GI SLIDE DECK 2020

Selected abstracts from:

ESMO Virtual Congress 2020

19–21 September 2020

european society of digestive oncology

esdo

Supported by Eli Lilly and Company.

Eli Lilly and Company has not influenced the content of this publication

Lilly

Letter from ESDO

DEAR COLLEAGUES

It is our pleasure to present this ESDO slide set which has been designed to highlight and summarize key findings in digestive cancers from the major congresses in 2020. This slide set specifically focuses on the **ESMO Virtual Congress 2020** and is available in English, French, Chinese and Japanese.

The area of clinical research in oncology is a challenging and ever changing environment. Within this environment, we all value access to scientific data and research which helps to educate and inspire further advancements in our roles as scientists, clinicians and educators. I hope you find this review of the latest developments in digestive cancers of benefit to you in your practice. If you would like to share your thoughts with us we would welcome your comments. Please send any correspondence to info@esdo.eu.

Finally, we are also very grateful to Lilly Oncology for their financial, administrative and logistical support in the realization of this activity.

Yours sincerely,

Eric Van Cutsem
Thomas Seufferlein
Côme Lepage
Phillippe Rougier (hon.)

Thomas Gruenberger
Tamara Matysiak-Budnik
Jaroslaw Regula
Jean-Luc Van Laethem

(ESDO Governing Board)

esdo

european society of digestive oncology

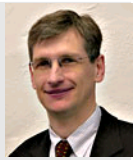
ESDO Medical Oncology Slide Deck
Editors 2020

COLORECTAL CANCERS



Prof Eric Van Cutsem	Digestive Oncology, University Hospitals, Leuven, Belgium
Prof Thomas Gruenberger	Department of Surgery, Kaiser-Franz-Josef Hospital, Vienna, Austria
Prof Jaroslaw Regula	Department of Gastroenterology and Hepatology, Institute of Oncology, Warsaw, Poland

PANCREATIC CANCER AND HEPATOBILIARY TUMOURS

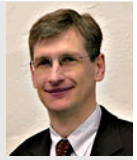



Prof Jean-Luc Van Laethem	Digestive Oncology, Erasme University Hospital, Brussels, Belgium
Prof Thomas Seufferlein	Clinic of Internal Medicine I, University of Ulm, Ulm, Germany

GASTROESOPHAGEAL AND NEUROENDOCRINE TUMOURS


Prof Côme Lepage	University Hospital & INSERM, Dijon, France
Prof Tamara Matysiak	Hepato-Gastroenterology & Digestive Oncology, Institute of Digestive Diseases, Nantes, France

BIOMARKERS

Prof Eric Van Cutsem	Digestive Oncology, University Hospitals, Leuven, Belgium
Prof Thomas Seufferlein	Clinic of Internal Medicine I, University of Ulm, Ulm, Germany

esdo

Glossary

1L	first-line
AE	adverse event
ALT	alanine aminotransferase
AST	aspartate aminotransferase
BICR	blinded-independent central review
bid	twice daily
BOR	best overall response
CBR	clinical benefit rate
CEA	carcinoembryonic antigen
CI	confidence interval
CPS	combined positive score
CR	complete response
(m)CRC	(metastatic) colorectal cancer
CRT	chemoradiotherapy
CT	chemotherapy
ctDNA	circulating tumour DNA
CTLA-4	cytotoxic T-lymphocyte-associated protein 4
DCR	disease control rate
DFS	disease-free survival
dMMR	deficient mismatch repair
DoR	duration of response
EAC	esophageal adenocarcinoma
ECOG	Eastern Cooperative Oncology Group
EQ-5D-3L	EuroQol five dimensions three levels questionnaire
(m)FOLFOX	(modified) leucovorin + 5-fluorouracil + oxaliplatin
FOLFIRINOX	leucovorin + 5-fluorouracil + irinotecan + oxaliplatin
FU	fluorouracil
GEJ	gastroesophageal junction
GEP	gastroenteropancreatic
GEM	gemcitabine
GI	gastrointestinal
Gy	Gray
HAIC	hepatic arterial infusion chemotherapy
HCC	hepatocellular carcinoma
HER2	human epidermal growth factor receptor 2
HIV	human immunodeficiency virus
HR	hazard ratio
IHC	immunohistochemistry
ISH	in situ hybridisation
ITT	intent-to-treat
iv	intravenous
LN	lymph node
LSM	least squares of mean
LVSD	left ventricular systolic dysfunction
MDS	myelodysplastic syndromes
MSI-H	high microsatellite instability
NA	not available
NE	not evaluable/not estimable
NEN	neuroendocrine neoplasm
NIVO	nivolumab
NR	not reached
NS	non-significant
od	once daily
ORR	overall/objective response rate
(m)OS	(median) overall survival
pCR	pathological complete response
PD	progressive disease
PDAC	pancreatic ductal adenocarcinoma
PD-L1	programmed death-ligand 1
(m)PFS	(median) progression-free survival
PK	pharmacokinetics
po	orally
PR	partial response
PS	performance status
q(2/3/4)w	every (2/3/4) week(s)
QLQ-CR29/30	quality of life questionnaire CR29/C30
QoL	quality of life
R	randomised
R0/1	resection 0/1
(ir/m)RECIST	(immune-related/modified) Response Evaluation Criteria In Solid Tumors
RT	radiotherapy
S-1	tegafur-gimeracil-oteracil-potassium
SAE	serious adverse event
SCAC	squamous carcinoma of the anal canal
SD	stable disease
SE	standard error
SOC	system organ class
TACE	transarterial chemoembolisation
TEAE	treatment-emergent adverse event
TRAE	treatment-related adverse event
TTR	time to response
VAS	visual analogue scale
WHO	World Health Organization
XELOX	capecitabine + oxaliplatin

