

An aerial photograph of the Mount Sinai Medical Center in Miami Beach, Florida, taken during a vibrant sunset. The sky is filled with orange and yellow clouds, and the sun is low on the horizon. The hospital complex, consisting of several large, modern buildings with white and grey facades, is situated along the coast. A large parking lot with many cars is visible to the right of the main building. In the background, the city skyline of Miami is visible across a body of water. The overall scene is a mix of urban architecture and natural beauty.

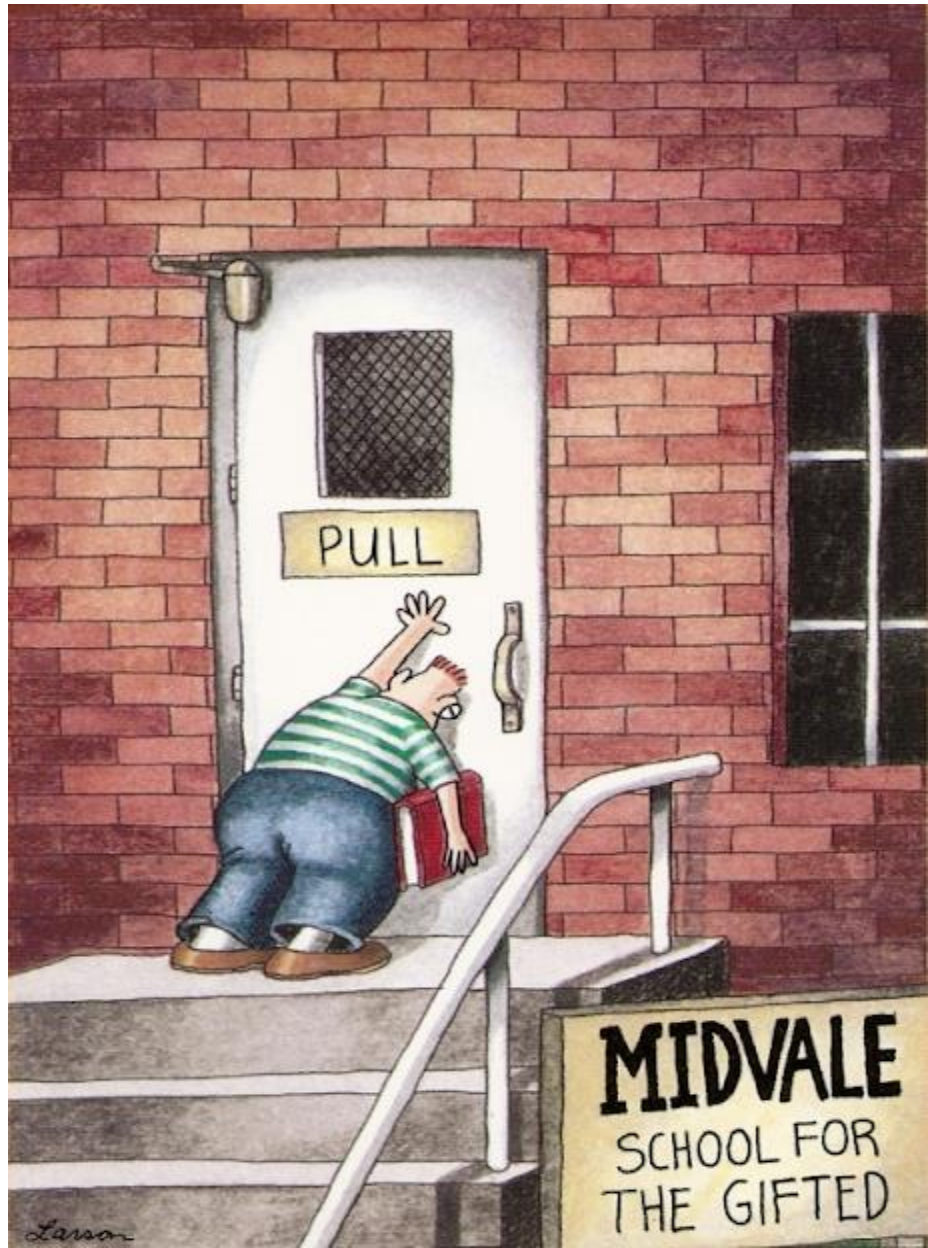
Gastro Esophageal Cancer Update

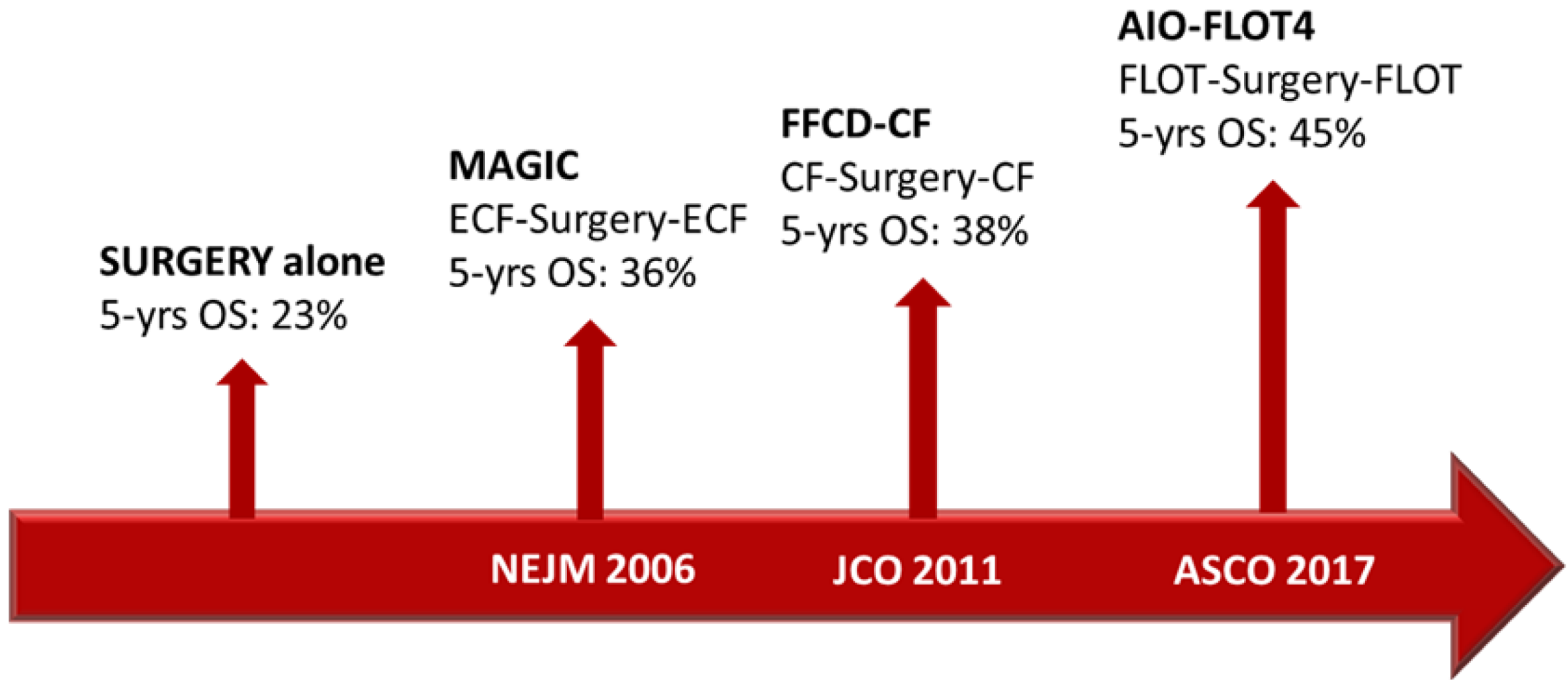
Mike Cusnir MD

Division Chief Hematology
and Oncology

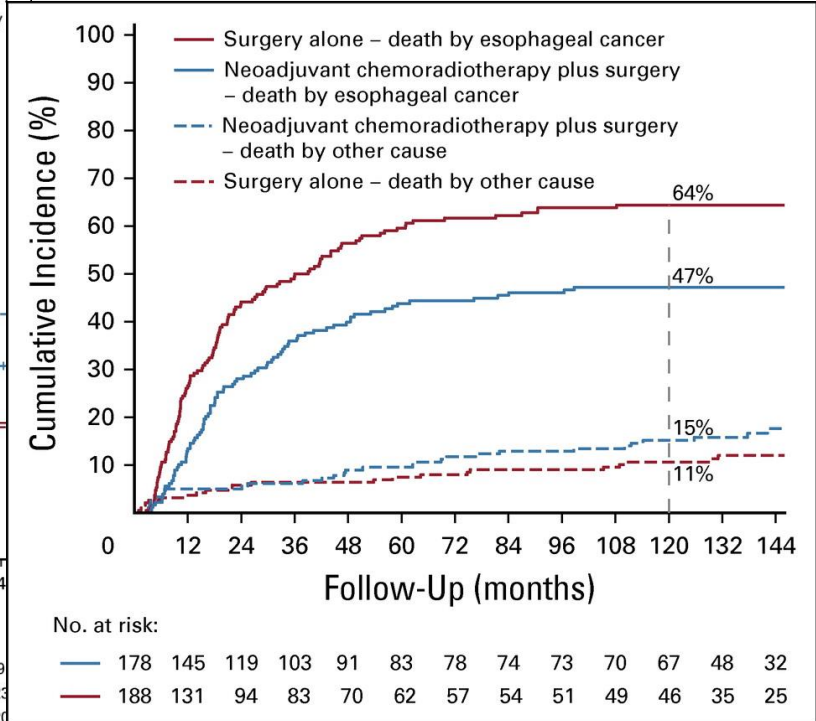
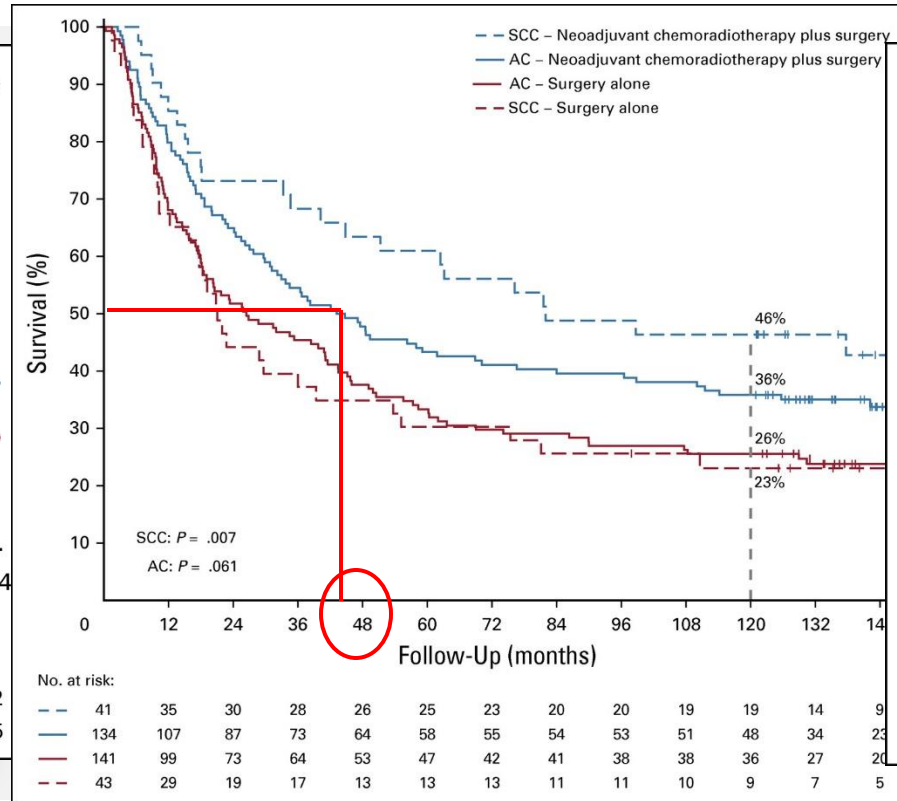
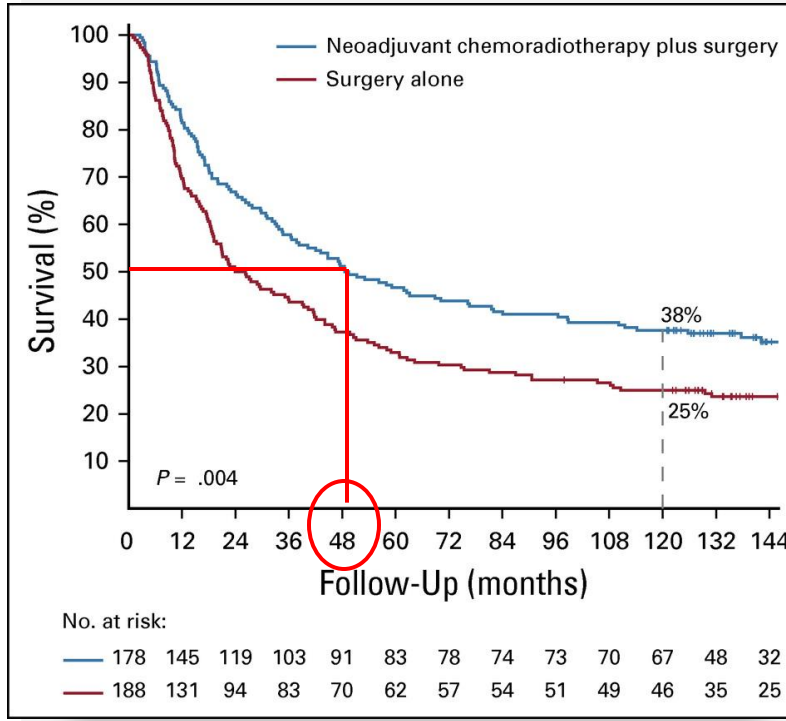
Miami Beach, Florida

