Survival outcomes in patients with stages I–III gastric adenocarcinoma treated with surgery alone versus surgery plus adjuvant chemotherapy: A systematic review

Supplementary file

Table S1. Specifications of each study according to patient demographics, tumor characteristics, and interventions

Study	Study type and location	Patient demographics	Primary tumor characteristics	Surgical intervention *n* (%)	Adjuvant chemotherapy regimen
Bajetta *et al.*[1]	RCT, Italy	*n*=1,100 Median age (range), years=62 (23.6 – 77.0) Sex ratio (male: Female)=1.73: 1	TNM stage, *n* (%) • IB=88 (8.1) • II=346 (31.8) • IIIA=297 (27.3) • IIIB=157 (14.4) • III+/unknown=212 (19.27) Tumor location, *n* (%) • Upper third=158 (14.9) • Middle third=248 (26.7) • Lower third=339 (31.9) • Other/unknown=319 (29) Histological classification, *n* (%) • Intestinal-type=303 (33.2) • Diffuse-type=340 (37.2) • Mixed=73 (8.0) Other/unknown=387 (34.91)	Gastrectomy • Total=599 (54.8) • Distal=446 (40.8) • Upper=48 (4.4) • Unknown=7 (0.006) Lymph-adenectomy • D1=272 (25.1) • D2=779 (72.1) • D3=30 (2.8) • Unknown=19 (0.017) • Median lymph nodes removed per patient=27	FOLFIRI Four cycles, each 14 days • Day 1: CPT-11 (180 mg/m^2, 1 h infusion) • Day 1 – 2: LV (100 mg/m^2, 2 h infusion) • Day 1 – 14: 5-FU (400 mg/m^2 bolus, followed by 22 h infusion of 600 mg/m^2) 3-week break Three cycles, each 21 days • Day 1: Docetaxel (75 mg/m^2, 1 h infusion) with dexamethasone (before, 12 h and 24 h) • Day 1 – 21: Cisplatin (75 mg/m^2) ControlNine cycles, each 14 days • Day 1 – 2: LV (100 mg/m^2, 2 h infusion) • Day 1 – 14: 5-FU (400 mg/m^2 bolus, followed by 22 h infusion of 600 mg/m^2)
Noh *et al.*[2]	RCT, China, South Korea, Taiwan	*n*=1,035 Age, years=≥18 to≥65 Sex ratio (male: female)=2.4: 1	TNM stage, *n* (%) • IB=1 (<1) • II=514 (49.7) • IIIA=377 (36.4) • IIIB=142 (13.7) • III+/unknown=1 (<1) Tumor location, *n* (%) • Fundus=86 (8.3) • Body=338 (32.7) • Antrum=471 (45.5) • Whole gastric=12 (1.2) • Other=128 (12.4)	Gastrectomy with D2 lymph-adenectomy • 1,035 (100)	Eight cycles, each 3 weeks • Day 1: Oxaliplatin (130 mg/m^2, intravenous) • Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral)
Moon *et al.*[3]	RCT, Japan	*n*=229 Median age (range), years=63 (34 – 79) Sex ratio (male: female)=3.23: 1	TNM stage, *n* (%) • IB=103 (45) • II=84 (36.7) • IIIA=42 (18.3)	Gastrectomy, R0 • Total=74 (32.3) • Distal=152 (66.4) • Proximal=48 (3.1) • Other=2 (0.01)	Once daily for 12 months; Either of three fluoropyrimidines: • 5-FU, *n* (%)=31 (13.5) (150 mg ≤50 kg or 200 mg>50 kg, oral) • 5'-DFUR, *n* (%)=42 (18.3) (600 mg ≤50 kg or 800 mg>50 kg, oral) • UFT, *n* (%)=40 (17.5) (300 mg≤1.3 m^2 BSA or 400 mg >1.3 m^2 BSA, oral)

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Table S1. ***(Continued)***

Study	Study type and location	Patient demographics	Primary tumor characteristics	Surgical intervention *n* (%)	Adjuvant chemotherapy regimen
Kanda *et al*.[4]	Cohort, Japan	*n*=171 Mean age, years=64.8 Sex ratio (male: female)=2.89: 1	TNM stage, *n* (%) • IIA=20 (11.7) • IIB=49 (28.7) • IIIA=28 (16.4) • IIIB=43 (25.2) • IIIC=31 (18.1) Tumor location, *n* (%) • Upper third=45 (26.3) • Middle third=57 (33.3) • Lower third=64 (37.4) • Whole gastric=5 (3) Histological classification, *n* (%) • Well-differentiated=5 (2.9) • Moderately differentiated=54 (31.6) • Poorly-differentiated=103 (60.2) • Signet ring cell=5 (3) • Mucinous=4 (2.3)	Gastrectomy, R0 with D2 lymph-adenectomy • Total=69 (40.4) • Distal=102 (59.7)	4 weeks, followed by a 2-week break, for 12 months: • S-1 (<1.25 m^2 BSA=80 mg, once daily, oral) (1.25 m^2 – 1.5 m^2 BSA=100 mg, once daily, oral) (≥1.5 m^2 BSA=120 mg, once daily, oral)
Lee *et al*.[5]	Cohort, Republic of Korea	*n*=630 Mean age, years=58.1 Sex ratio (male: female)=1.71: 1	TNM stage, *n* (%) Stage IIA: • T3N0M0=387 (61.4) • T2N1M0=161 (25.6) • T1N2M0=82 (13) Tumor location, *n* (%) • Antrum=366 (58.1) • Gastroesophageal Junction=77 (12.2) • Other=187 (29.7) WHO histological classification, *n* (%) • Differentiated=269 (42.7) • Undifferentiated=361 (57.3)	Gastrectomy with non-specified lymph node dissection • 630 (100)	Either of three regimens: • 5-FU single, *n* (%)=65 (33.2) (no doses) • 5-FU combination (with platinum), *n* (%)=127 (64.8) (no doses) • Unknown, *n* (%)=4 (2) (no doses)
Cho *et al*.[6]	Cohort, Republic of Korea	*n*=206 Mode age, (range) years=<65 (< 65 to≥65) Sex ratio (male: female)=1.9: 1	TNM stage, *n* (%) • IIA=64 (31.1) • IIIB=58 (28.2) • IIIC=84 (40.8)	Gastrectomy, R0 with≥D2 lymph-adenectomy • 206 (100)	XELOX Eight cycles, each 14 days • Day 1: Oxaliplatin (130 mg/m^2, intravenous) • Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral) Control, TS-1 6-week cycles for 12 months 4 weeks, then a 2-week break: - TS-1 (80, 100, or 120 mg depending on BSA, two separate doses, oral)
Jin *et al*.[7]	Cohort, China	*n*=1,601 Mode age, (range) years=≥65 (<65 – ≥65) Sex ratio (male: female)=1.73: 1	TNM stage, *n* (%) Stage IA and Stage IB: • T1N0M0=1,157 (72.1) • T2N0M0=447 (28) Tumor location, *n* (%) • Cardia=392 (24.5) • Fundus=55 (3.4) • Body (lesser curvature)=97 (6.1) • Body (greater curvature)=318 (19.9)	Gastrectomy with D1–D2 lymph-adenectomy • 1,601 (100)	Four–eight cycles, median six. Duration per cycle not specified. Either of four regimens: • S-1 single, *n* (%)=40 (14.1) (no doses) • S-1+oxaliplatin (SOX), *n* (%)=180 (63.6) (no doses) • Capecitabine+oxaliplatin, *n* (%)=30 (10.6) (no doses) • Docetaxel, oxaliplatin+S-1 (DOS), *n* (%)=33 (11.7) (no doses)