Contents

Note: To jump to a section, right click on the number and ‘Open Hyperlink’

CANCERS OF THE ESOPHAGUS AND STOMACH

LBA6: Nivolumab (NIVO) plus chemotherapy (chemo) versus chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJC)/esophageal adenocarcinoma (EAC): First results of the CheckMate 649 study – Moehler M, et al

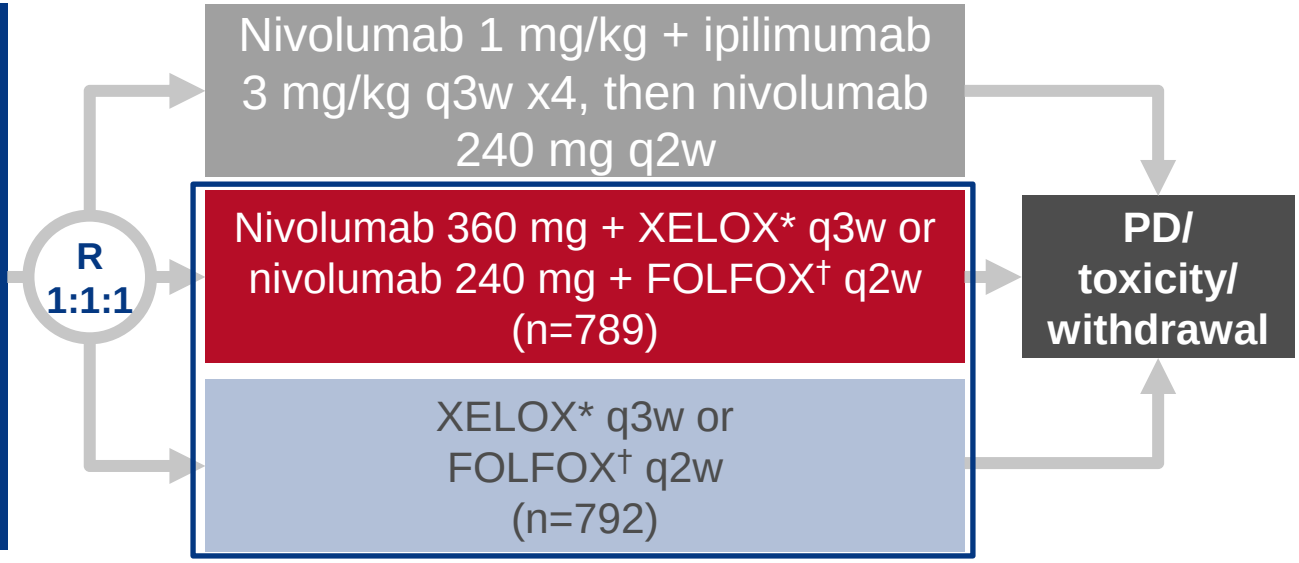
Study objective

- To evaluate the efficacy and safety of nivolumab as a 1L treatment for patients with gastric or GEJ cancer or esophageal adenocarcinoma

Key patient inclusion criteria

- Previously untreated, unresectable advanced or metastatic gastric or GEJ cancer or esophageal adenocarcinoma
- No known HER2+ status
- ECOG PS 0–1

(n=1581)



Stratification

- Region, ECOG PS, chemotherapy regimen, PD-L1 expression

CO-PRIMARY ENDPOINTS

- OS and PFS (PD-L1 CPS ≥5)