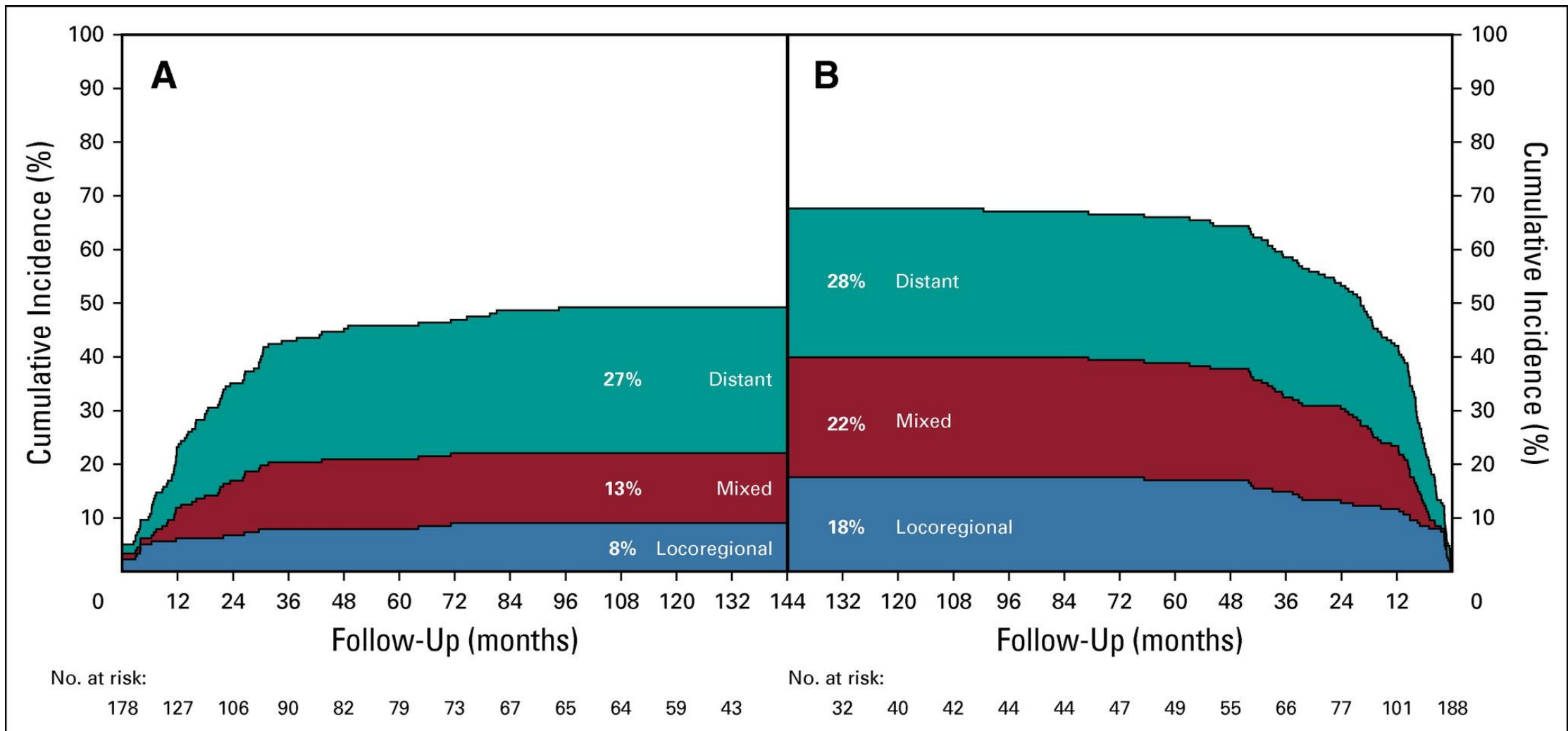
Mount Sinai
MEDICAL CENTER



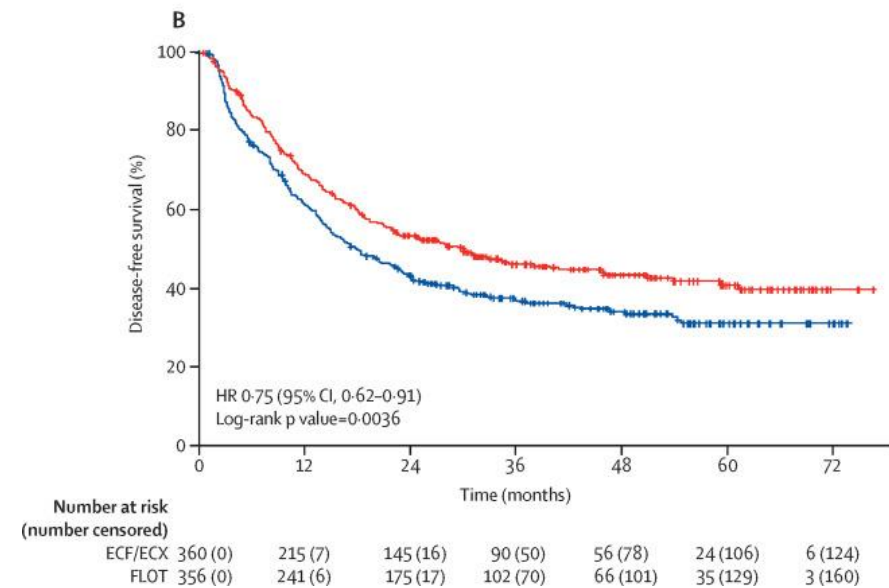
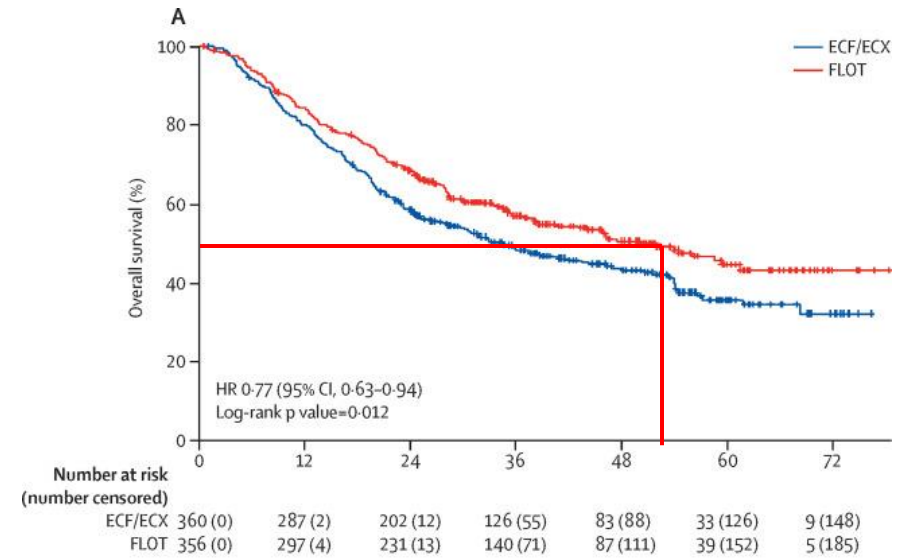
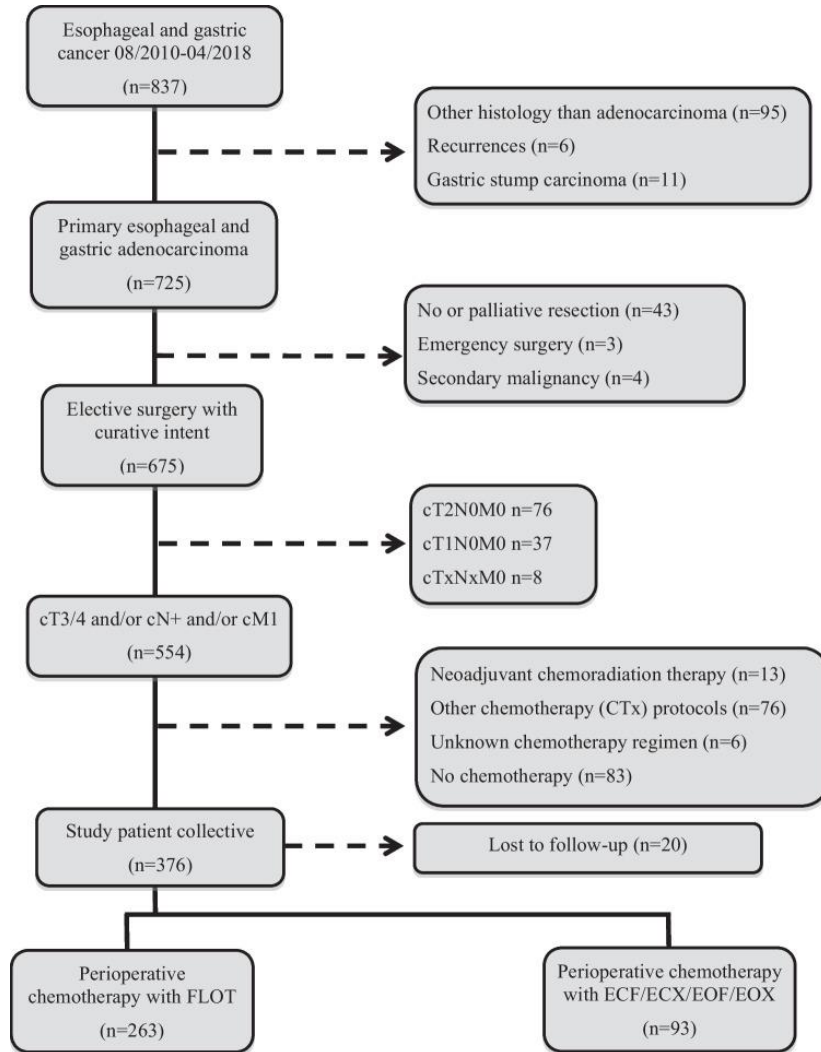


CROSS Trial





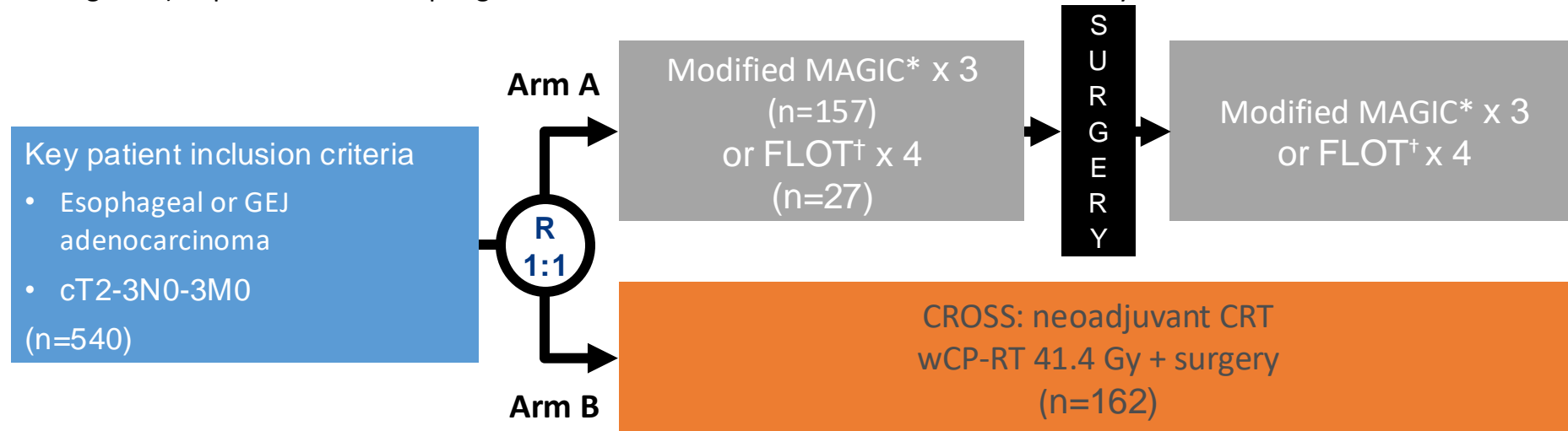
FLOT4



4004: Neo-AEGIS (Neoadjuvant trial in Adenocarcinoma of the Esophagus and Esophago-Gastric Junction International Study): Preliminary results of phase III RCT of CROSS versus perioperative chemotherapy (Modified MAGIC or FLOT protocol) – Reynolds JV, et al

Study objective

- To evaluate the efficacy and safety of the CROSS regimen vs. perioperative chemotherapy (either modified MAGIC or FLOT regimen) in patients with esophageal or GEJ adenocarcinoma in the Neo-AEGIS study