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Table S1. ***(Continued)***

Study	Study type and location	Patient demographics	Primary tumor characteristics	Surgical intervention *n* (%)	Adjuvant chemotherapy regimen
			• Antrum=664 (41.5) • Other=75 (4.7) Histological classification, *n* (%) • Intestinal-type=423 (26.4) • Diffuse-type=366 (22.9) • Mixed=42 (2.6) • Undefined=770 (48.1)		
Huang *et al*.[8]	Cohort, China	*n*=1,593 Mode age, (range) years=>65 (≤65 – > 65) Sex ratio (male: female)=1.56: 1	TNM stage, *n* (%) Stage IIA: • T1N2M0=158 (9.9) • T3N0M0=1,435 (90.1) Tumor location, *n* (%) • Upper third=788 (49.5) • Middle=241 (15.1) • Lower third=564 (35.4) Histological classification, *n* (%) • Intestinal-type=276 (17.3) • Non-intestinal-type=1,317 (82.7)	Gastrectomy • Total=728 (45.7) • Distal=652 (41) • Upper=129 (8.1) • Antrum=84 (5.3)	(Not specified)
Lee *et al*.[9]	Cohort, Republic of Korea	*n*=983 Mode age, (range) years=≥60 (<60 – ≥60) sex ratio (male: female)=2.2: 1	TNM stage, *n* (%) Stage II • T3N0M0=983 (100) Tumor Location, *n* (%) • Upper third=788 (49.5) • Middle=241 (15.1) • Lower third=564 (35.4) Histological classification, *n* (%) • Intestinal-type=346 (35.2) • Diffuse-type=442 (45) • Mixed=96 (9.8)	Gastrectomy, R0 with ≥D2 lymph-adenectomy • Subtotal=642 (65.3) • Total=341 (34.7)	S-1 Eight cycles, 6 weeks each 4 weeks: • S-1 (40, 50, or 60 mg depending on BSA, twice daily, oral) 2-week break Control, CAPOX Eight cycles, 3 weeks each • Day 1: Oxaliplatin (130 mg/m^2, intravenous) • Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral)
Chen *et al*.[10]	Cohort, China	*n*=428 Median age (range), years=60 (23 – 79) Sex ratio (male: female)=2.5: 1	TNM stage, *n* (%) • IIA=91 (21.3) • IIB=75 (17.5) • IIIA=139 (32.5) • IIIB=89 (20.8) • IIIC=34 (7.9) Histological classification, *n* (%) • High-differentiation=3 (0.7) • Median-differentiation=84 (19.6) • Low-differentiation=173 (40.4) • Signet ring cell=22 (5.1) • Mucinous=14 (3.3) • Other=132 (30.8)	Gastrectomy with D2 Lymph-adenectomy • 428 (100)	Either of three groups: Group B (20 – 24 weeks), *n* (%)=175 (51.2) • SOX, seven–eight cycles every 3 weeks Day 1: Oxaliplatin (130 mg/m^2, intravenous over 2 h in 250 mL dextrose 5%) Day 1 – 14: S-1 (40–60 mg depending on BSA, twice daily, oral) • XELOX, seven–eight cycles every 3 weeks Day 1: Oxaliplatin (130mg/m^2, intravenous over 2 h in 250 mL dextrose 5%) Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral) • FOLFOX, 10–12 cycles every 2 weeks Day 1: Oxaliplatin (85 mg/m^2) and leucovorin calcium (intravenous over 2 h in 250 mL dextrose 5%) 5-FU (400 mg/m^2, bolus, then 2,400 mg/m^2, intravenous over 46 h) Group C (12 – 18 weeks), *n* (%)=107 (31.3) • SOX, four–six cycles every 3 weeks (same dosage as Group B)