SECONDARY ENDPOINTS

- OS, PFS, ORR, safety

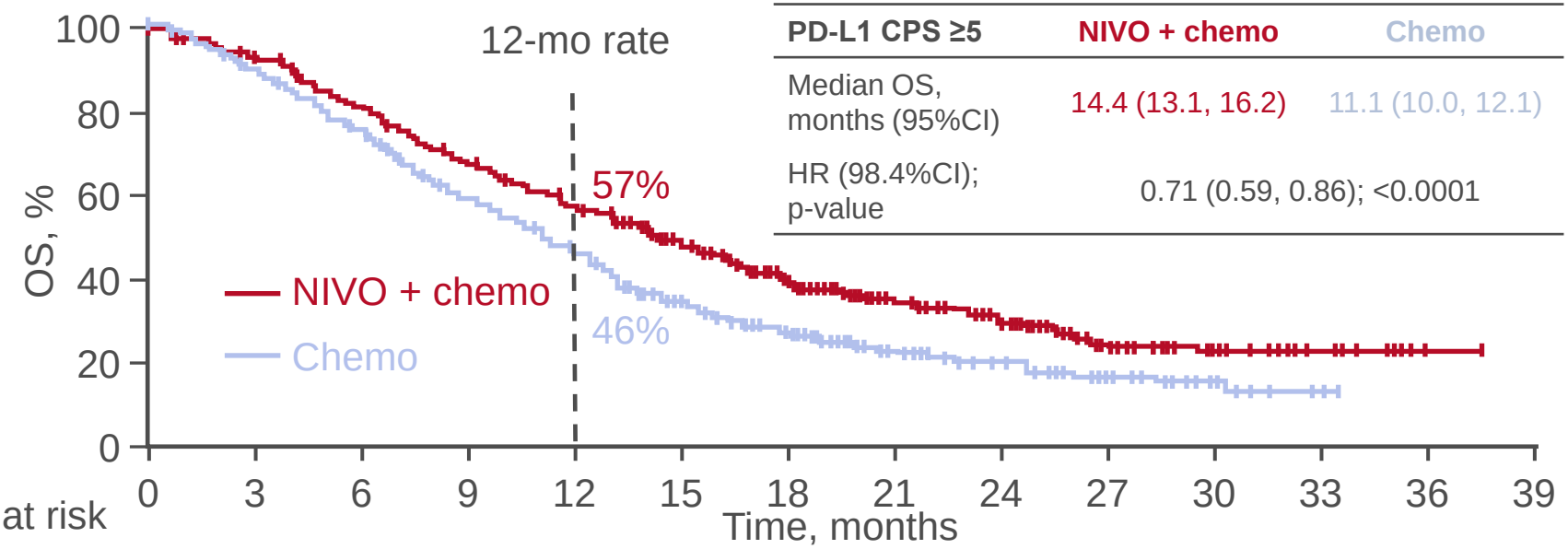
*Oxaliplatin 130 mg/m^2 iv D1 + capecitabine 1000 mg/m^2 po bid D1–14; †oxaliplatin 85 mg/m^2, leucovorin 400 mg/m^2 + FU 400 mg/m^2 D1 then FU 1200 mg/m^2 iv D1–2.Data cut-off 27 May 2020.

Moehler M, et al. Ann Oncol 2020;31(suppl):abstr LBA6

LBA6: Nivolumab (NIVO) plus chemotherapy (chemo) versus chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJC)/esophageal adenocarcinoma (EAC): First results of the CheckMate 649 study – Moehler M, et al

Key results

Overall survival (PD-L1 CPS ≥5)



PD-L1 CPS ≥5	NIVO + chemo	Chemo
Median OS, months (95%CI)	14.4 (13.1, 16.2)	11.1 (10.0, 12.1)
HR (98.4%CI); p-value	0.71 (0.59, 0.86); <0.0001	

No. at risk

NIVO + chemo	473	438	377	313	261	198	149	96	65	33	22	9	1	0
Chemo	482	421	350	271	211	138	98	56	34	19	8	2	0	0

PD-L1 CPS ≥1	NIVO + chemo	Chemo
Median OS, months (95%CI)	14.0 (12.6, 15.0)	11.3 (10.6, 12.3)
HR (99.3%CI); p-value	0.77 (0.64, 0.92); 0.0001	

All randomized	NIVO + chemo	Chemo
Median OS, months (95%CI)	13.8 (12.6, 14.6)	11.6 (10.9, 12.5)
HR (99.3%CI); p-value	0.80 (0.68, 0.94); 0.0002	

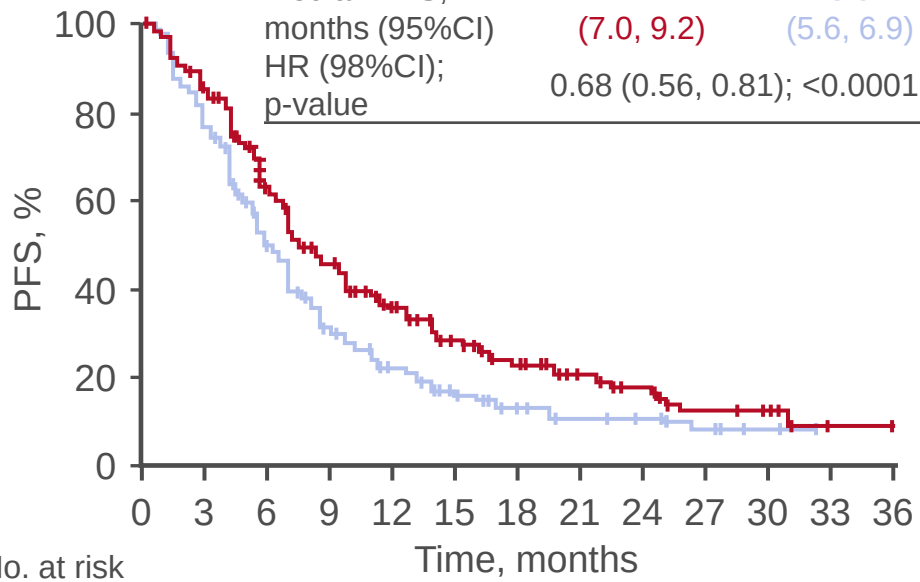
Moehler M, et al. Ann Oncol 2020;31(suppl):abstr LBA6

LBA6: Nivolumab (NIVO) plus chemotherapy (chemo) versus chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJC)/esophageal adenocarcinoma (EAC): First results of the CheckMate 649 study – Moehler M, et al

Key results (cont.)