PRIMARY ENDPOINT

- OS

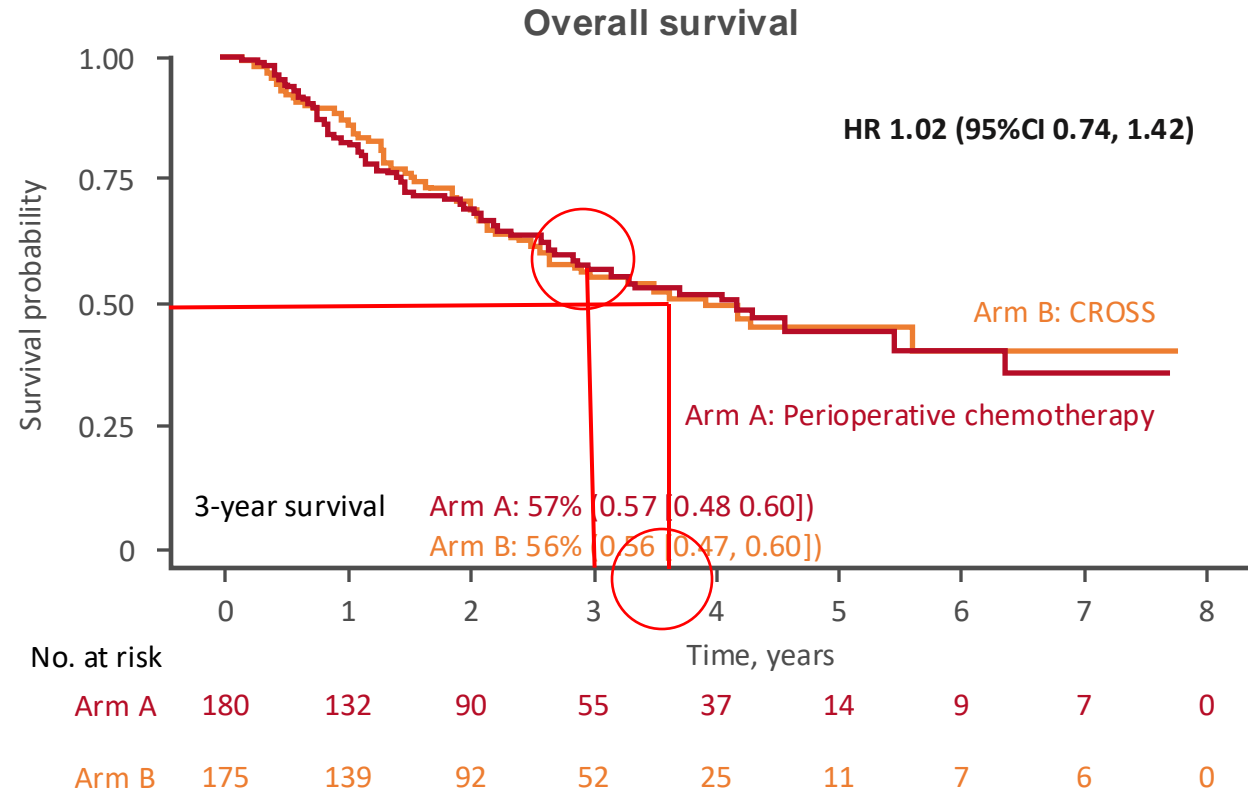
*ECF/ECX/EOF/EOX; †5FU 2600 mg/m² iv 24 h infusion D1 + leucovorin 200 mg/m² iv D1 + oxaliplatin 85 mg/m² iv D1 + docetaxel 50 mg/m² iv D1 q2w

SECONDARY ENDPOINTS

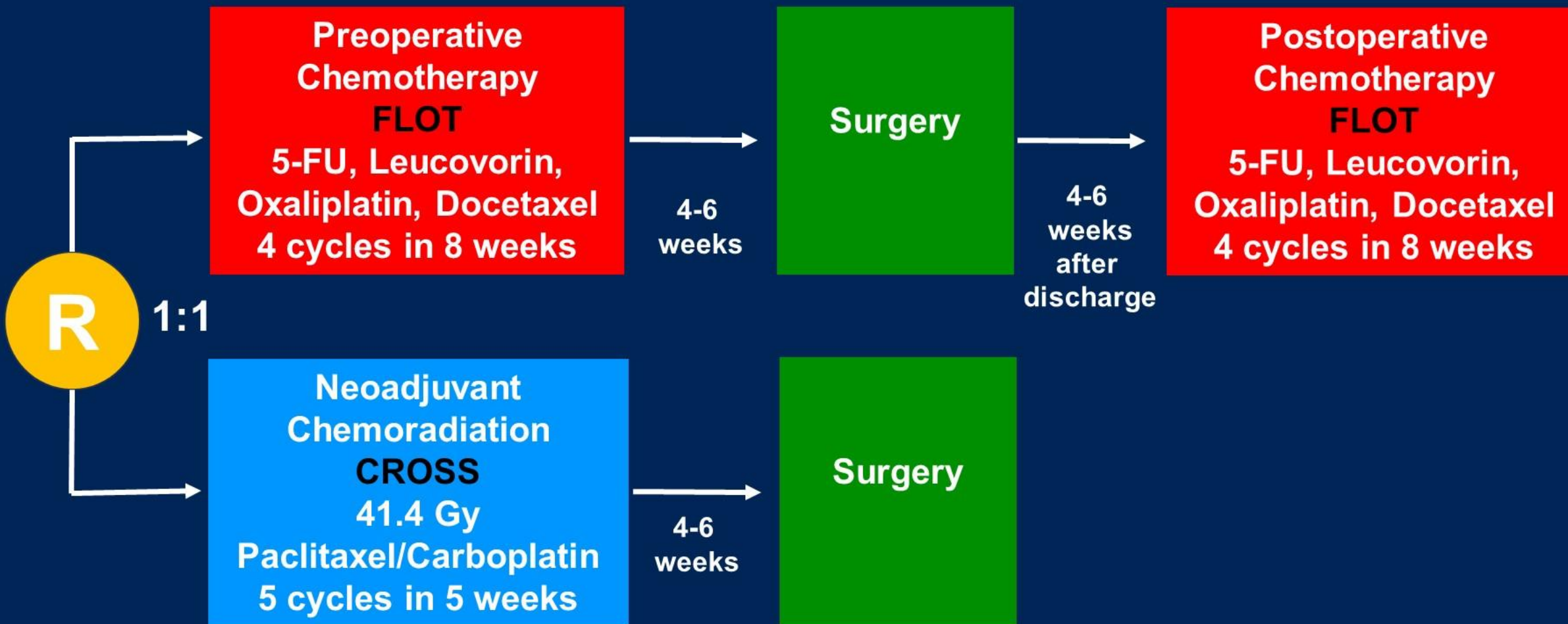
- DFS, TTF, TRG, R0 rate, postoperative complications, HR-QoL, safety

4004: Neo-AEGIS (Neoadjuvant trial in Adenocarcinoma of the Esophagus and Esophago-Gastric Junction International Study): Preliminary results of phase III RCT of CROSS versus perioperative chemotherapy (Modified MAGIC or FLOT protocol) – Reynolds JV, et al

Key results



ESOPEC Trial Scheme



Statistical Planning

Intention to treat (ITT) analysis of overall survival (primary endpoint) in all randomized patients

Sample size planning:

- To show superiority of FLOT vs. CROSS for overall survival at one-sided significance level of 2.5%
- Assumptions on 3-year overall survival rates:
CROSS 55%, FLOT 68% (hazard ratio 0.645)
- **218 events** needed for power 90%
- **438 patients** needed

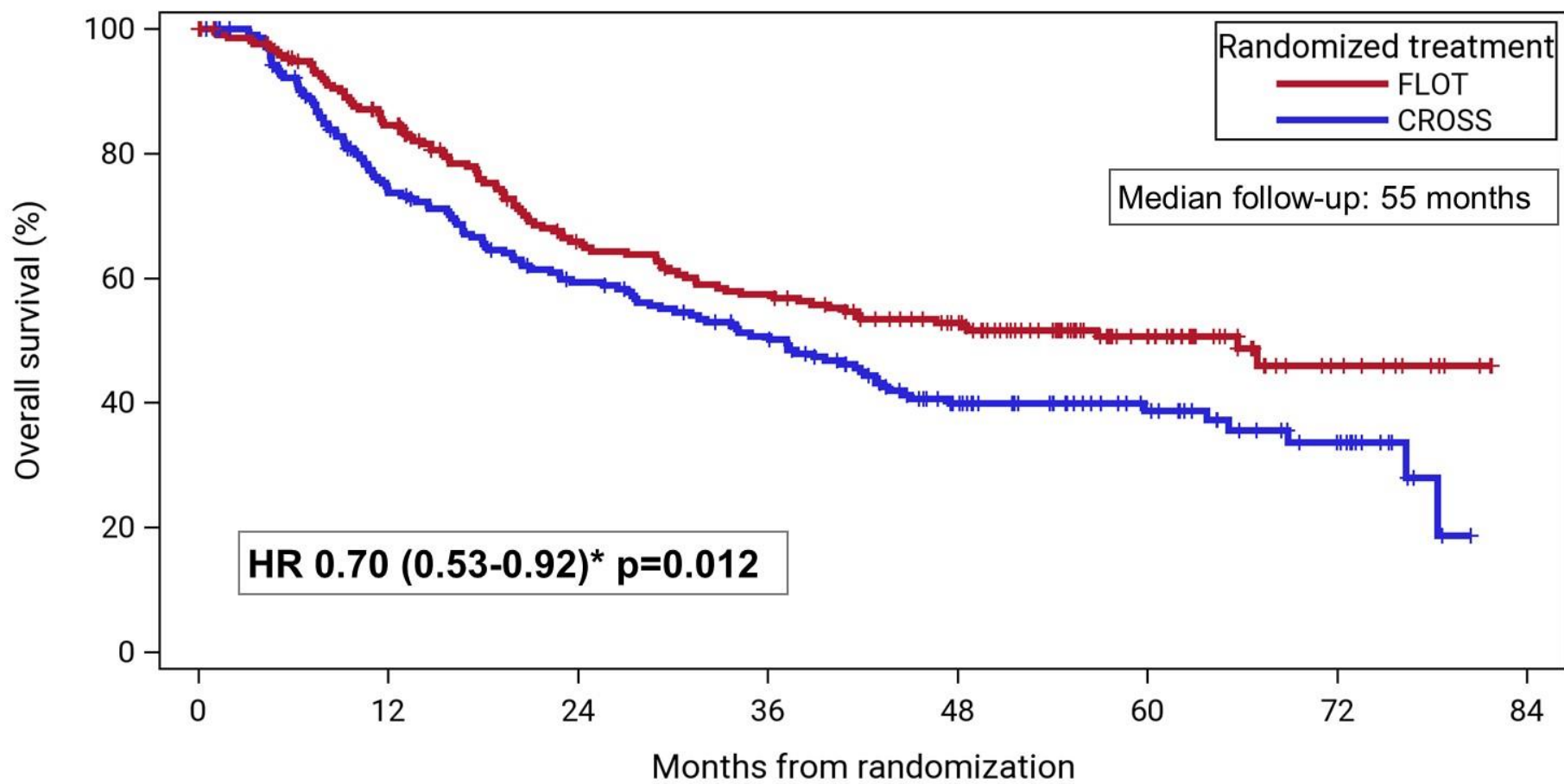
Treatment Exposure

	FLOT Group	CROSS Group
N	221	217
Started neoadjuvant treatment (PP population*)	93.7 %	90.3 %
Completed neoadjuvant treatment	87.3 %	67.7 %[#]
Received neoadjuvant treatment plus surgery	86.0 %	82.9 %
Received adjuvant treatment	63.3 %	
Completed adjuvant treatment	52.5 %	

*Per protocol population according to Clinical Trial Protocol and Statistical Analysis Plan

[#]Completion rate (41.4Gy) of radiotherapy **98%**

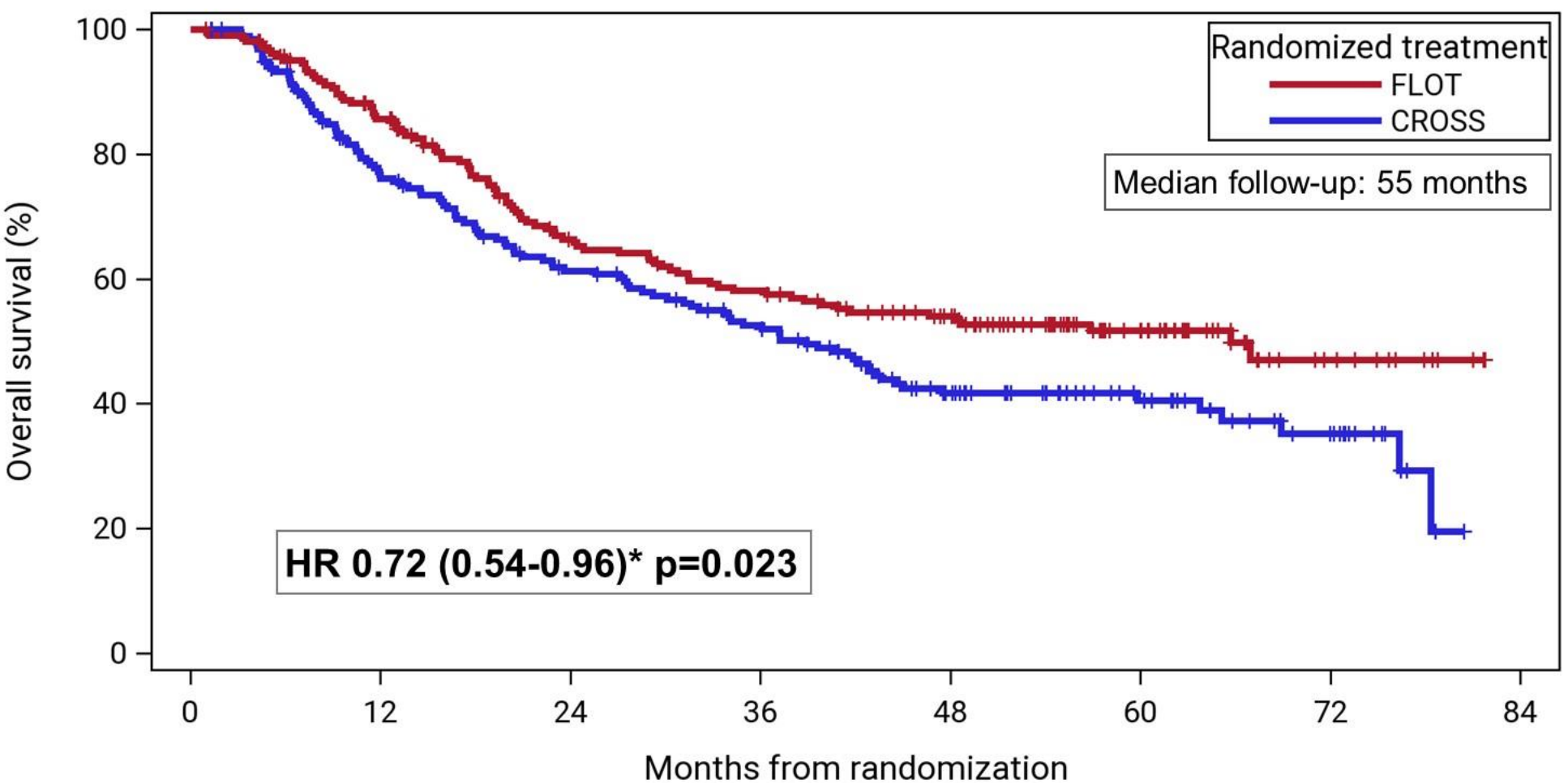
Overall Survival - ITT Population



FLOT	221	172	124	107	84	44	11	0
CROSS	217	146	113	92	54	32	15	0

	FLOT	CROSS
Events	97	121
Median OS time (months)	66 95% CI 36 – n.e	37 95% CI 28 – 43
3-year OS rate	57.4%	50.7%
5-year OS rate	50.6%	38.7%