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Table S1. ***(Continued)***

Study	Study type and location	Patient demographics	Primary tumor characteristics	Surgical intervention *n* (%)	Adjuvant chemotherapy regimen
					• XELOX, four–six cycles every 3 weeks (same dosage as Group B) • FOLFOX, six–nine cycles every 2 weeks (same dosage as Group B) • Group D (<12 weeks), *n* (%)=60 (17.5) • SOX, ≤3 cycles every 3 weeks (same dosage as Group B and C) • XELOX, ≤3 cycles every 3 weeks (same dosage as Group B & C) • FOLFOX, ≤5 cycles every 2 weeks (same dosage as Group B and C)
Kang *et al*.[11]	Cohort, Republic of Korea	*n*=1,083 Mean age, years=58 Sex ratio (male: Female) = 2: 1	TNM stage, *n* (%) Stage II • T3N0M0=1,083 (100) Tumor location, *n* (%) • Upper third=244 (22.5) • Middle=363 (33.5) • Lower third=462 (42.7) • Whole gastric=14 (1.3) Histological classification, *n* (%) • Intestinal-type=409 (37.8) • Diffuse-type=658 (60.8) • Mixed=16 (1.5)	Gastrectomy • Subtotal=676 (62.4) • Total=407 (37.6) Lymphadenectomy • D1+=26 (2.4) • ≥D2=1,057 (97.6) • Mean lymph nodes removed per patient=41.9	Either of five regimens: • UFT, oral (no *n*, no doses) • TS-1, oral (no *n*, no doses) • 5-FU with leucovorin (FL), intravenous (no *n*, no doses) • 5-FU with platinum (FP), intravenous (no *n*, no doses) • Capecitabine with platinum (XELOX) (no *n*, no doses)
Serrano *et al*.[12]	Cohort, Peru	*n*=173 Median age, years=62.3 Sex ratio (male: Female)=1.25: 1	TNM stage, *n* (%) • IIA=18 (10.2) • IIB=32 (18.8) • IIIA=65 (36.9) • IIIB=30 (17.6) • IIIC=28 (16.5) Tumor location, *n* (%) • Fundus=3 (1.7) • Body=31 (17.9) • Antrum=116 (67) • Whole gastric=1 (0.7) • Other=22 (12.7) Histological classification, *n* (%) • Intestinal-type=82 (47.4) • Diffuse-type=68 (39.3) • Mixed=23 (13.3)	Gastrectomy with D2 lymph-adenectomy • 173 (100)	≥6 courses, 3 weeks each • Day 1: Oxaliplatin (130 mg/m^2, intravenous) • Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral)
Mei *et al*.[13]	Cohort, China	*n*=307 Median age (range), years=63 (29 – 80) Sex ratio (male: Female)=2.4: 1	TNM stage, *n* (%) Stage I • T2N0M0=307 (100) Tumor location, *n* (%) • Upper third=55 (17.9) • Middle=46 (15) Lower third=206 (67.1) Histological classification, *n* (%) • Poor-differentiation=96 (31.3) • Tubular=160 (52.1) • Signet-ring cell=32 (10.4) • Mucinous=19 (6.2)	Gastrectomy, R0 with D2 lymph-adenectomy • Distal=224 (73) • Total=83 (27)	One regimen of: Every 3 weeks for 1 year • S-1 monotherapy, *n* (%)=130 (66.3) (40 mg/m^2, twice daily, oral) Combined with either of the following dual-drug regimens, *n* (%)=66 (33.7): Six cycles, 3 weeks each • XELOX Day 1: Oxaliplatin (130 mg/m^2, intravenous) Day 1 – 14: Capecitabine (1,000 mg/m^2, twice daily, oral) • SOX Day 1: Oxaliplatin (130 mg/m^2, intravenous) Day 1 – 14: S-1 (40 mg/m^2, twice daily, oral)

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Table S1. ***(Continued)***

Study	Study type and location	Patient demographics	Primary tumor characteristics	Surgical intervention *n* (%)	Adjuvant chemotherapy regimen
Wada *et al*.[14]	Case-control, Japan	*n*=77 Median age (range), years=65.5 (42 – 80) Sex ratio (male: Female)=1.9: 1	TNM stage, *n* (%) • IIA=11 (14.3) • IIB=18 (23.4) • IIIA=14 (18.2) • IIIB=12 (15.6) • IIIC=22 (28.6) Histological classification, *n* (%) • Differentiated=35 (45.5) • Undifferentiated=41 (53.2)	Gastrectomy, R0 with ≥D1–D2 lymph-adenectomy • Partial=38 (49.4) • Total=39 (50.6)	S-1 4 weeks, followed by 2-week intervals, for 1 year • 80 mg/m^2, once daily, oral
Aoyama *et al*.[15]	Case-control, Japan	*n*=52 Median age (range), years=64 (37 – 80) Sex ratio (male: Female)=1.6: 1	TNM stage, *n* (%) Stage II: • T1N2M0=15 (28.8) • T1N3M0=13 (25.1) • T3N0M0=24 (46.1) Tumor location, *n* (%) • Upper third=10 (19.2) • Middle third=27 (51.9) Lower third=15 (28.8) Histological classification, N (%) • Differentiated=25 (48.1) • Undifferentiated=27 (51.9)	Gastrectomy with D1+ – D2 Lymph- adenectomy • 52 (100)	(Not specified)
Kano *et al*.[16]	Case-control, Japan	*n*=390 Median age (range), years=64 (27 – 80) Sex ratio (male: Female)=2.3: 1	TNM stage, *n* (%) • IIA=25 (6.4) • IIB=110 (28.2) • IIIA=78 (20) • IIIB=83 (21.3) • IIIC=94 (24.1) Tumor location, *n* (%) • Upper third=109 (27.9) • Middle=159 (40.8) • Lower third=109 (27.9) • Whole gastric=13 (3.3) Histological classification, *n* (%) • Differentiated=135 (34.6) • Undifferentiated=255 (65.4)	Gastrectomy, R0 • Distal=225 (57.7) • Total=165 (42.3)	S-1 4 weeks, followed by 2-week rest, for 1 year (eight courses) • 80 – 120 mg/m^2, once daily, oral
Takahashi *et al*.[17]	Case-control, Japan	*n*=396 Median age (interquartile range), years[a]=63 (56 – 71) Sex ratio (male: Female)[a]=2.2: 1	TNM stage, *n* (%) • IIA=25 (6.3) • IIB=116 (29.3) • IIIA=78 (19.7) • IIIB=83 (20.9) • IIIC=94 (23.7) Histological classification, *n* (%)‡ • Differentiated=42 (34.4) • Undifferentiated=80 (65.6)	Gastrectomy (distal/ total) with D2 lymph-adenectomy • 396 (100)	S-1 4 weeks, followed by 2-week rest, for 1 year (eight courses) • 80 – 120 mg/m^2, once daily, oral

Note: [a]Refers to data from subgroup analysis of patients who experienced recurrence (n=122) after receiving adjuvant chemotherapy.

Abbreviations: 5-FU: 5-fluorouracil; BSA: Body surface area; CSS: Cause-specific survival; DFS: Disease-free survival; DFUR: 5'-deoxy-5-fluorouridine; h: Hour; HR: Hazard ratio; OS: Overall survival; RCT: Randomized controlled trial; RFS: Recurrence-free survival; UFT: Tegafur/uracil.