PFS (PD-L1 CPS ≥5)

	NIVO + chemo	Chemo
Median PFS, months (95%CI)	7.7 (7.0, 9.2)	6.0 (5.6, 6.9)
HR (98%CI); p-value	0.68 (0.56, 0.81); <0.0001	



No. at risk

NIVO + chemo	473	384	258	181	132	89	60	39	23	10	8	1	0
Chemo	482	325	200	109	72	41	25	18	12	7	4	0	0

12-month PFS rate: NIVO + chemo, 36%; Chemo, 22%

Response in PD-L1 CPS ≥5

	NIVO + chemo (n=378)	Chemo (n=391)
ORR, % (95%CI)	60 (55, 65)	45 (40, 50)
	p<0.0001	
CR	12	7
PR	48	38
SD	28	34
PD	7	11
NE	6	10
Median TTR, months (range)	1.5 (0.8, 10.2)	1.5 (1.0, 7.1)
Median DoR, months (95%CI)	9.5 (8.0, 11.4)	7.0 (5.7, 7.9)

Moehler M, et al. Ann Oncol 2020;31(suppl):abstr LBA6

LBA6: Nivolumab (NIVO) plus chemotherapy (chemo) versus chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJC)/esophageal adenocarcinoma (EAC): First results of the CheckMate 649 study – Moehler M, et al

Key results (cont.)

AEs, n (%)	Nivolumab + chemotherapy (n=782)		Chemotherapy (n=767)	
	Any grade	Grade 3–4	Any grade	Grade 3–4
Any TRAE	738 (94)	462 (59)	679 (89)	341 (44)
Serious TRAE	172 (22)	131 (17)	93 (12)	77 (10)
TRAE leading to discontinuation	284 (36)	132 (17)	181 (24)	67 (9)
Treatment-related deaths	12 (2)		4 (<1)	
Selected TRAE				
Endocrine	107 (14)	5 (<1)	3 (<1)	0
Gastrointestinal	262 (34)	43 (5)	207 (27)	25 (3)
Hepatic	203 (26)	29 (4)	134 (17)	16 (2)
Pulmonary	40 (5)	14 (2)	4 (<1)	1 (<1)
Renal	26 (3)	6 (<1)	8 (1)	1 (<1)
Skin	214 (27)	26 (3)	105 (14)	6 (<1)

Moehler M, et al. Ann Oncol 2020;31(suppl):abstr LBA6

LBA6: Nivolumab (NIVO) plus chemotherapy (chemo) versus chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJC)/esophageal adenocarcinoma (EAC): First results of the CheckMate 649 study – Moehler M, et al

Conclusions

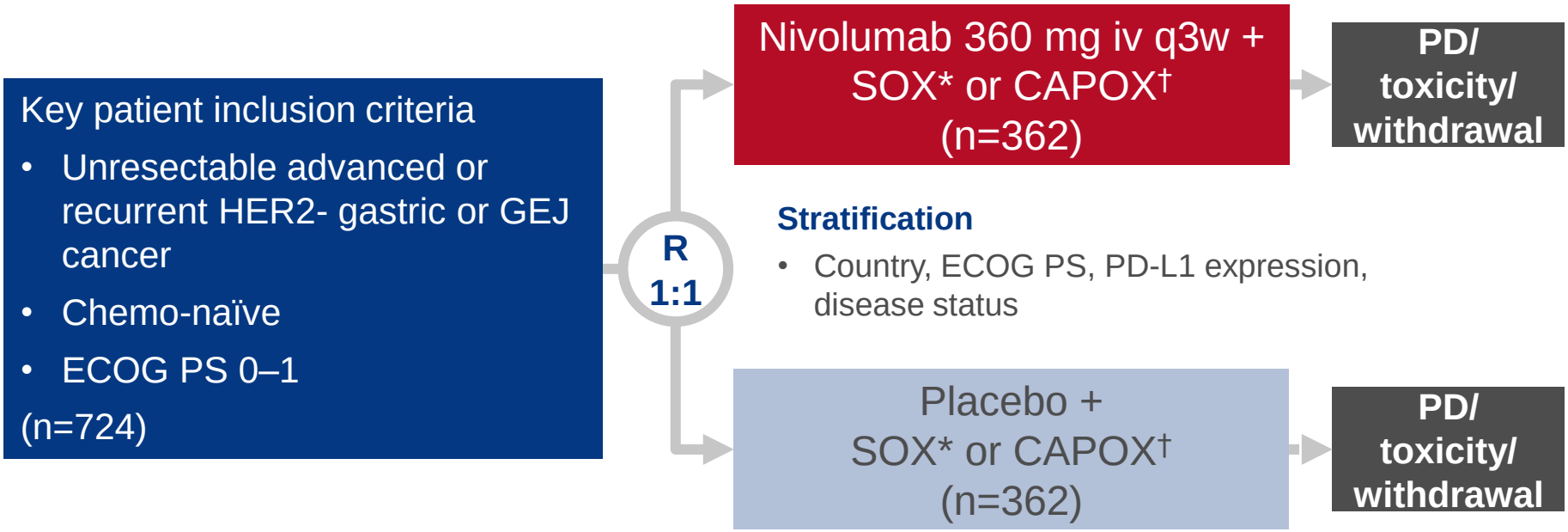
- In previously untreated patients with advanced gastric or GEJ cancer or esophageal adenocarcinoma, nivolumab + chemotherapy provided improvements in OS and PFS compared with chemotherapy alone
- There were no new safety signals observed