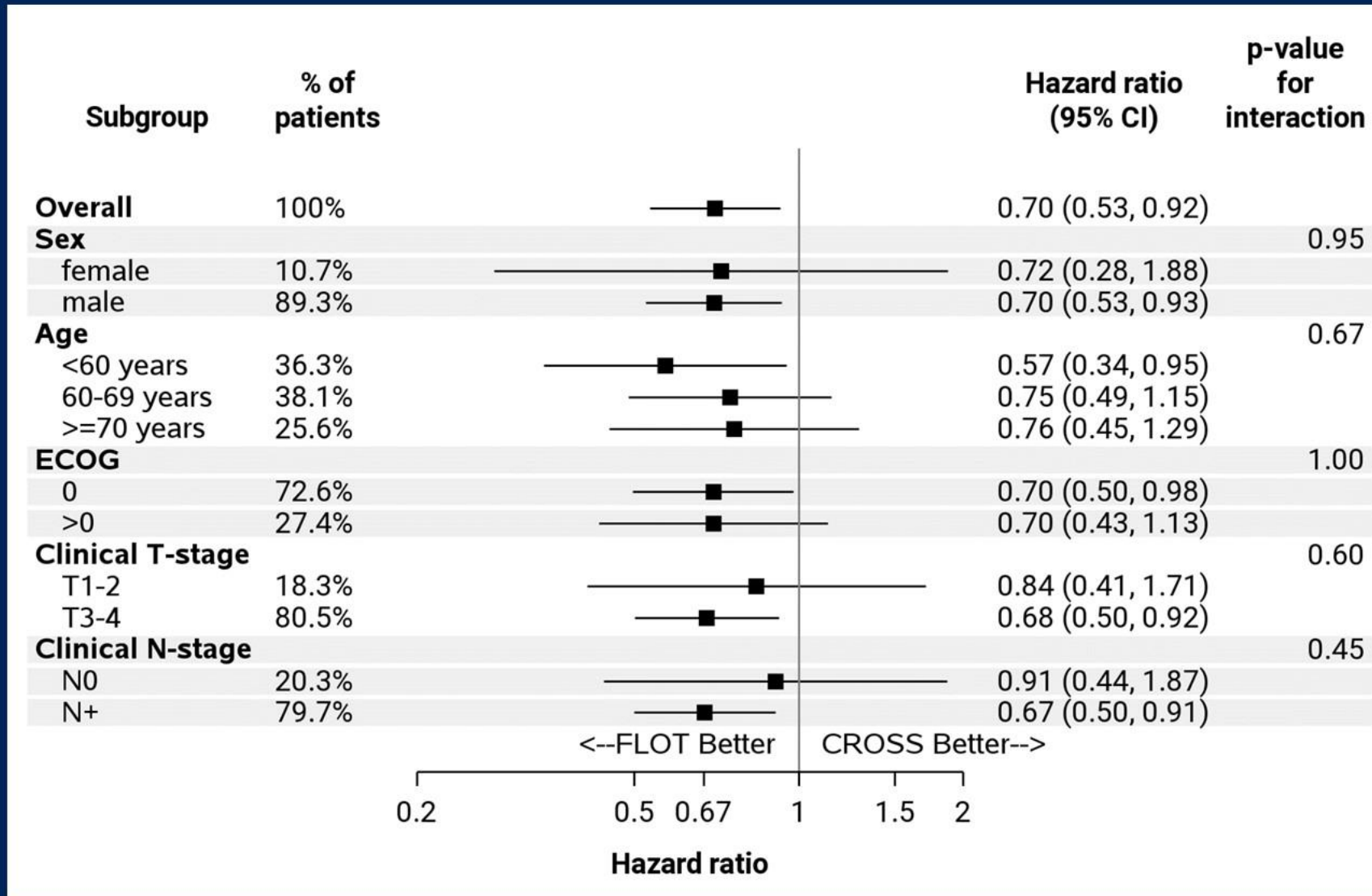
Overall Survival – PP Population



FLOT	207	169	121	105	84	44	11	0
CROSS	196	141	109	89	54	32	15	0

	FLOT	CROSS
Events	92	110
Median OS time (months)	66 95% CI 38 – n.e	39 95% CI 29 – 45
3-year OS rate	58.1%	52.6%
5-year OS rate	51.8%	40.5%

Overall Survival in Exploratory Subgroups



Pathology Results – Surgery Population

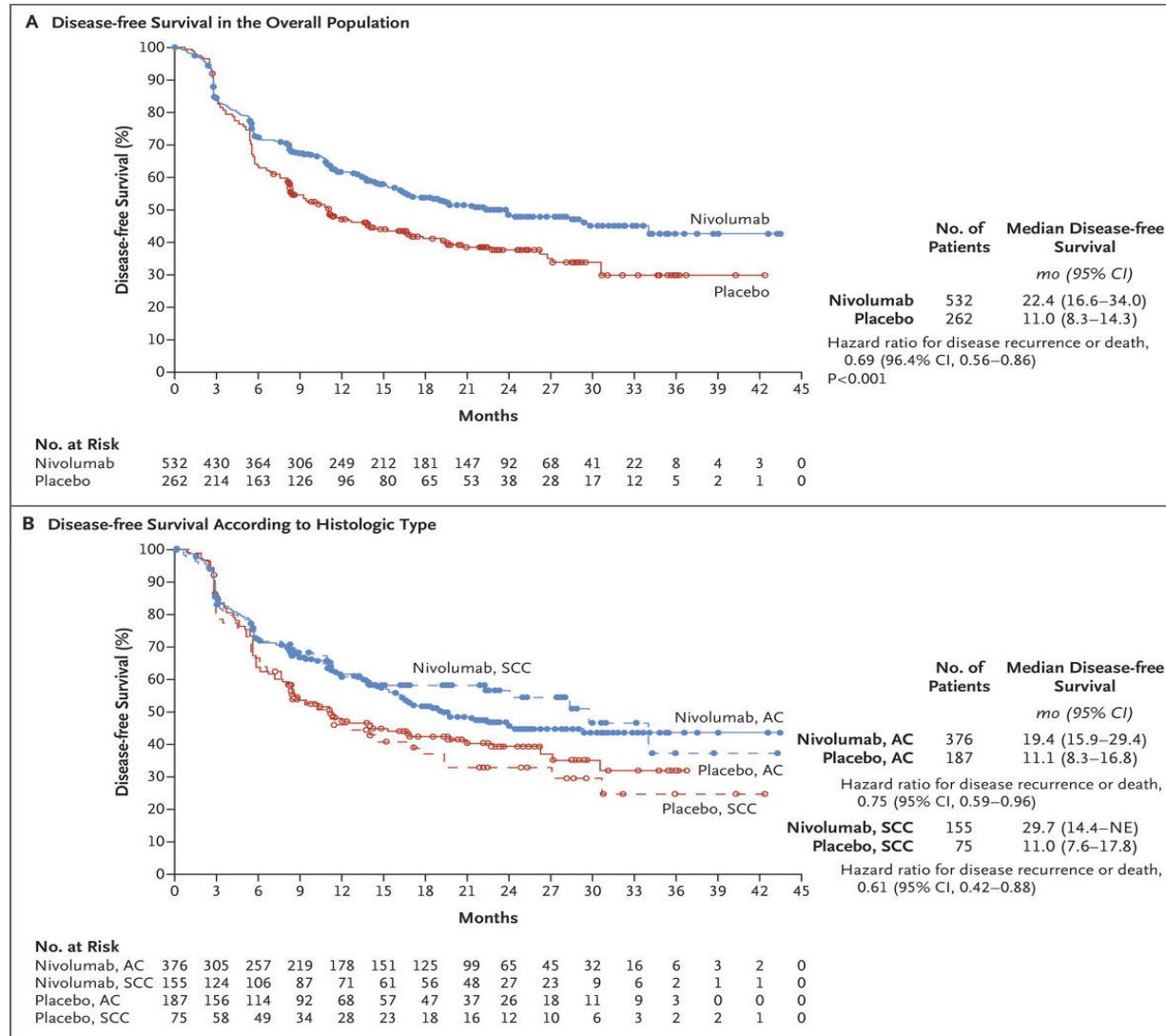
	FLOT Group	CROSS Group
N	191	180
Resection status		
No resection	0.5%	1.1%
R0	94.2%	95.0%
R1	5.2%	3.9%
Postoperative N-Stage		
ypN-	50.8%	54.4%
ypN+	48.7%	44.4%
Pathological complete remission		
ypT0 ypN0	16.8%	10.0%
Tumor regression grade (Becker¹)		
Complete regression	18.3%	13.3%
Near complete regression (<10% vital tumor)	25.1%	39.4%

per local pathology assessment

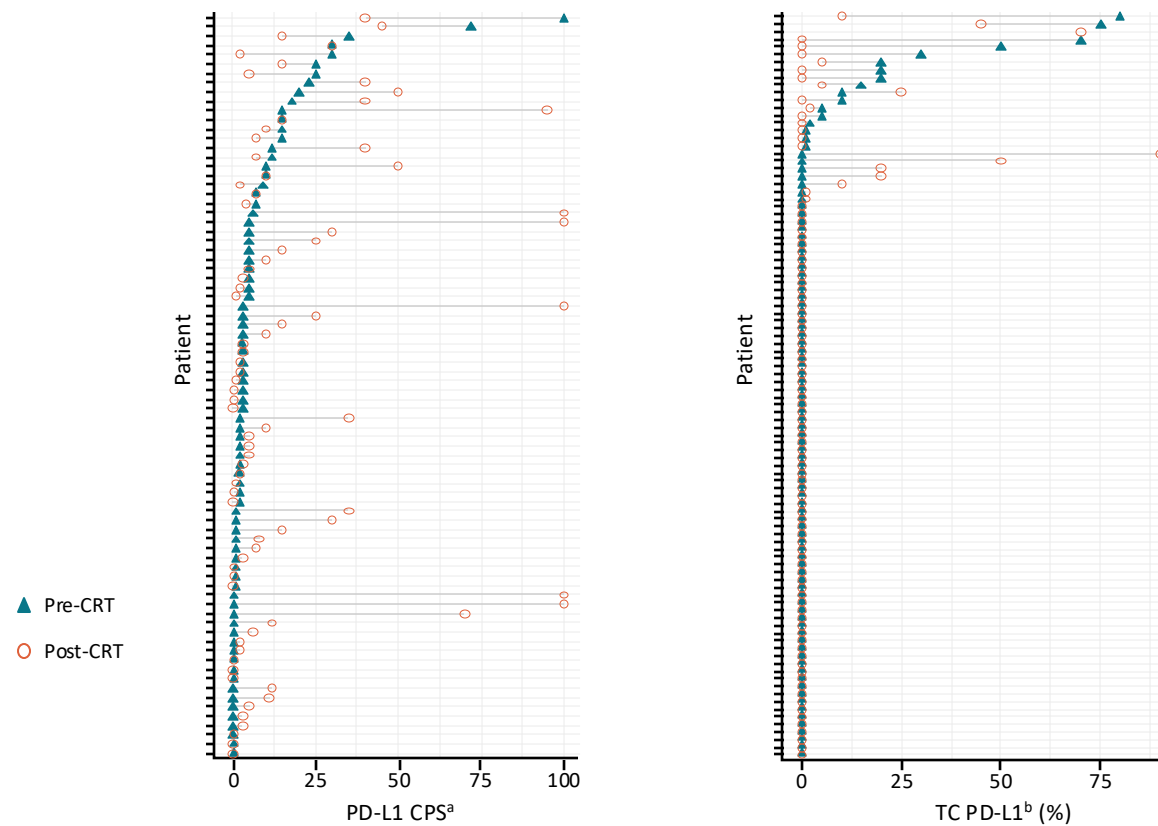
Postoperative Complications – Surgery Population

	FLOT Group	CROSS Group
N	191	180
Postoperative morbidity		
Clavien Dindo I	20.9%	20.0%
Clavien Dindo II	13.6%	15.0%
Clavien Dindo III	23.0%	23.3%
Clavien Dindo IV	6.8%	4.4%
Postoperative mortality		
30-days	1.0%	1.7%
90-days	3.2%	5.6%

Disease-free Survival in the Intention-to-Treat Population CHECKMATE 577.



