)	0.21	3.0 (2.0–4.0)	2.7 (1.5–4.4)	0.46
Proximal margin (cm), median (IQR)	1.8 (1.0–3.0)	1.5 (1.0–2.0)	0.09	5 (4–7)	5 (4–6)	0.33
Distal margin (cm), median (IQR)	7.3 (5.0–9.9)	7.0 (5.0–9.0)	0.66	2.5 (2–3.5)	2 (1–3)	0.002
Total lymph node harvest, m median (IQR)	23 (18–29)	20 (16–24)	0.012	23 (18–29)	19 (15–25)	<0.001
Positive lymph node harvest, median (IQR)	1 (0–4)	2 (0–7)	0.34	1 (0–4)	0 (0–4)	0.29
Histological classification			0.22			0.42
Poor	27	20		50	44	
Moderate/well	49	56		64	70	
Depth of invasion			0.68			0.25
T1	15	12		42	46	
T2	15	11		28	23	
T3	23	28		24	33	
T4	23	25		20	12	
N stage			0.45			0.40
N0	46	32		56	65	
N1	11	11		16	19	
N2	14	13		21	15	
N3	15	20		21	15	
TNM stage						0.65
I	27	19	0.12	54	54	

II	13	23		23	28	
III	36	34		37	32	

TLTG, Totally Laparoscopic Total Gastrectomy; LATG, Laparoscopy-Assisted Total Gastrectomy; TLDG, Totally Laparoscopic Distal Gastrectomy; LADG, Laparoscopy-Assisted Distal Gastrectomy.