Moehler M, et al. Ann Oncol 2020;31(suppl):abstr LBA6

LBA7: Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction (G/GEJ) cancer: ATTRACTION-4 (ONO-4538-37) study – Boku N, et al

Study objective

- To evaluate the efficacy and safety of nivolumab in patients with gastric or GEJ cancer



CO-PRIMARY ENDPOINTS

- PFS (central assessment), OS

SECONDARY ENDPOINTS

- PFS (investigator-assessed), ORR, DoR, DCR, TTR, BOR, safety

*S-1 40 mg/m^2 po bid D1–14 + oxaliplatin 130 mg/m^2 iv q3w;
†capecitabine 1000 mg/m^2 po bid D1–14 + oxaliplatin 130 mg/m^2 iv q3w.
Interim PFS analysis data cut-off 31 October 2018 and final OS analysis data cut-off 31 January 2020.

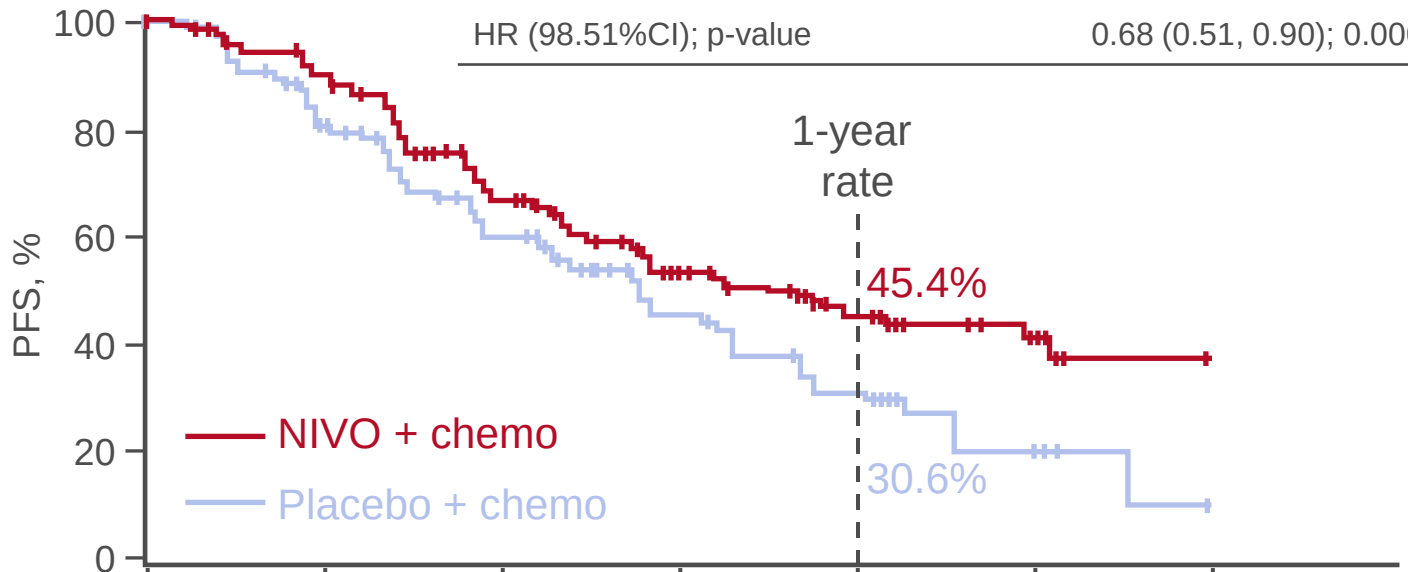
Boku N, et al. Ann Oncol 2020;31(suppl):abstr LBA7

LBA7: Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction (G/GEJ) cancer: ATTRACTION-4 (ONO-4538-37) study – Boku N, et al

Key results

Progression-free survival

	NIVO + chemo	Placebo + chemo
Interim PFS, months (95%CI)	10.45 (8.44, 14.75)	8.34 (6.97, 9.40)
HR (98.51%CI); p-value	0.68 (0.51, 0.90); 0.0007	



No. at risk							
NIVO + chemo	362	274	168	94	46	13	0
Placebo + chemo	362	259	160	80	30	5	0