Post-CRT changes in PD-L1 expression



- Increases in PD-L1 CPS expression after neoadjuvant CRT (and prior to study treatment) were observed in 51% of PD-L1 CPS-evaluable patients^c, while TC PD-L1 expression remained unchanged in 76% of TC PD-L1-evaluable patients^d



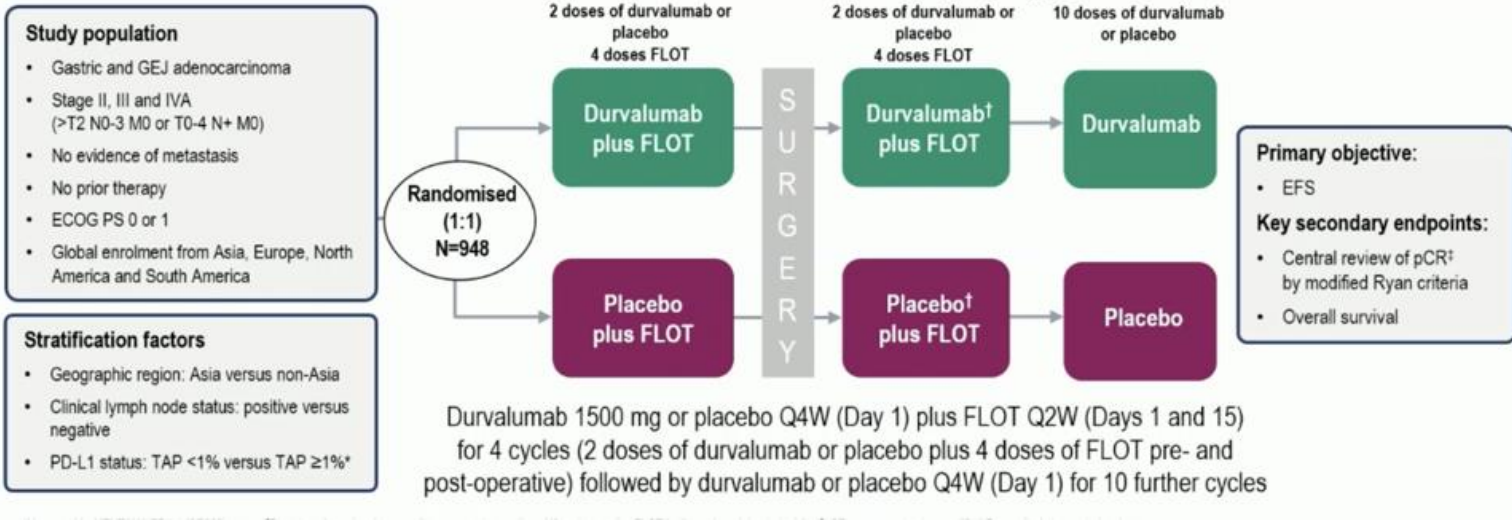
Post-CRT changes in PD-L1 expression

	Nivolumab	Placebo	Total
PD-L1 CPS^a evaluable,^b n	51	29	80
Median DFS (95% CI), mo	25.1 (14.5–NE)	9.3 (5.6–26.3)	–
HR (95% CI)	0.64 (0.36–1.15)		–
PD-L1 CPS change > 0, n (%)	23 (45)	18 (62)	41 (51)
Median DFS (95% CI), mo	NR (27.1–NE)	8.9 (5.6–NE)	–
HR (95% CI)	0.30 (0.11–0.78)		–
PD-L1 CPS change = 0, n (%)	7 (14)	4 (14)	11 (14)
Median DFS (95% CI), mo	16.0 (1.9–NE)	5.5 (5.4–22.8)	–
HR (95% CI)	NA ^c		–
PD-L1 CPS change < 0, n (%)	21 (41)	7 (24)	28 (35)
Median DFS (95% CI), mo	8.3 (2.8–19.4)	15.1 (2.8–NE)	–
HR (95% CI)	NA ^c		–
TC PD-L1^d evaluable,^e n	65	33	98
Median DFS (95% CI), mo	25.1 (14.5–NE)	7.1 (5.6–15.1)	–
HR (95% CI)	0.56 (0.33–0.96)		–
TC PD-L1 change > 0, n (%)	6 (9)	2 (6)	8 (8)
Median DFS (95% CI), mo	19.8 (2.8–NE)	NA	–
HR (95% CI)	NA ^c		–
TC PD-L1 change = 0, n (%)	49 (75)	25 (76)	74 (76)
Median DFS (95% CI), mo	23.4 (9.8–NE)	5.6 (5.4–15.1)	–
HR (95% CI)	0.51 (0.28–0.91)		–
TC PD-L1 change < 0, n (%)	10 (15)	6 (18)	16 (16)
Median DFS (95% CI), mo	39.2 (3.6–NE)	NR (2.9–NE)	–
HR (95% CI)	NA ^c		–

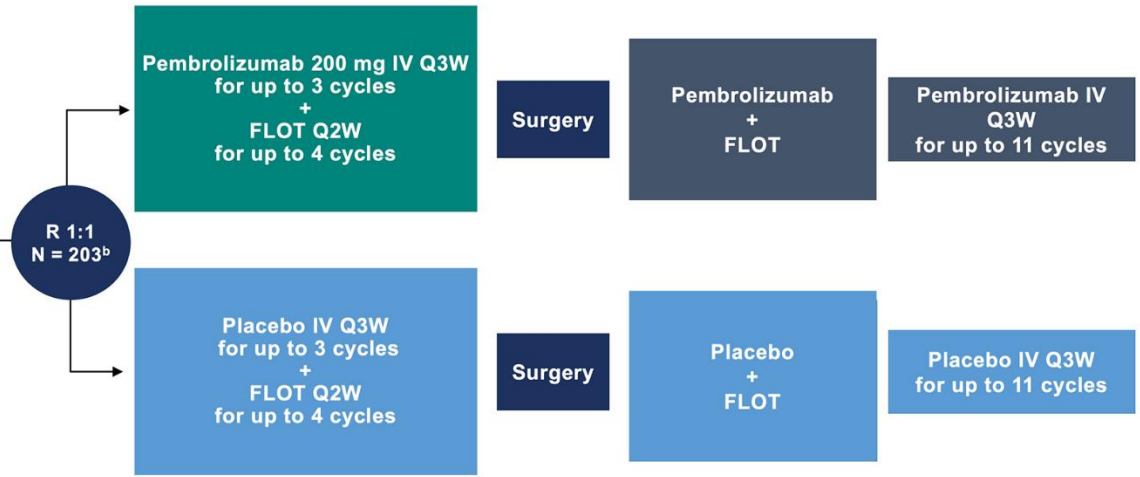
- The magnitude of DFS benefit appeared to be greater with nivolumab vs placebo in patients with an increase in PD-L1 CPS post-CRT (HR, 0.30 [95% CI, 0.11–0.78]) compared with the overall PD-L1 CPS-evaluable population^b (HR, 0.64 [95% CI, 0.36–1.15])



MATTERHORN is a global, Phase 3, randomised, double-blind, placebo-controlled study



- Key Eligibility Criteria**
- Localized G/GEJ adenocarcinoma defined by T3 or greater primary lesion or presence of N+ nodes
 - No prior therapy
 - Able to undergo surgery
 - Provision of tumor sample for PD-L1 testing^a
 - ECOG PS 0-1



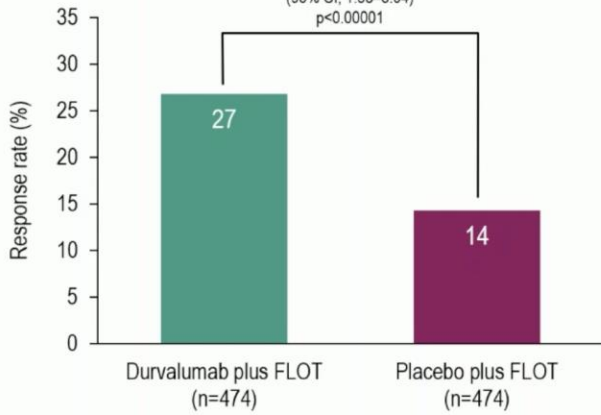
- Stratification factors**
- Geographic region (Asia versus non-Asia)
 - Tumor staging (II vs III vs IVa)
 - Chemotherapy backbone (XP/FP vs FLOT)

- Endpoints:**
- Primary: safety
 - Key secondary: pathCR rate per BICR, EFS per investigator, OS

Combined complete and near-complete pathological response

Central review

Δ12%
Odds ratio: 2.19
(95% CI, 1.58–3.04)
p<0.00001

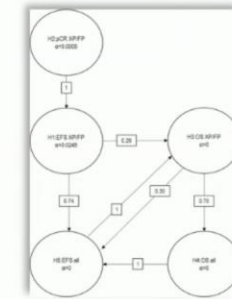


Near-complete pathological response = single or rare small groups of cancer cells at time of resection per modified Ryan criteria

Participants achieve pCR if there is no residual viable tumour cells found at primary tumour and resected lymph nodes at the time of resection, meaning a pathological regression of >100%, based on central (or local) assessment. CI, confidence interval; FLOT, fluorouracil, leucovorin, oxaliplatin, and docetaxel; pCR, pathological complete response.

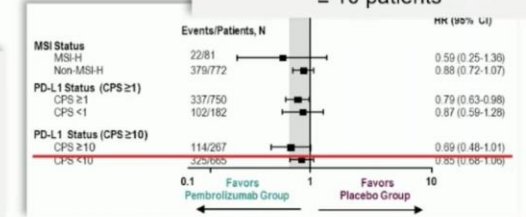
KEYNOTE 585 event free survival

Improved pCR fails to translate into better EFS for most patients



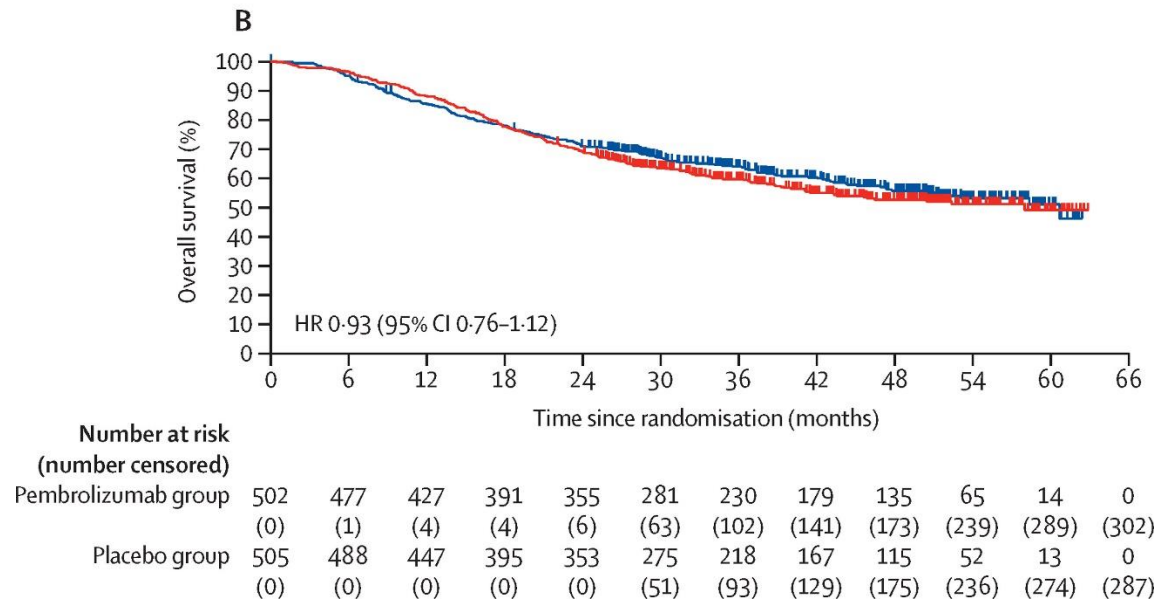
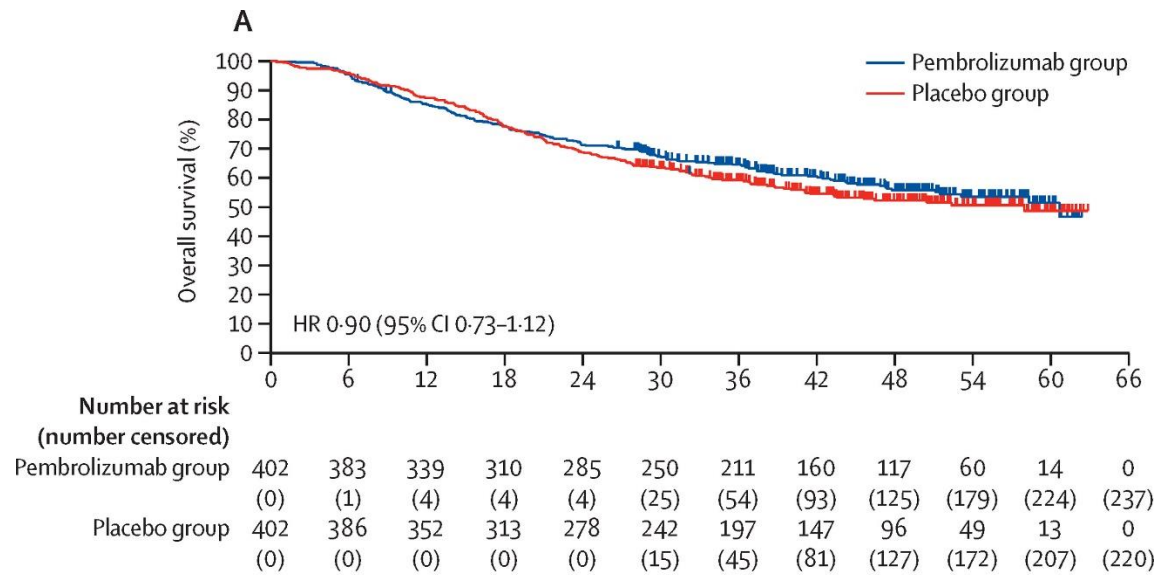
Statistical failure
α loss & multiplicity

Chemo+PD-1 ↑↑EFS in PD-L1 CPS ≥ 10 patients



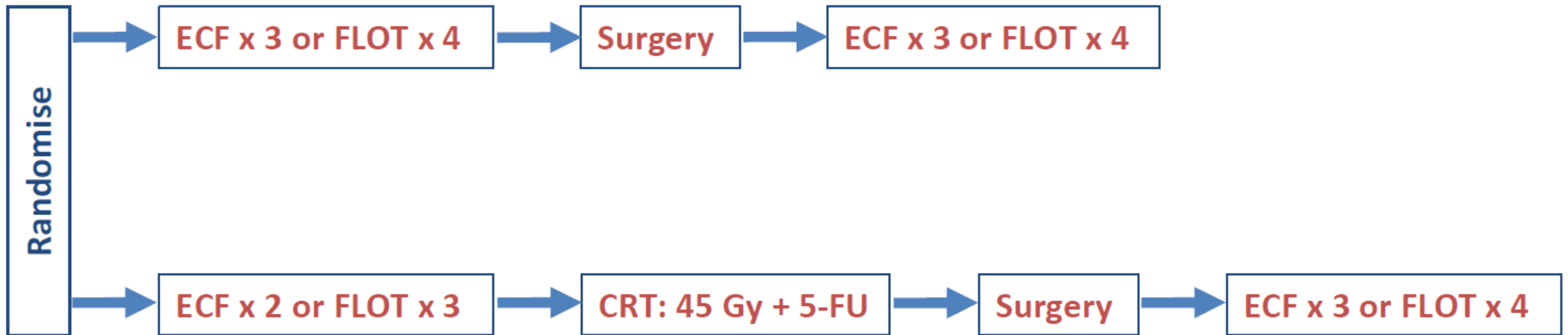
20 month ↑ in EFS could be clinically meaningful
But....