Table S2. Summary of main results comparing exposure group to reference group with outcome measures

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Bajetta *et al.*[1]	(Tx) FOLFIRI 562 (51.1) (C) 538 (48.9)	• Age ≤75 years • pT2b/pT3 pN- or pN+, Stage II and III • Gastrectomy with ≥D1 lymphadenectomy • ECOG <2 • No previous malignancy except superficial skin cancer and *in situ* cervical carcinoma • No previous chemotherapy and radiotherapy • No abnormal hepatic/renal/ cardiac function	• DFS, 72 months HR=1 (95% CI, 0.85 –1.17), *P*=0.974 • OS, 72 months • HR=0.98 (95% CI, 0.82 – 1.18), *P*=0.865	*p*<0.0001	• F sex HR=0.77 DFS, (95% CI, 0.58 – 1.01), *P*=0.019 HR=0.73 OS, (95% CI, 0.54 – 0.98), *P*=0.012 • Age<60 HR=0.88 DFS, (95% CI, 0.58 – 1.01), *P*=0.019 HR=0.86 OS, (95% CI, 0.65-1.13), *P*=0.301 • Stage IIIA HR=0.83 DFS, (95% CI, 0.61 – 1.12), *P*=0.549 HR=0.74 OS, (95% CI, 0.53–1.03), *P*=0.388 • N0 HR=0.74 DFS, (95% CI, 0.34 – 1.63), *P*=0.230 HR=0.61 OS, (95% CI, 0.26 – 1.45), *P*=0.845	Tx • Toxicity=83 (14.8) • Relapse/death= 11 (2) • Other=8 (1.4) C • Toxicity=30 (5.6) • Relapse/death= 20 (3.7) • Other=20 (3.7)	DFS: Exposure and control groups experience the same number of events across the 72-month period (recurrence and death). Adjuvant chemotherapy provided in the exposure group does not significantly affect DFS for stages II–III gastric cancer. OS: HR<1, but almost=1, meaning the exposure group experiences slightly lower event probability during a unit of time than the control group (tx=243 events [43.2%] versus C=240 events [44.6%]). No statistically significant benefit of adjuvant polychemotherapy (tx) versus single chemotherapy drug (C) on DFS and OS.
Noh *et al.*[2]	(Tx) Capecitabine+Oxaliplatin 520 (50.2) (C) 515 (49.8)	• Age≥18 years • Ambulatory, Karnofsky performance≥70 • Stage II, IIIA, and IIIB • Gastrectomy with D2, within the past 6 weeks • ECOG<2 • No history of another cancer in the past 5 years except BCC skin and cured carcinoma *in situ* of uterine cervix. • No serious concomitant illness limiting life expectancy<5 years • No history of uncontrolled seizures, central nervous system disorders, or psychiatric disability. • No clinically significant cardiac disease within the past 12 months. • No physical integrity upper GI pathologies/malabsorption syndrome • No known peripheral neuropathy • No intercurrent uncontrolled infections • No moderate/severe renal impairment	• DFS, 75 months HR=0.58 (95% CI, 0.47–0.72), *P*<0.0001 • OS , 78 months HR=0.66 (95% CI, 0.52–0.85), *P*=0.0015	*p*<0.05	• Male sex HR=0.54 DFS, (95% CI, 0.42-0.70), *P*=0.25 HR=0.60 OS, (95% CI, 0.45 –0.81), *P*=0.1 • Age≥65 HR=0.51 DFS, (95% CI, 0.34-0.78), *P*=0.43 HR=0.70 OS, (95% CI, 0.44 – 1.12), *P*=0.86 • Stage II HR=0.55 DFS, (95% CI, 0.38 – 0.80), *P*=0.82 HR=0.54 OS, (95% CI, 0.34-0.87), *P*=0.55 • Stage IIIB HR=0.52 DFS, (95% CI, 0.33 – 0.82), *P*=0.82 HR=0.67 OS, (95% CI, 0.39–1.13), *P*=0.55 • T1, T2, T2a, and T2b HR=0.46 DFS, (95% CI, 0.33–0.74), *P*=0.05 HR=0.49 OS, (95% CI, 0.33–0.74), *P*=0.03 • N1 or N2 HR=0.57 DFS, (95% CI, 0.46–0.72), *P*=0.35 HR=0.67 OS, (95% CI, 0.51–0.87), *P*=0.71	Tx • Death=103 (20) • Adverse event including intercurrent illness=54 (10.4) • Recurrence=117 (23) C • Death=141 (27) • Adverse event including intercurrent illness=1 (0.19) • Recurrence=186 (36)	• DFS: HR<1, close to 0.50, meaning the exposure group provided with adjuvant chemotherapy experienced slightly more than half the event probability (death/ recurrence) during unit of time than the control group over a 75-month period. • OS: HR<1, 0.66, meaning there is 34% less probability that an event will occur in the exposure group as compared to the control group. • There is a statistically significant benefit of adjuvant chemotherapy on both DFS and OS. As compared to control, the greatest effect of adjuvant chemotherapy is seen in DFS across 75 months.