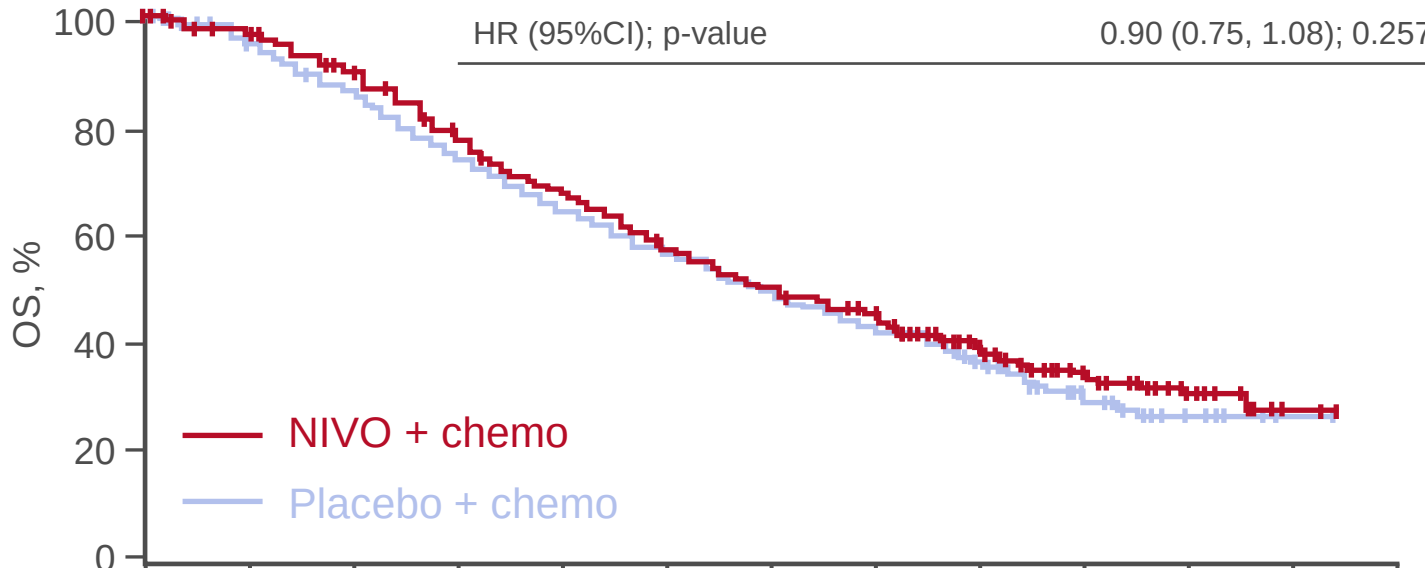
Boku N, et al. Ann Oncol 2020;31(suppl):abstr LBA7

LBA7: Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction (G/GEJ) cancer: ATTRACTION-4 (ONO-4538-37) study – Boku N, et al

Key results (cont.)

Overall survival

	NIVO + chemo	Placebo + chemo
Final OS, months (95%CI)	17.45 (15.67, 20.83)	17.15 (15.18, 19.65)
HR (95%CI); p-value	0.90 (0.75, 1.08); 0.257	



No. at risk													
NIVO + chemo	362	346	318	269	232	193	169	150	102	58	23	2	0
Placebo + chemo	362	342	301	259	219	192	167	141	97	48	16	5	0

Data cut-off 31 January 2020.

Boku N, et al. Ann Oncol 2020;31(suppl):abstr LBA7

LBA7: Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction (G/GEJ) cancer: ATTRACTION-4 (ONO-4538-37) study – Boku N, et al

Key results (cont.)

	NIVO + chemo (n=362)	Chemo (n=362)
ORR, n (%) [95%CI]	208 (57.5) [52.2, 62.6]	173 (47.8) [42.5, 53.1]
	p=0.0088	
BOR, n (%)		
CR	70 (19.3)	48 (13.3)
PR	138 (38.1)	125 (34.5)
SD	52 (14.4)	75 (20.7)
PD	25 (6.9)	46 (12.7)
NE	77 (21.3)	68 (18.8)
DCR, n (%) [95%CI]	260 (71.8) [66.9, 76.4]	248 (68.5) [63.4, 73.3]
Median TTR, months (range)	1.4 (1.0–8.3)	1.4 (1.0–15.3)
Median DoR, months (95%CI)	12.9 (9.9, 16.6)	8.7 (7.2, 11.4)

Boku N, et al. Ann Oncol 2020;31(suppl):abstr LBA7

LBA7: Nivolumab plus chemotherapy versus chemotherapy alone in patients with previously untreated advanced or recurrent gastric/gastroesophageal junction (G/GEJ) cancer: ATTRACTION-4 (ONO-4538-37) study – Boku N, et al

Key results (cont.)

TRAEs, n (%)	Nivolumab + chemo (n=378)			Chemo (n=391)		
	Any grade	Grade 3–4	Grade 5	Any grade	Grade 3–4	Grade 5
Any	351 (97.8)	205 (57.1)	3 (0.8)	349 (97.5)	174 (48.6)	2 (0.6)
Serious	88 (24.5)	66 (18.4)	3 (0.8)	51 (14.2)	33 (9.2)	2 (0.6)
Leading to discontinuation	22 (6.1)	11 (3.1)	3 (0.8)	17 (4.7)	8 (2.2)	2 (0.6)
Leading to dose delay/reduction	307 (85.5)	169 (47.1)	0	291 (81.3)	140 (39.1)	0
Selected TRAE						
Endocrine	41 (11.4)	8 (2.2)	0	12 (3.4)	0	0
Gastrointestinal	129 (35.9)	21 (5.8)	0	113 (31.6)	19 (5.3)	0
Hepatic	83 (23.1)	14 (3.9)	1 (0.3)	68 (19.0)	12 (3.4)	0
Hypersensitivity/infusion reaction	48 (13.4)	12 (3.3)	0	26 (7.3)	4 (1.1)	0
Pulmonary	12 (3.3)	4 (1.1)	0	7 (2.0)	1 (0.3)	0
Renal	9 (2.5)	1 (0.3)	0	4 (1.1)	1 (0.3)	0
Skin	134 (37.3)	14 (3.9)	0	86 (24.0)	4 (1.1)	0