- 1) Comparing to inferior baseline than standard of care
- 2) Driven by PD-L1 positive/high subgroup
- 3) Has a "head-start" because of 9 months extra adjuvant treatment



TOPGEAR

Key eligibility criteria: resectable adenocarcinoma of stomach or GOJ (Siewert type II \leq 2cm oesophageal involvement, and Siewert type III); stage IB–IIIC, ie. T3–T4 and/or N-positive



ECF = epirubicin, cisplatin, 5-FU

FLOT = 5-FU, leucovorin, oxaliplatin, docetaxel

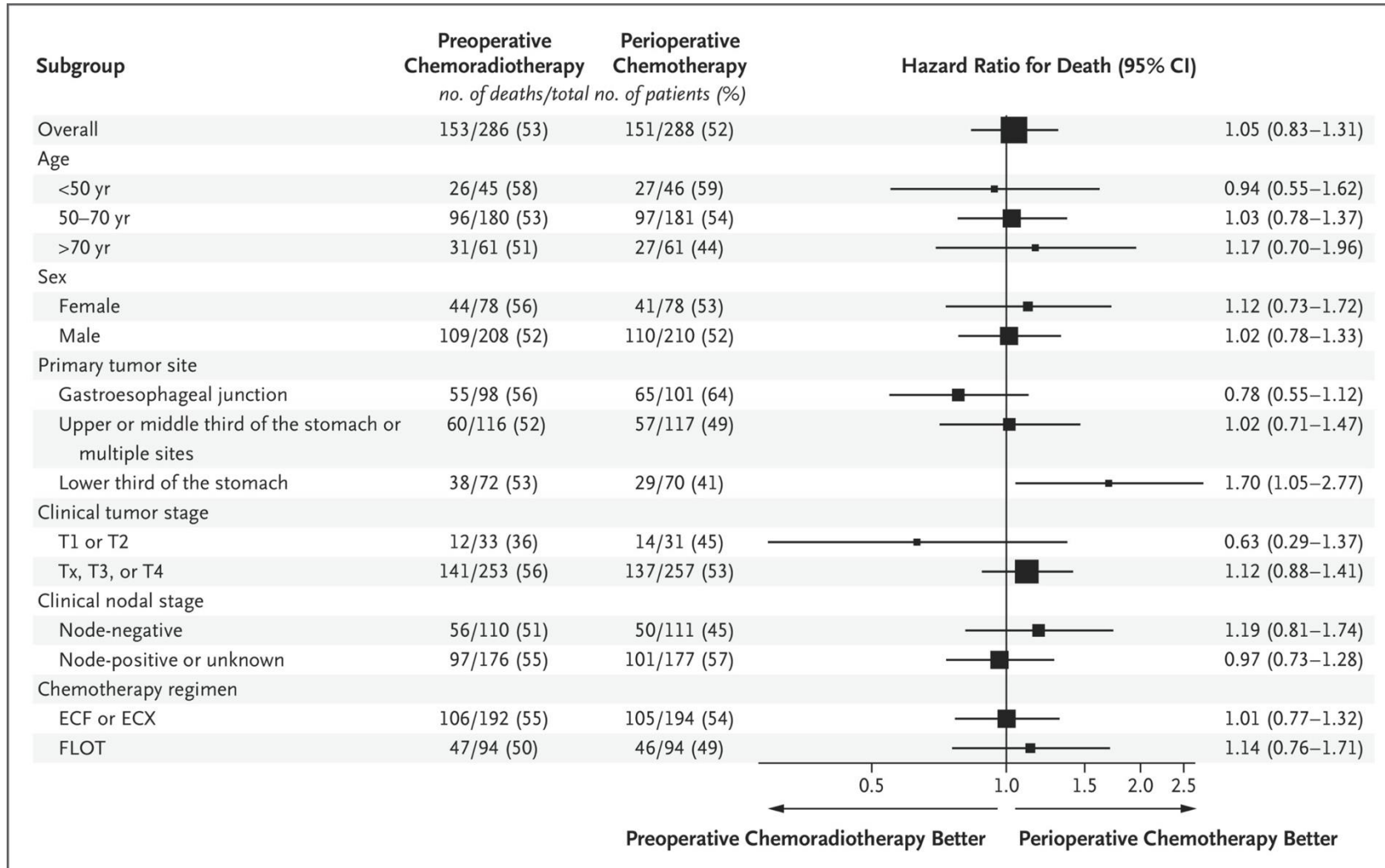
Treatment compliance

Treatment	Preop CRT		Periop CT		P-value
	N	n (%)	N	n (%)	
Received preop chemotherapy	286	270 (94.4%)	288	263 (91.3%)	0.15
Received postop chemotherapy					
patients undergoing surgery	241	115 (47.7%)	256	151 (59.0%)	0.01
all randomised patients	286	159 (56%)	288	190 (66%)	0.01
Received chemoradiotherapy	286	259 (90.6%)			
completed 45Gy	259	238 (91.9%)			
Received surgery					
all randomised patients	286	241 (84.3%)	288	256 (88.9%)	0.10
curative intent	286	228 (79.7%)	288	244 (84.7%)	

Surgical and pathological outcomes

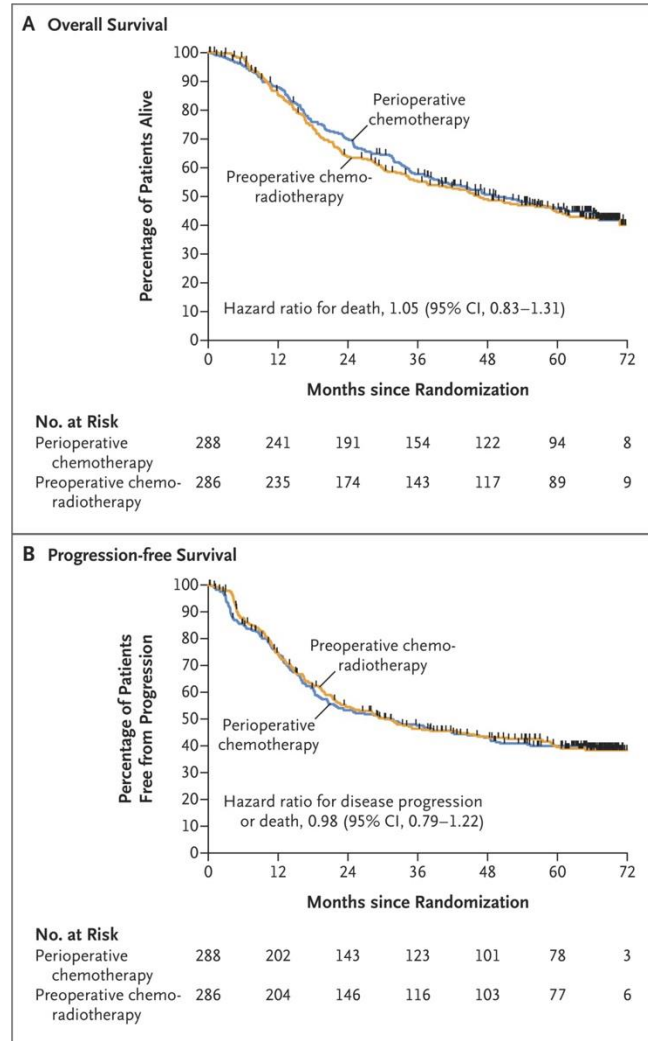
	Preop CRT N=286	Periop CT N=288	P-value
D1+ or D2 lymphadenectomy	188 (83.6%)	192 (81.0%)	
RO resection	208 (92.4%)	206 (87.7%)	0.09
R1 resection	15 (6.7%)	29 (12.3%)	
ypTNM stage:	(N=231)	(N=247)	
ypT0, ypTis	38 (16.5%)	18 (7.3%)	<0.001
ypT1/2	73 (31.6%)	62 (25.2%)	
ypT3/4	120 (51.9%)	166 (67.5%)	
ypN negative	125 (54.1%)	104 (42.3%) [‡]	<0.01
ypN positive	106 (45.9%)	142 (57.7%)	
Pathological Response:			
Grade 1a: 0% residual tumour (pCR)	36 (16.8%)	18 (8.0%)	<0.0001
Grade 1b: <10% residual tumour	70 (32.7%)	48 (21.3%)	
Grade 2: 10-50% residual tumour	61 (28.5%)	69 (30.7%)	
Grade 3: >50% residual tumour	47 (22.0%)	90 (40.0%)	

Treatment Effect on Overall Survival According to Prespecified Subgroups.



Leong T et al. N Engl J Med 2024;391:1810-1821

Overall Survival and Progression-free Survival.

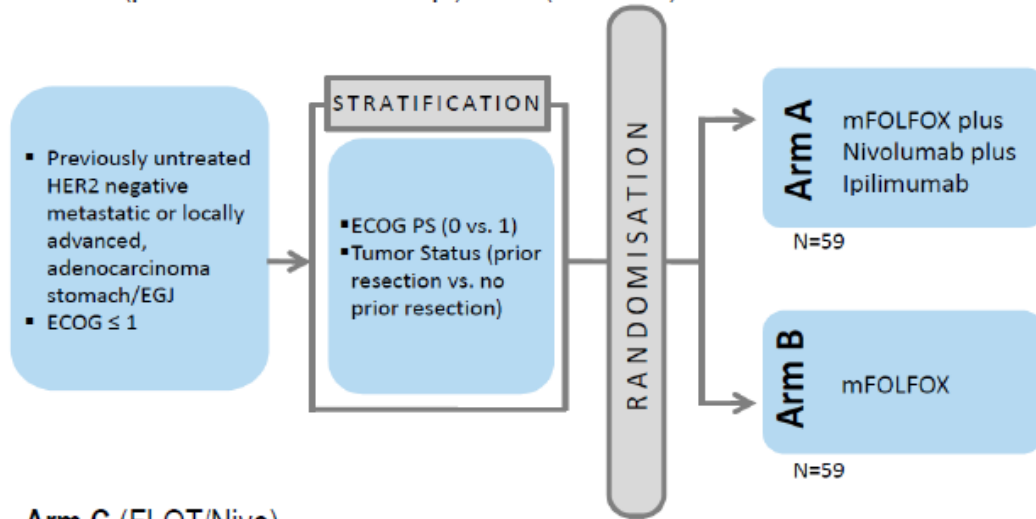


Leong T et al. N Engl J Med 2024;391:1810-1821

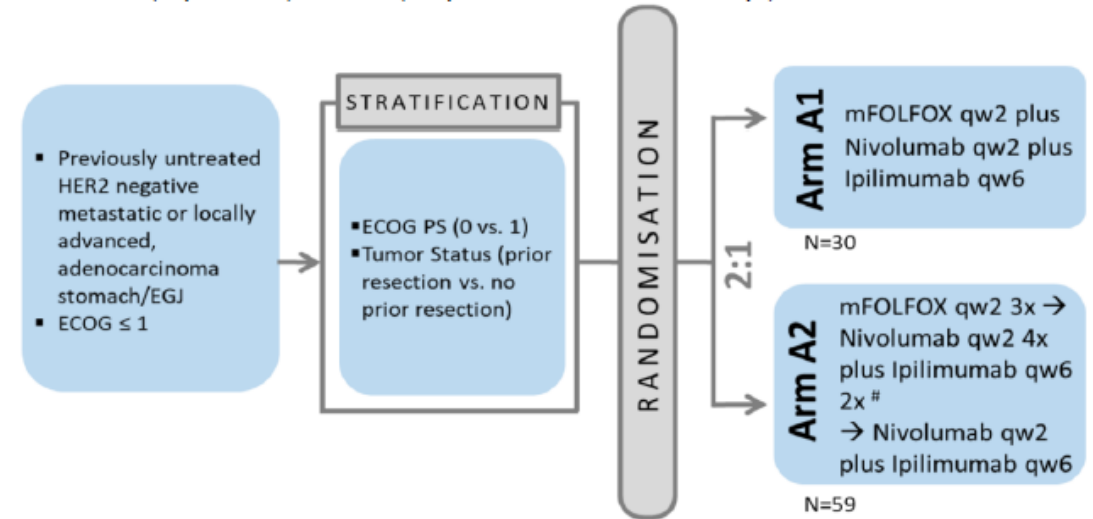
IKF-AIO-Moonlight Study Design

The IKF-AIO-Moonlight study is a four-arm investigator-initiated phase II trial

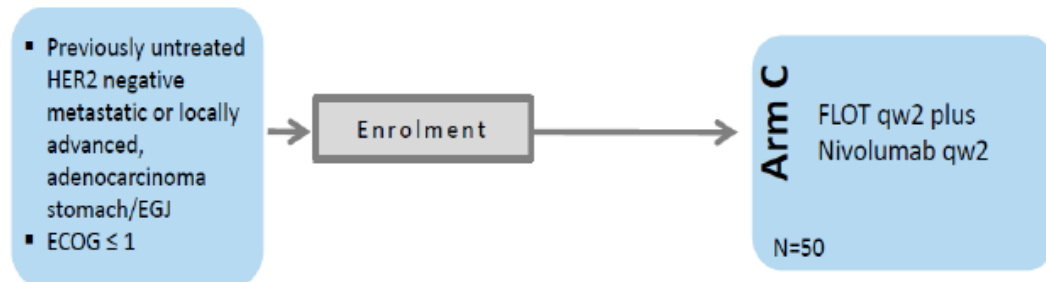
Arm A (parallel FOLFOX/Nivo/Ipi) vs. B (FOLFOX)