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Moon *et al.*[3]	(Tx) 5-FU or 5'-DFUR or UFT, 113 (49.3) (C) 116 (50.7)	• Age<75 years • Stage IB, II, III with R0 resection within the past 6 weeks • No previous treatment for gastric cancer before the surgery • No organ function abnormalities (normal leucocyte, platelet hemoglobin, AST, ALT, blood urea nitrogen, and creatine concentration levels • Negative diagnostic peritoneal lavage	• RFS, 65 months HR=0.64 (95% CI, 0.33 – 1.20), *P*=0.163 • OS, 65 months HR=0.52 (95% CI, 0.25 – 1.04), *P*=0.063	*p*<0.05	• Stage II HR=0.36 OS, (95% CI, 0.12–0.94), *P*=0.036 • UFT chemotherapy HR=0.16 OS, (95% CI, 0.02 – 0.61), *P*=0.05	Tx • Cancer-related death=15 (13.3) • Other deaths=5 (4.4) • Recurrence=17 (15) C • Cancer-related death=20 (17.2) • Other deaths=6 (5.2) • Recurrence= 25 (21.6)	• RFS: HR<1, 0.64, meaning there is 36% less probability that an event will occur in the exposure group than in the control group over a 65-month period. • OS: HR<1, 0.52, meaning there is 48% (close to half) less probability that an event will occur in the exposure group than in the control group. • However, no statistically significant benefit of adjuvant chemotherapy on both RFS and OS (*p*>0.05) compared to surgery alone.
Kanda *et al.*[4]	(Tx) S-1 79 (46.2) (C) 92 (53.8)	• Confirmed stomach adenocarcinoma • Stage II/III • R0 gastrectomy with D2 lymph-adenectomy • ECOG≤2 • No post-operative complications of poor oral intake within 6 weeks after surgery	• RFS, 60 months (Tx), %= 71 (C), %=53, *p*=0.030 • OS, 60 months (Tx), %=73, HR=2.42 (95% CI, 0.74 –10.8), *P*=0.165 (C), %=54, *P*=0.035	*p*<0.05	• Preoperative body mass index≥22 HR=0.74 OS, (95% CI, 0.24–2.23), *P*=0.588 • Tumor located in the lower third HR=0.89 OS, (95% CI, 0.24–2.74), *P*=0.846	Tx • Peritoneal recurrence=5 (5.7) C • Peritoneal recurrence=17 (18.6)	• RFS: Exposure group experienced 18% greater RFS, as compared to the control group, with statistical significance. • OS: Exposure group experienced 19% greater OS, as compared to the control. HR>1, 2.42, meaning there is approximately greater than twice the probability of an event (recurrence) occurring in the exposure group compared to the control. • Despite increased RFS and OS rates up to 19%, adjuvant chemotherapy provides no significant (p>0.05) reduction in event probability compared to surgery alone.

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Lee *et al.*[5]	(Tx) 5-FU or 5-FU with platinum or unknown 196 (31.1) (C) 434 (68.9)	• Stage IIA (T3N0M0, T2N1M0 or T1N2M0) • Curative gastrectomy with radical lymph node dissection within the past four to 6 weeks • >15 lymph nodes extracted • No 2° malignancies • No pre-operative chemotherapy/radiotherapy • ECOG≤2 • Normal blood values (neutrophils, platelets), no evidence of active infection • Normal renal and hepatic function • No systemic diseases contraindicating chemotherapy	• RFS, 84 months (Tx), %= 89.3 (C), %= 86.4, p=0.047 • OS, 84 months (Tx), %= 90.6 (C), %= 85.8, P=0.110	p<0.05	• T2N1 (96.8% RFS, P<0.001) (95.9% OS, P=0.003)	Tx • Recurrence=19 (9.7) C • Recurrence=55 (12.7) Total Deaths (Tx+C)=133 (21.2)	• RFS: Statistically, there is a significant difference showing exposure group experienced 2.9% greater RFS, as compared to the control group. • OS: Exposure group experienced 4.8% greater OS, as compared to the control, but there is no statistically significant difference in OS between exposure and control groups (p>0.05). • T2N1 responds most statistically significantly to adjuvant chemotherapy, with the greatest benefit on RFS over 84 months.
Cho *et al.*[6]	(Tx) XELOX 114 (55.3) (C), TS-1 92 (44.7)	• Age≥18 years • Ambulatory • Stage III • R0 Gastrectomy with≥D2 lymph- adenectomy • No peritoneal, hepatic or distant metastases • Negative cytology for tumor cells in peritoneal fluid • No previous chemotherapy, radiotherapy, or immunotherapy for gastric cancer	• DFS, 51 months (Tx), %= 59.1 (C), %= 66.6, p=0.636 • OS, 51 months (Tx), %= 69.6 (C), %= 75.6, P=0.495	p<0.05	• Female sex HR=0.706 DFS, (95% CI 0.530 –1.966), P=0.606, HR=0.988 OS, (95% CI 0.356 – 2.745), P=0.434 • N1 HR=0.586 DFS, (95% CI 0.146 – 2.349), P=0.613, HR=0.989 OS, (95% CI 0.088–11.05), P=0.027	Tx • Adverse event=7 (6.1) • Recurrence=5 (4.4) C • Adverse event=4 (4.4) • Recurrence=11 (12)	• DFS: TS-1 (control) adjuvant chemotherapy achieves a 7.5% increase in DFS as compared to XELOX adjuvant chemotherapy (tx), over 51 months, but not statistically significant. • OS: Although statistically non-significant, the XELOX (tx) group achieves 6% greater OS over 51 months, as compared to TS-1 (C). • XELOX adjuvant chemotherapy provided to N1 patients has 0.586 DFS, meaning the probability of an event (adverse/recurrence) occurring is approximately 41.4% less as compared to TS-1. The OS for N1 patients receiving XELOX over control TS-1 is statistically significant (p<0.05).

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Jin *et al.*[7]	(Tx) S-1 or SOX or DOS or capecitabine+oxaliplatin 283 (17.7) (C) 1318 (82.3)	• Stage IA and IB (pT1N0M0, pT2N0M0) • Curative gastrectomy performed in past 8 years (between January 2011 and December 2017) • No co-occurring 1° malignancies or malignancies arising>6 months from gastric cancer diagnosis (metachronous disease) • No lymphoma, endocrine carcinomas, or stromal tumors • No anticipated serious complication response to chemotherapy	• CSS, 100 months HR=0.718 (95% CI, 0.508 – 1.014), *P*=0.060 • OS, 100 months HR=0.940 (95% CI, 0.710 – 1.245), *P*=0.688	$p<0.05$	• Body (lesser curvature) HR=0.56 CSS, (95% CI 0.220 – 1.422), *P*=0.223, HR=0.577 OS, (95% CI 0.298 – 1.116), *P*=0.102 • Diffuse -type HR=0.88 CSS, (95% CI 0.563 – 1.376), *P*=0.576, HR=0.644 OS, (95% CI 0.458 –0.906), *P*=0.011 • T2N0M0 with examined lymph nodes≤15, tumor size>3cm, Non-SRCC (CSS, *P*=0.034)	(None reported) Tx+C • No follow-up=128 (18)	• CSS: HR<1, 0.718, meaning there is approximately 28% less probability that an event will occur in the exposure group as compared to the control group, over 100 months. However, *P*>0.05 (*p*=0.060), so statistically not significant. • 4.8% greater OS over 51 months, as compared to TS-1 (C). • OS: HR<1, 0.940, but close to 1. Meaning there is only 6% less probability an event will occur in the exposure group compared to the control group over 100 months. *P*>0.05 (*p*=0.060), so statistically not significant. • Statistically significant responses to adjuvant chemotherapy are seen in CSS of T2N0M0 (non-SRCC), with examined lymph nodes≤15 and tumor size>3 cm (*p*=0.034). Statistically significant positive response to adjuvant chemotherapy is also seen in OS of patients with diffuse-type gastric cancer (0.644 OS, 95% CI 0.458–0.906, *P*=0.011).