Conclusions

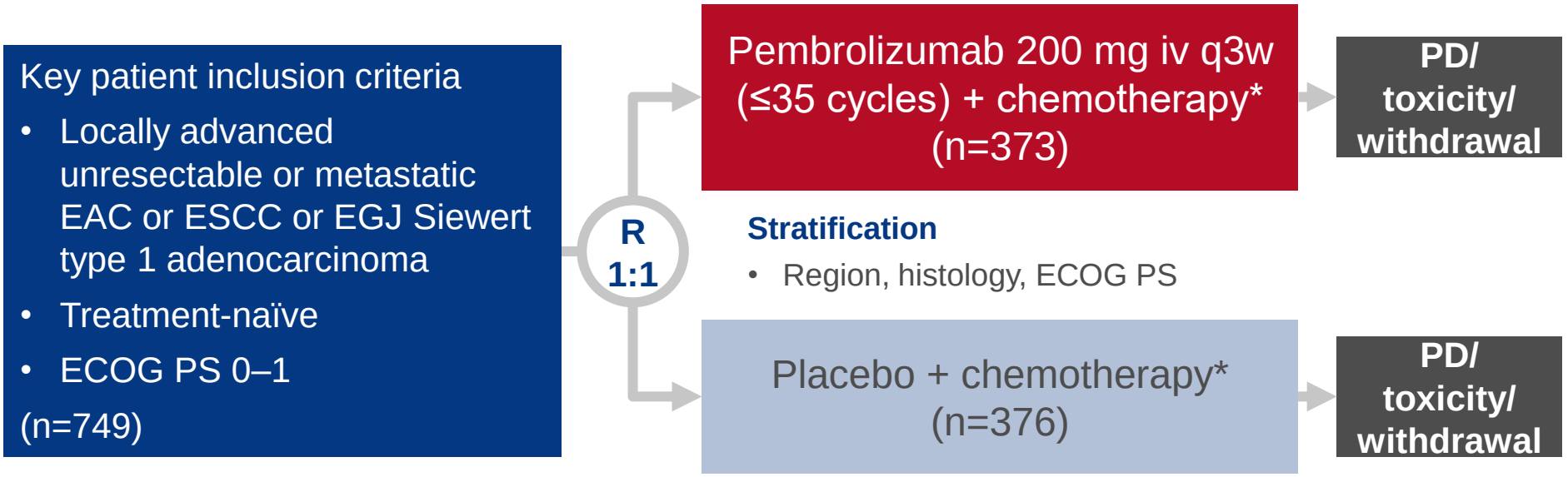
- **In patients with gastric or GEJ cancer, nivolumab + chemotherapy provided significant improvement in PFS, but not in OS, and had an acceptable safety profile**

Boku N, et al. Ann Oncol 2020;31(suppl):abstr LBA7

LBA8: Pembrolizumab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced esophageal cancer: The phase 3 KEYNOTE-590 study – Kato K, et al

Study objective

- To evaluate the safety and efficacy of pembrolizumab + chemotherapy in patients with advanced esophageal cancer



CO-PRIMARY ENDPOINTS

- OS and PFS (investigator-assessed, RECIST v1.1)

SECONDARY ENDPOINTS

- ORR, safety

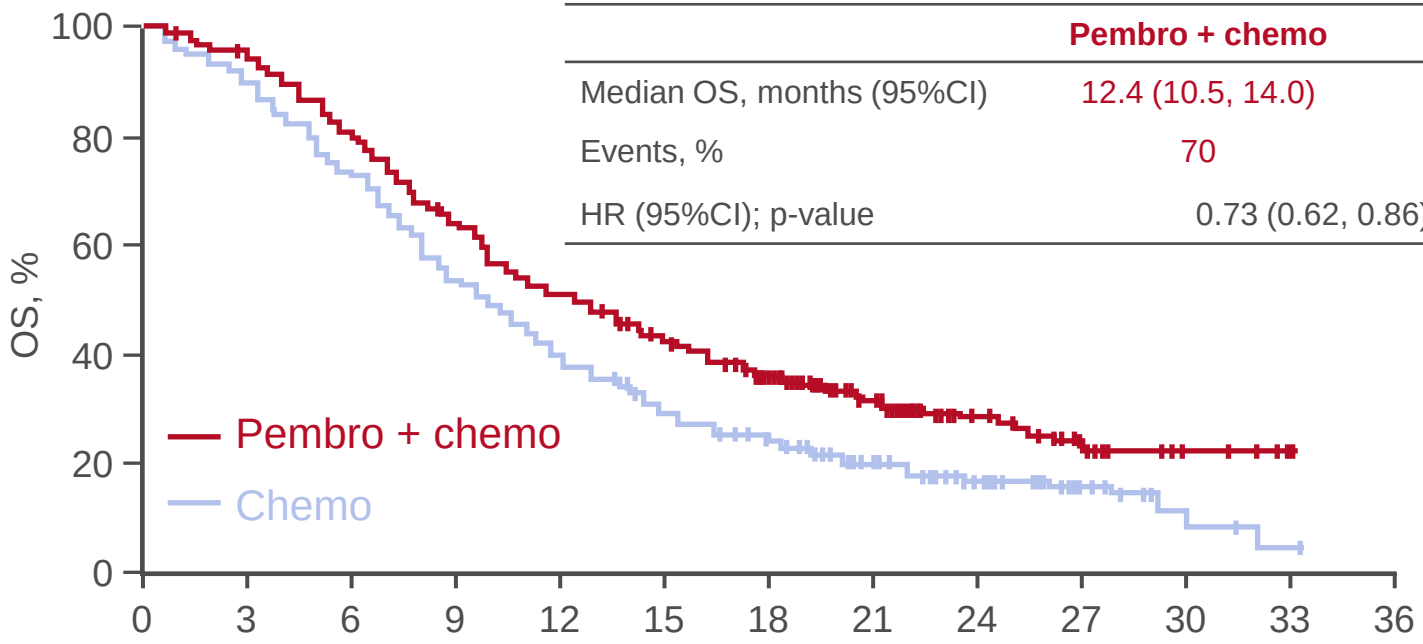
*5FU 800 mg/m^2 iv D1–5 q3w (≤35 cycles) + cisplatin 80 mg/m^2 (≤6 cycles). Data cut-off 02 July 2020.