Arm A1 (equal to A) vs. A2 (sequential FOLFOX/Nivo/Ipi)



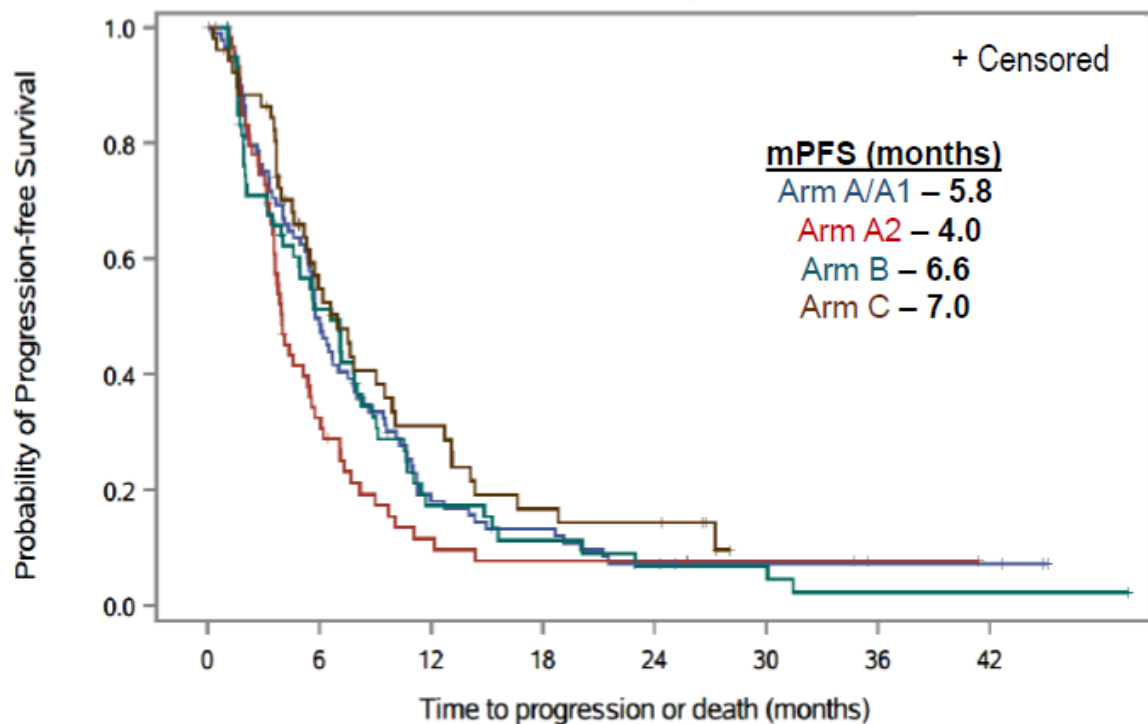
Arm C (FLOT/Nivo)



Note: Arm A and A1 were pooled in the analyses presented here

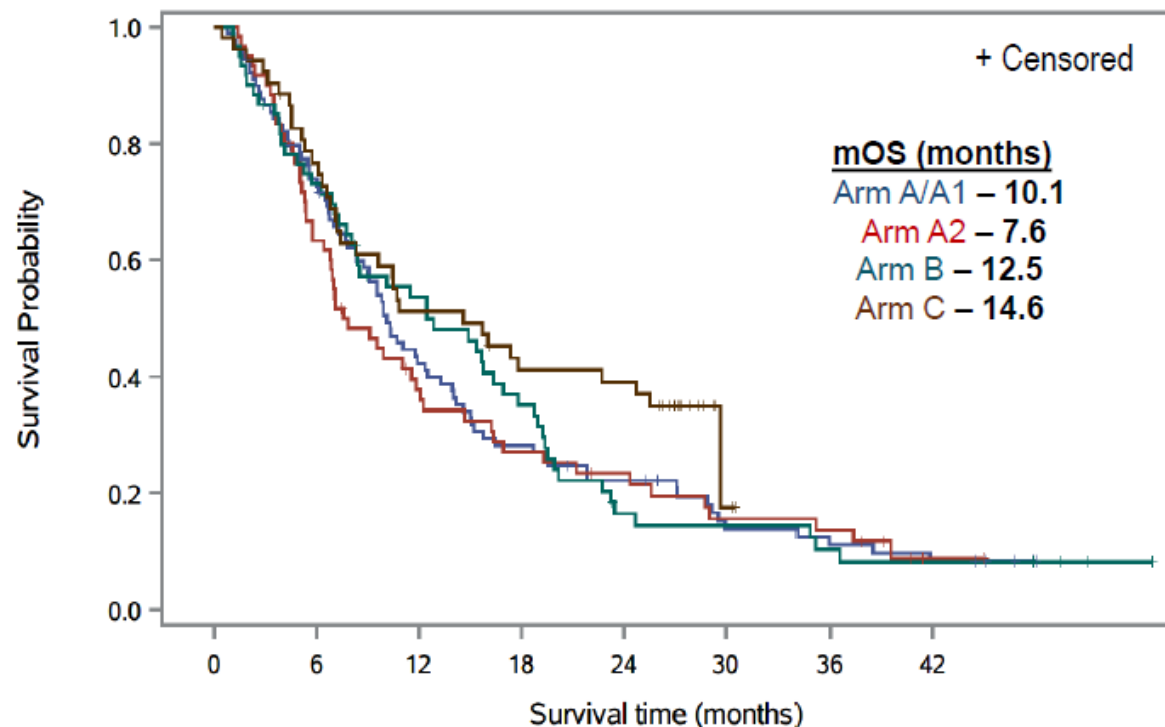
Progression-free and Overall Survival all arms

PFS (ITT)



Arm A1 & A	90	43	15	11	5	3	3	3
Arm A2	60	18	6	4	4	3	1	0
Arm B	60	28	9	5	3	3	1	1
Arm C	52	24	13	7	6	0		

OS (ITT)



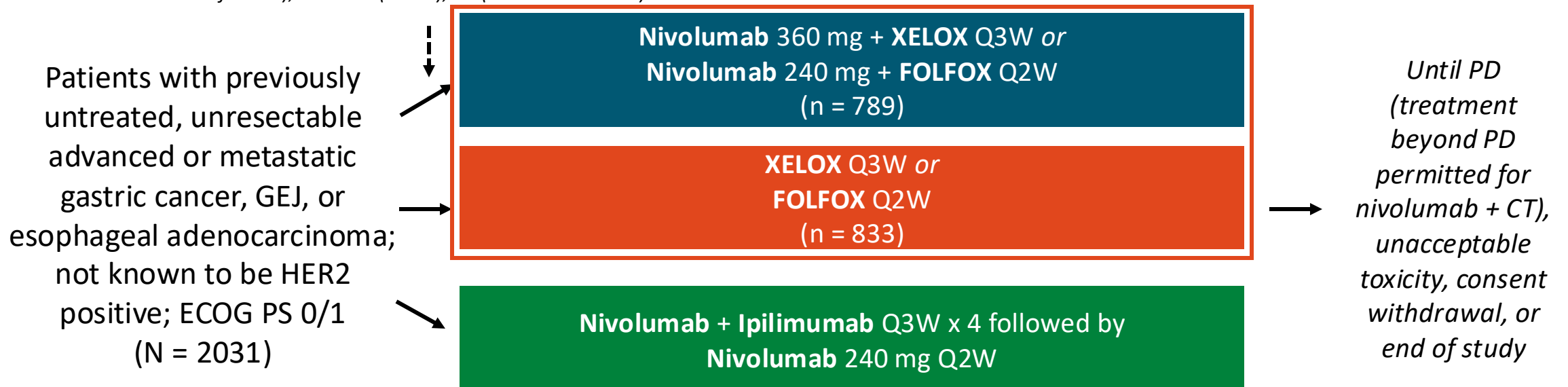
Arm A1 & A	90	64	36	24	18	10	8	6
Arm A2	60	38	21	15	12	8	7	1
Arm B	60	42	29	19	8	7	5	4
Arm C	52	39	26	20	19	2	0	

Updated Results From 1L Nivolumab + CT vs CT for Advanced GEJ Cancers (CheckMate 649): Study Design

- International, randomized, open-label phase III trial

Stratified by PD-L1 ($\geq 1\%$ vs $< 1\%$), region (Asia vs US/Canada vs rest of world), ECOG PS (0 vs 1), CT (XELOX vs FOLFOX)

This Analysis

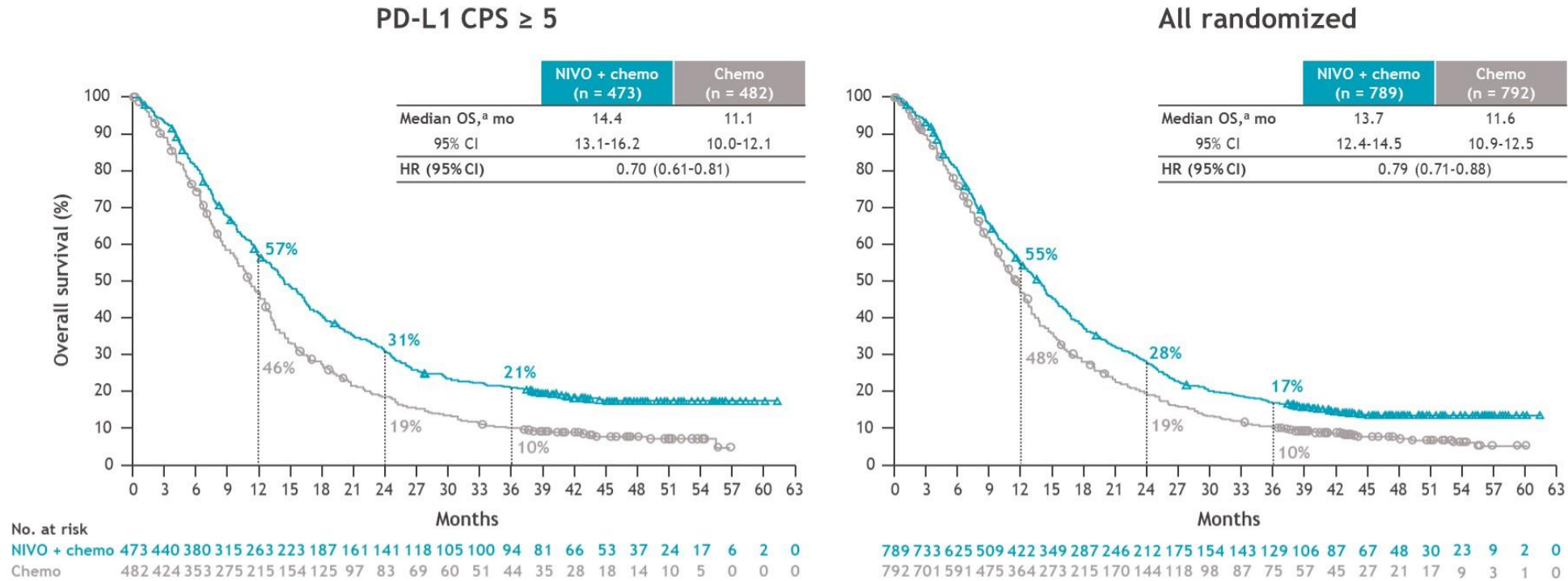


- Coprimary endpoints:** OS and PFS in patients with PD-L1 CPS ≥ 5

Median follow-up: 24.0 mo in nivolumab + CT arm

- Secondary endpoints:** OS and PFS in all randomized patients and patients with PD-L1 CPS ≥ 10 and ≥ 1 , BICR-assessed ORR