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Huang *et al.*[8]	(Tx) 287 (18) (C) 1,306 (82)	• Stage IIA (T1N2M0, T3N0M0) • Radical gastrectomy performed • Only 1° site of the tumor in the stomach • Patients entered into the SEER database (1988 to 2012), FMUUH database (2008 to 2014), and IMIGASTRIC database (2000 to 2014) with complete demographic, staging, and survival information • No distant metastasis • No radiotherapy provided	• OS, 400 months *P*=0.0001, *P*=0.012, *P*=0.042	$p<0.05$	• T1N2M0 HR=0.56 OS, (95% CI 0.359 – 0.871), *P*=0.010 • LN≤15 dissected HR=0.602 OS, (95% CI 0.414 –0.875), *P*=0.008 • Tumor size≥20 mm HR=0.527 OS, (95% CI 0.336 – 1.234), *P*=0.009	Tx • Bleeding loss≤90 to>90 mL=159 (55.4) C • Bleeding loss≤90 to>90mL=127 (9.7)	• OS: Throughout the study (approximately 400 months), OS of patients across all databases was statistically significantly better in the exposure group ($p<0.05$). • Adjuvant chemotherapy has a statistically significant benefit on the overall survival of Stage IIA patients. T1N2M0, ≤15 LN dissected and tumor size≥20 mm afford lowest HR (<1), meaning the lowest probability of event likelihood, compared to control.
Lee *et al.*[9]	(Tx) 768 (78.1) (C) CAPOX 215 (21.9)	• Age ≥20 years • Stage II/III • Radical Gastrectomy • Received adjuvant chemotherapy within 8 weeks of surgery • No pre-operative chemotherapy, radiotherapy, or immunotherapy • No distant metastasis • No co-occurring 1° malignancies or malignancies arising >6 months from gastric cancer diagnosis (metachronous disease) • Negative cytology for tumor cells in peritoneal fluid	• DFS, 60 months Tx, (%) 66.1 (95% CI=64.3–67.9), *P*=0.961 C, (%) 66.5 (95% CI=62.5–70.5), *P*=0.961 HR=1.008 (95% CI, 0.728 – 1.395), *P*=0.963	$p<0.05$	• Age≥60 ($p=0.014$) • T3 ($p=0.045$, $p=<0.001$) • T4 ($p=0.007$) • Tumor size>5 cm ($p<0.001$) • Vascular invasion ($p=0.001$) • Lymphatic invasion ($p=0.012$)	Tx • Recurrence=141 (32.9) C • Recurrence=49 (31.6)	• DFS: Although statistically insignificant, over a 60-month duration, tx with chemotherapeutic regimen S-1 achieves 0.4% less DFS than C, CAPOX chemotherapeutic regimen. • HR>1, meaning there is no significant difference in the probability of events occurring, that is, recurrence (specifically peritoneal, hematogenous, lymph node, and locoregional) across both groups. • Significant responses to adjuvant chemotherapy in both groups include age≥60, T3 and T4, tumor size>5 cm, and vascular/lymphatic invasion. Overall, there is no distinction between which regimen (tx, S-1) or (C, CAPOX) affords statistically significant benefit as adjuvants for Stage II/III.

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Chen *et al.*[10]	(Tx) SOX, XELOX, FOLFOX in 7–8/10–12 cycles (Group B), 4–6/6–9 cycles (Group C),≤three or five cycles (Group D), 342 (79.9) (C), N (%) = 86 (20.1)	• Age 18 – 79 years • Radical gastrectomy with D2 lymphadenectomy Ambulatory • Stage II–III • Receipt of adjuvant chemotherapy within 3 months after surgery • No history of other malignancy • No prior adjuvant radiation or neoadjuvant chemotherapy • No prior receipt of adjuvant chemotherapy (mono/dual/ triplet)	• DFS, 60 months Tx, (%) Group B=68 (95% CI=61–75) Group C=65.4 (95% CI=56.3–74.6) Group D=50 (95% CI=37–63), C, (%) 50 (95% CI=39.2–60.8) • OS, 60 months Tx, (%) Group B=73.7 (95% CI=67.1–80.3) Group C=72 (95% CI=63.3–80.6) Group D=53.3 (95% CI=40.3–66.3) C, (%)=52.3 (95% CI=41.6–63.1)	$p<0.008$	• Group B, compared to Group D and (C), DFS $P=0.003$ HR=0.459 OS, (95% CI 0.301 – 0.699), $P<0.001$ • Group C compared to Group D and (C), OS $P=0.004$ and $P=0.005$ HR=0.504 OS, (95% CI 0.314 –0.807), $P=0.004$	Tx • Nausea/vomiting=52 (16.2) • Neutropenia=60 (18.7) • Thrombocytopenia=21 (6.5)	DFS: ⅔ of exposure groups (Groups B and C) achieve 15.4–18% greater DFS rates than control, over 60 months. OS: All exposure groups (Groups B, C, and D) achieve 1–21.4% greater OS rates than control, over 60 months. Group B (7–8/10–12 cycles of tx) and C (4–6/6–9 cycles of tx) have HR<1, close to 0.5, meaning approximately half of the probability of adverse events, as compared to control. The DFS response for Group B and the OS response of Group C, to adjuvant chemotherapy, are statistically significant ($p<0.008$).
Kang *et al.*[11]	(Tx), UFT, TS-1, 5-FU, FL, FP or XELOX 612 (56.5) (C) 471 (43.5)	• Stage II (pT3N0M0) • Curative Gastrectomy with radical lymph- adenectomy • No neoadjuvant chemotherapy • No remnant gastric cancer • No co-occurring 1° malignancies or malignancies arising>6 months from gastric cancer diagnosis (metachronous disease) • Tumor median size 4.5 cm and histologically classified	• DFS, 59 months Tx, (%) 89.9 C, (%) 89.2 $P>0.05$ • Tumor recurrence HR=0.925 (95% CI=0.625–1.368), $P=0.695$	$p<0.05$	• (Tx) FP HR=0.740 (95% CI=0.349–1.569), $P=0.432$ • (Tx) TS-1 HR=0.623 (95% CI=0.336–1.154), $P=0.133$	Tx • Recurrence=99 (16.2) C • Recurrence=49 (31.6)	• DFS: Although statistically insignificant, over a 59-month duration, tx group experiences 0.7% higher DFS than the control of no adjuvant chemotherapy. • For tumor recurrence, HR<1 but almost 1, with no statistical significance, meaning there is no difference in the probability of events (i.e., tumor recurrence) among the tx and C groups. • Individual chemotherapeutic tx (FP and TS-1) afford HR <1 meaning less probability of events (i.e., recurrence occurring); however, this is not statistically significant. • Thus, there is no statistically significant benefit of adjuvant chemotherapy tx over control for pT3N0M0.

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Table S2. *(Continued)*

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Serrano *et al.*[12]	(Tx), Capecitabine+oxaliplatin 100 (57.8) (C) 73 (42.2)	• Age≥18 years • Stage II–III with radical gastrectomy and D2 lymph-adenectomy performed between 2014 and 2016. • Normal blood values (normal neutrophil/ lymphocyte ratio, albumin≥3.5 g/dL, albumin/globulin ratio>1.5)	• DFS, 46 months Tx, (%) 69 C, (%) 52.6 *P*=0.034 HR=0.28 (95% CI=0.17–0.47), *P*<0.001 • OS, 48 months Tx, (%) 73 C, (%) 57.5 *P*=0.027 HR=0.27 (95% CI=0.16–0.46), *P*<0.001	*p*<0.05	• Age≥65 DFS HR=0.43 (95% CI=0.19–0.97), *P*=0.04 • pN2 DFS HR=0.13 (95% CI=0.0349–0.452), *P*<0.01 • Stage IIIA DFS HR=0.14 (95% CI=0.0505–0.375), *P*<0.01	Tx • Death=31 (31) • Adverse events (neutropenia, thrombocytopenia, anemia nausea, diarrhea, peripheral neuropathy, asthenia, hand-foot syndrome)=85 (85) C • Death=34 (46.6)	• DFS: Tx offers 16.4% greater DFS over 46 months, with statistical significance (*p*<0.05). HR=0.28, meaning the probability of an event is 72% less in tx compared to control, with statistical significance. • OS: Tx offers 15.5% greater OS over 48mo, with statistical significance (*p*<0.001). HR=0.27, meaning the probability of an event is 73% less in tx compared to control, with statistical significance. • Statistically significant factors that favor tx, in terms of DFS, include age≥65, pN2, and stage IIIA. Thus there is statistically significant benefit on DFS and OS of adjuvant chemotherapy across stages II–III.
Mei *et al.*[13]	(t) S-1+XELOX or SOX 196 (63.8) (C) 111 (36.2)	• Age<80 years • Radical gastrectomy with D2 lymph- adenectomy between 2012–2016 • No previous gastric surgery • Stage T2N0M0 • Only R0 surgical margins (no R1 or R2) • ≥15 harvested lymph nodes • No neoadjuvant chemotherapy • No other 1° malignancies	• DSS, 5y Tx, (%) 83 C, (%) 96.8 *P*<0.001 • OS, 5y Tx, (%) 92.9 C, (%) 79.3 *P*<0.001	*p*<0.05	• Mono-therapy tx (5-year DSS (%)=95.2, *P*=0.083) • Dual drug tx (5-year DSS (%)=100, *P*=0.083)	Tx • Death due to recurrence=6 (0.25) C • Death due to recurrence=18 (0.75)	• DSS: Tx offers 13.8% greater DSS over 5y with statistical significance (*p*<0.001). • OS: Tx offers 13.6% greater OS over 5 years with statistical significance (*p*<0.05). • Factors favoring tx include a 5-year DSS rate of 95.2% for monotherapy tx and 100% for dual drug tx, although both these results are *P*>0.05, therefore not statistically significant. • For patients with T2N0M0, a statistically significant benefit of adjuvant chemotherapy can be seen in DSS and OS over 5 years.

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Table S2. *(Continued)*

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Wada *et al.*[14]	(Tx), <9 months of S-1 26 (33.8) (C), ≥9 months of S-1 N (%) = 51 (66.2)	• Histologically proven gastric adenocarcinoma • Stage II/III • Gastrectomy, R0, with ≥D1 – D2 lymph- adenectomy, between 2003–2008 (past 10 years) • Adjuvant S-1 chemotherapy after surgery • No previous treatment for cancer except surgery for 1° tumor	• RFS, 12 months OR=0.567 (95% CI, 0.242 – 1.329), *P*=0.192 • Recurrences Tx, N(%)=10 (38.5), *P*=0.195 C, N(%)=13 (25.5), *P*=0.195	*p*<0.05	• N0-2 (p=0.036) • Tumor size<5 cm (*p*=0.020)	Tx • Anorexia=10 (38.5) • Fatigue=3 (11.5) • Diarrhea=2 (7.7) • Neutropenia=2 (7.7) • Rash=2 (7.7) • Recurrence=1 (3.8) C • Anorexia=1 (2) • Neutropenia=1 (2) • Rash=1 (2) • Alopecia=1 (2)	• RFS: Although statistically insignificant, over a 12-month duration, tx with<9 months of S-1 achieves odds 0.567 times (approximately half) the estimated odds of recurrence than >9 months of S-1. • Recurrence rates are 13% less in tx (<9 months of S-1), compared to C (>9 months of S-1), although no significant difference between groups (*p*>0.05). • Significant responses to tx (<9 months) of adjuvant S-1 chemotherapy include N0-2 (*p*=0.036) and tumor size<5 cm (*p*=0.020).
Aoyama *et al.*[15]	(Tx), T1N2M0 and T1N3M0 28 (53.8) (C), T3N0M0 24 (46.2)	• Histologically proven gastric adenocarcinoma • Stage II (T1N2M0, T1N3M0, T3N0M0) • Total/distal gastrectomy performed with D1+to D2 lymphadenectomy between 2000 and 2010 • No other adjuvant chemotherapy received after surgery	• RFS, (%) 3 years T1N2M0=93.3 T1N3M0=91.7 • T3N0M0=100 6 years T1N2M0=80 T1N3M0=76.4 T3N0M0=100	*p*<0.05	• Tumor diameter≥30 to≤50 mm (3 year RFS 100%, 5 year RFS 100%, *P*=0.0449) • Positive lymphatic invasion OR=0.341, (95% CI 0.035–13.302), *P*=0.353	(Not specified)	• RFS: Across both groups, 3-year and 5-year RFS remained high (80–100%). T3N0M0 affords 100% RFS over 3 years and 5 years. Tumor diameter ≥30 to≤50 mm affords 100% RFS with statistical significance, across both groups. Although statistically not significant, tumors with positive lymphatic invasion, have OR of 0.341 meaning the odds of recurrence in T1N2M0/ T1N3M0 are 0.341 times compared to T3N0M0. • Thus, according to statistical significance, larger diameter tumors with T3N0M0 may achieve greater RFS with adjuvant chemotherapy.