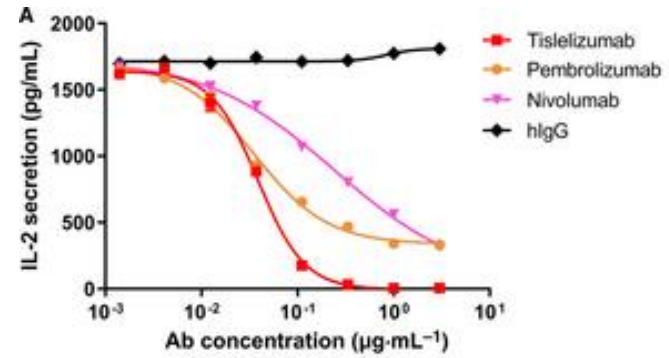
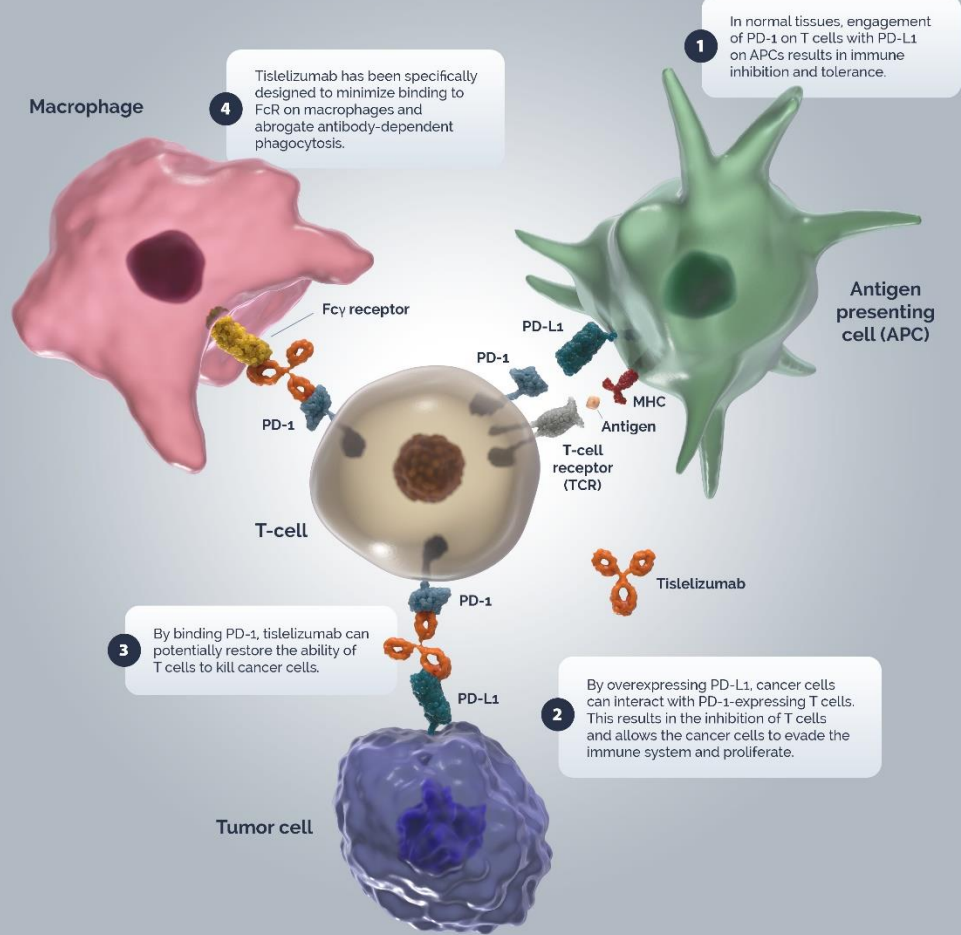
Overall survival: 36-month follow-up



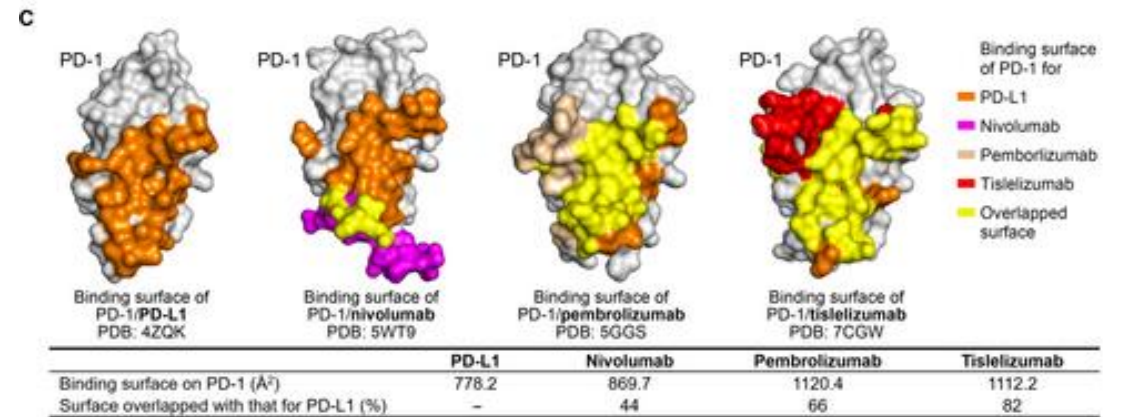
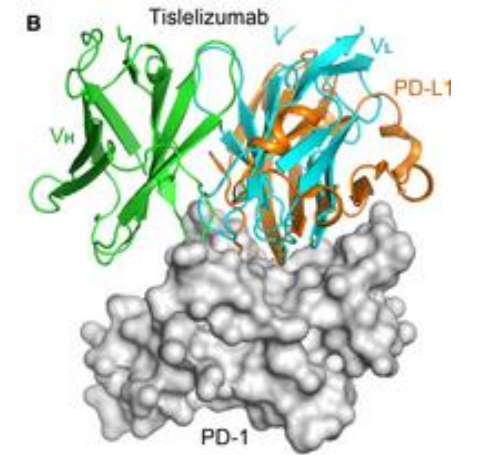
- Clinically meaningful improvement in OS with NIVO + chemo vs chemo was maintained with longer follow-up in PD-L1 CPS ≥ 5 and all randomized populations

^aMinimum follow-up, 36.2 months.

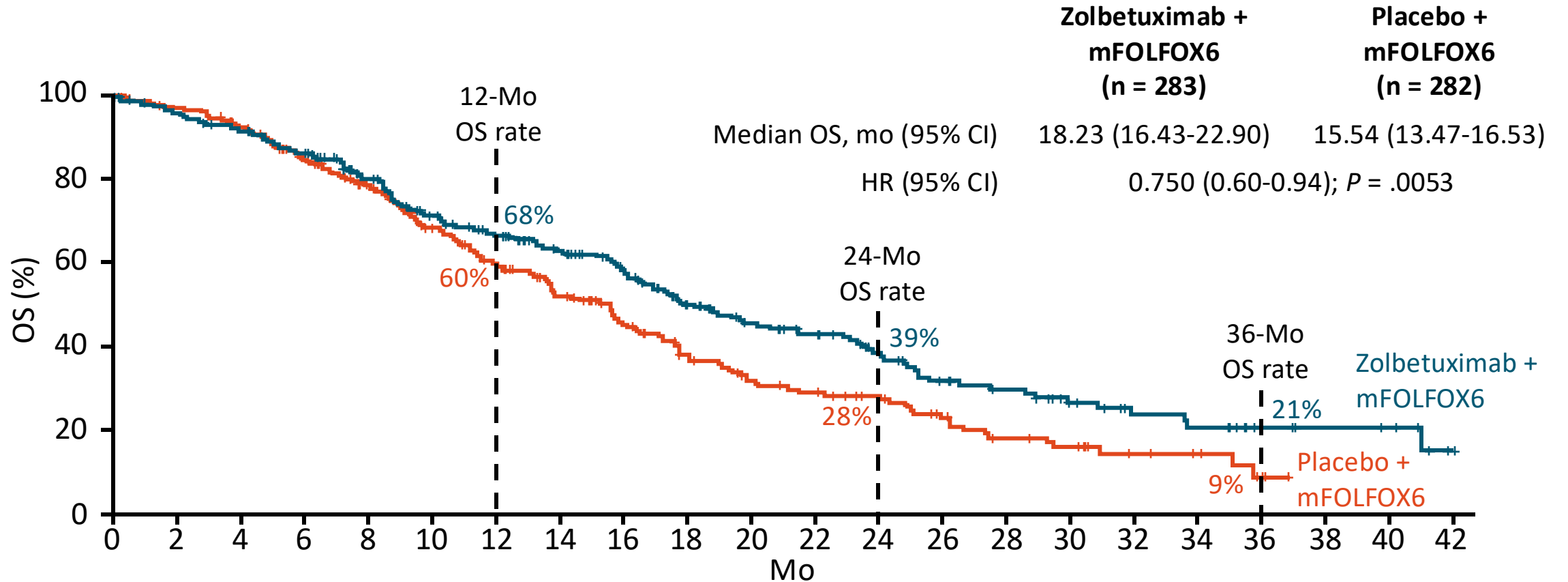
Tislelizumab (BGB-A317) — A humanized IgG4 anti-PD-1 monoclonal antibody



	Tislelizumab	Nivolumab	Pembrolizumab	hlgG
IC ₅₀ (µg·mL ⁻¹)	0.0387	0.243	0.0351	NA
Blockage percentage at the highest concentration (3 µg·mL ⁻¹)	> 99%	80%	81%	NA



SPOTLIGHT: OS



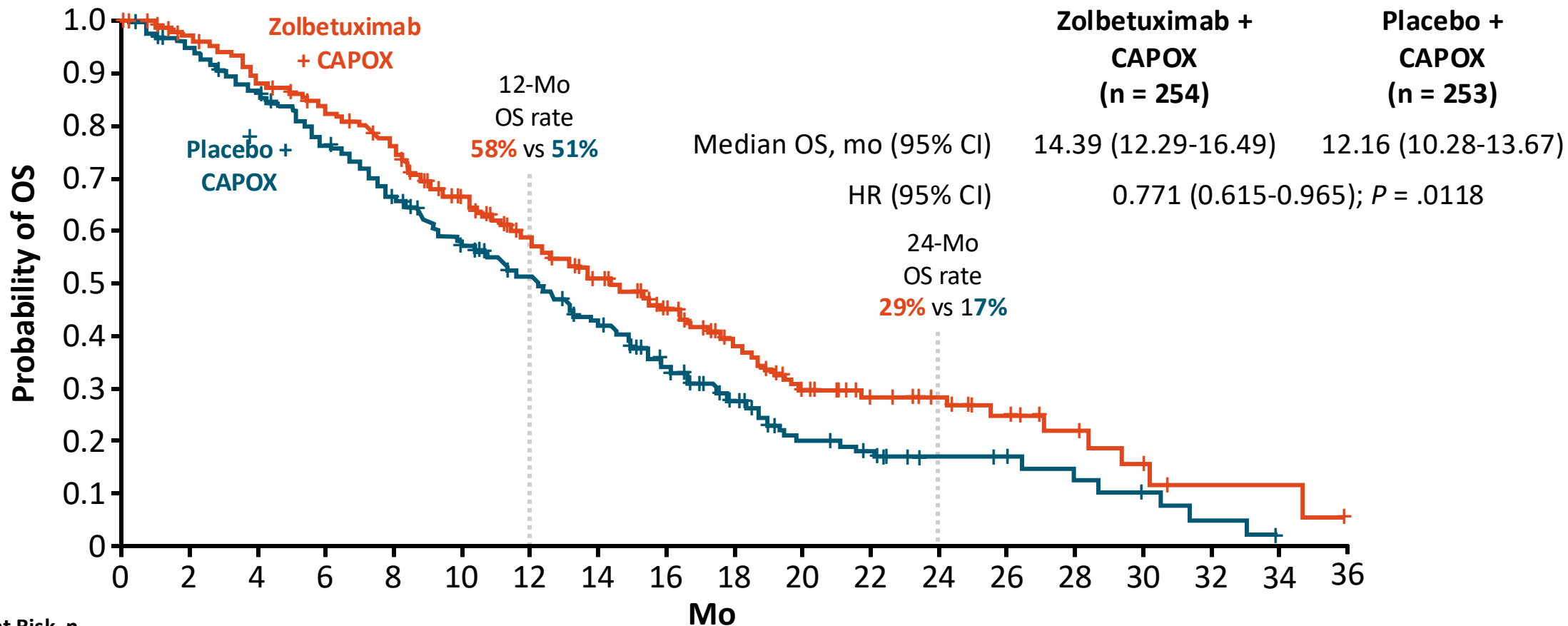
Patients at Risk, n

Time (Mo)	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42																							
Zolbetuximab + mFOLFOX6	283	270	264	255	251	241	233	217	196	178	164	152	146	135	125	117	107	93	83	75	70	67	62	58	49	42	34	32	30	27	23	20	15	15	13	13	9	8	7	7	6	4	1	0	
Placebo + mFOLFOX6	282	277	271	266	253	242	224	210	197	183	164	152	139	129	108	101	85	77	64	60	49	42	40	36	34	30	25	21	18	17	15	9	8	7	6	5	2	0	0	0	0	0	0	0	0

Data cut-off: September 9, 2022. Median follow-up: 22.14 mo (zolbetuximab + FOLFOX6) vs 20.93 mo (placebo vs FOLFOX6).

Shitara. Lancet. 2023.

GLOW: OS



Patients at Risk, n																				
	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
Zolbetuximab + CAPOX	254	233	211	193	171	138	108	87	68	47	31	22	18	12	8	4	2	2	0	
Placebo + CAPOX	253	235	210	181	152	125	104	82	59	40	22	16	10	8	6	4	2	0	0	

Data cutoff: October 7, 2022. Median follow-up: 12.62 mo (zolbetuximab + CAPOX) vs 12.09 mo (placebo vs CAPOX).

Xu. ASCO Plenary 2023. Abstr 405736.



Slide credit: clinicaloptions.com

SPOTLIGHT: TEAEs in $\geq 20\%$ of Patients

Adverse Event, %	Zolbetuximab + mFOLFOX6 (n = 279)		Placebo + mFOLFOX6 (n = 278)	
	All Grade	Grade ≥ 3	All Grade	Grade ≥ 3
Nausea	81.0	16.1	60.8	6.5
Vomiting	64.5	16.1	34.5	5.8
Decreased appetite	47.0	5.7	33.5	3.2
Diarrhea	38.7	4.3	43.9	3.2
Peripheral sensory neuropathy	38.0	3.9	42.4	5.4
Neutropenia	36.2	28.3	33.8	23.4
Anemia	35.5	8.6	37.1	9.4
Constipation	35.5	1.1	37.1	9.4
Neutrophil count decreased	34.1	24.7	32.0	24.8
Fatigue	28.0	6.1	32.0	5.0
Asthenia	24.7	7.2	22.3	2.5
Abdominal pain	23.3	4.3	28.8	2.2
Stomatitis	20.8	2.5	20.1	1.1