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Table S2. *(Continued)*

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Kano *et al.*[16]	(Tx), S-1 390 (43) (C), S-1 ACTS-GC Trial 517 (57)	• Age≤81 • Stage II/III • R0 Gastrectomy performed with>D2 lymphadenectomy between 2008 and 2012 • No neoadjuvant chemotherapy received • No synchronous cancer • No remnant gastric cancer after surgery • No histological special types • Eligible to receive adjuvant chemotherapy (good performance statement, physician's decision, patient's wish, no early recurrence, etc.) • Did not receive other adjuvant chemotherapy regimens than S-1 monotherapy for example, capecitabine+oxaliplatin and S-1+cisplatin.	• RFS, 5 year tx, (%) II=85.9,86.4 IIIA=68.1, 73.9 IIIB=51.6, 46.3 C, (%) II=79.2, 77.9 IIIA=61.4, 64.3 IIIB=37.6, 35.9 • OS, 5 year tx, (%) II=86.6,87.6 IIIA=73.6, 79.1 IIIB=57, 50 C, (%) II=84.2,83.4 IIIA=67.1, 69.1 IIIB=50.2, 44. 8	(Not specified)	(N/A)	Tx • Adverse effects=70 (17.9) • Recurrence=115 (29.5) C • Adverse effects=72 (13.9) • Recurrence=162 (30.6)	• RFS: Across all individual stages (II, IIIA, IIIB), RFS rates over 5 years are higher in the tx S-1 group, as compared to the ACTS-GC trial control. The highest RFS rate in the tx group is noted in stage II (8.5% higher than control). The highest difference in RFS rates is noted in stage IIIB (tx group achieves 14% greater RFS than the control). OS: Across all individual stages (II, IIIA, IIIB), OS rates over 5 years are higher in the tx S-1 group, as compared to the ACTS-GC trial control. The highest RFS rate in tx group is noted in stage II (4.2% higher than control). The highest difference in RFS rates is noted in stage IIIA (tx group achieves 10% greater OS than the control). • Based on differences in RFS and OS rates, stages IIIA and IIIB may respond more significantly to tx, affording higher survival. • Although there are no statistical *P* values for reference to comment on the significance of this association.

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Table S2. ***(Continued)***

Author	Exposure group, treatment (tx) and reference group, C, n (%)	Controlled confounding variables	Outcome measures	Reference *P*-value for significance	Factors favoring treatment	Adverse effects, *n* (%)	Conclusions
Takahashi *et al*.[17]	(Tx), recurrence after S-1 122 (30.4) (C), S-1 396 (98.8)	• Stage II/III (excluding pT1N0M0 and pT3N0M0) • Curative gastrectomy with≥D2 lymphadenectomy (distal or total) between 2008 and 2012. • No neoadjuvant chemotherapy • No remnant gastric cancer • Eligible for S-1 (physician discretion, patient consent, contraindicated other treatments for other diseases	• RFS, (%) 1 year=67.2 3 years=23 5 years=5.7 Median RFS, months (range, IQR)=19.5 (2–78, 10–33) *P*=0.719 • OS, (%) Median OS, months (range, IQR)=10 (0–100, 5–19.5) *p*=0.311	*p*<0.05	• Local recurrence (100%) and lymphatic recurrence (92%) in tx for recurrence patients plateaus 3 years after gastrectomy • Stage IIIA (median RFS, months=24, *P*=0.719)	Tx+C • Recurrence during chemo- therapy=22 (5.5) • Recurrence after 1 year tx=14 (3.5) • GI toxicity=13 (3.2) • Hematological events=3 (0.7) • Eczema=1 (0.2) • Ophthalmopathy=1 (0.2)	• RFS: The highest RFS rate is seen 1 year post-adjuvant chemotherapy in the exposure group (patients who have experienced recurrence post-curative gastrectomy), compared to three and 5 years. • OS: Median OS across all stages is 9.5 months less than median RFS, meaning patients given adjuvant chemotherapy after recurrence from surgery will experience greater RFS. Median RFS is notably highest in Stage IIIA; however, *P*>0.05 across all values is statistically insignificant. • Recurrence patterns plateau in the tx group when chemotherapy is given up to 3 years. • Paper site's times to recurrence, expressed as higher RFS/OS rates, were better compared to the literature; however, raw data was not provided to make a statistical comparison.

Abbreviations: ACTS-GC: Adjuvant chemotherapy trial of TS-1 for gastric cancer; ALT: Alanine aminotransferase; AST: Aspartate aminotransferase; BCC: Basal cell carcinoma; CI: Confidence interval; CSS: Cause-specific survival; DFS: Disease-free survival; DSS: Disease-specific survival; ECOG: Eastern Cooperative Oncology Group, FMUUH: Fujian Medical University Union Hospital; GI: Gastrointestinal; HR: Hazard ratio; IMIGASTRIC: International Study Group on Minimally Invasive Surgery for Gastric Cancer; IQR: Interquartile range; OR: Odds ratio; OS: Overall survival; RFS: Recurrence-free survival; SEER: Surveillance, Epidemiology, End results.

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