Kato K, et al. Ann Oncol 2020;31(suppl):abstr LBA8

LBA8: Pembrolizumab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced esophageal cancer: The phase 3 KEYNOTE-590 study – Kato K, et al

Key results

Overall survival (all patients)



	Pembro + chemo	Chemo
Median OS, months (95%CI)	12.4 (10.5, 14.0)	9.8 (8.8, 10.8)
Events, %	70	82
HR (95%CI); p-value	0.73 (0.62, 0.86); <0.0001	

No. at risk

Pembro + chemo	373	348	295	235	187	151	118	68	36	17	7	2	0
Chemo	376	338	274	200	147	108	82	51	28	15	4	1	0

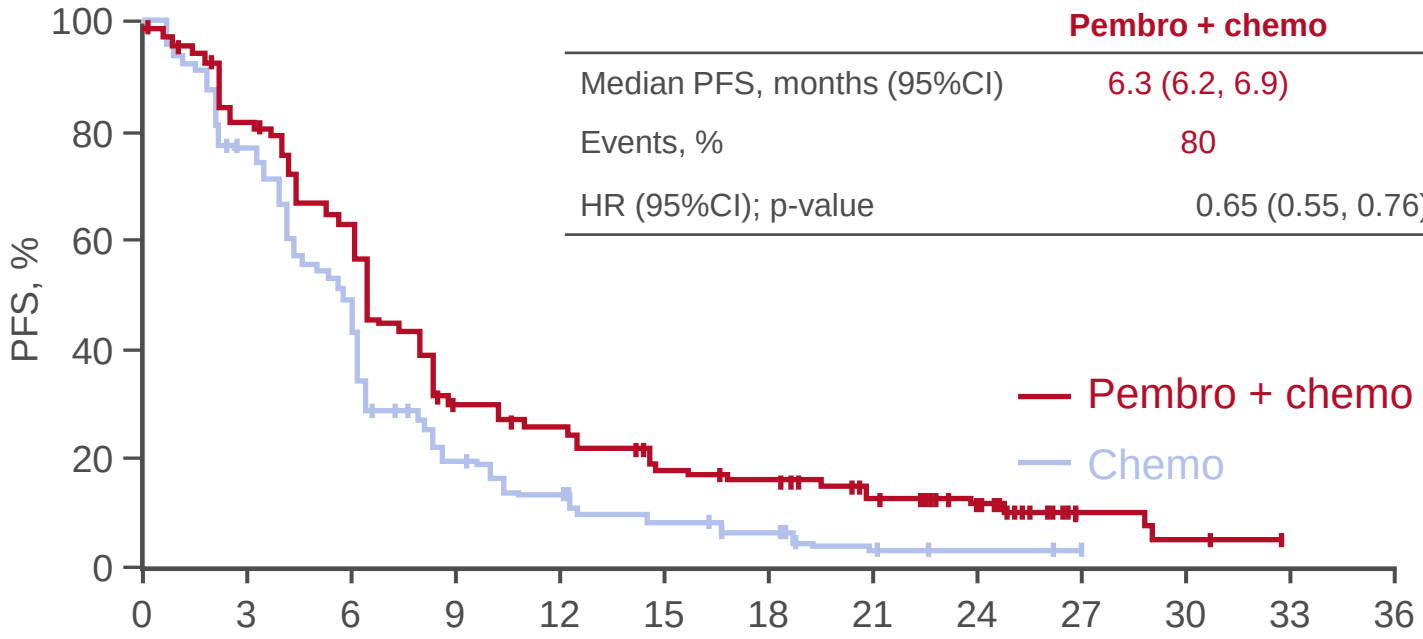
Kato K, et al. Ann Oncol 2020;31(suppl):abstr LBA8

LBA8: Pembrolizumab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced esophageal cancer: The phase 3 KEYNOTE-590 study – Kato K, et al

Key results (cont.)

Progression-free survival (all patients)

	Pembro + chemo	Chemo
Median PFS, months (95%CI)	6.3 (6.2, 6.9)	5.8 (5.0, 6.0)
Events, %	80	89
HR (95%CI); p-value	0.65 (0.55, 0.76); <0.0001	



No. at risk

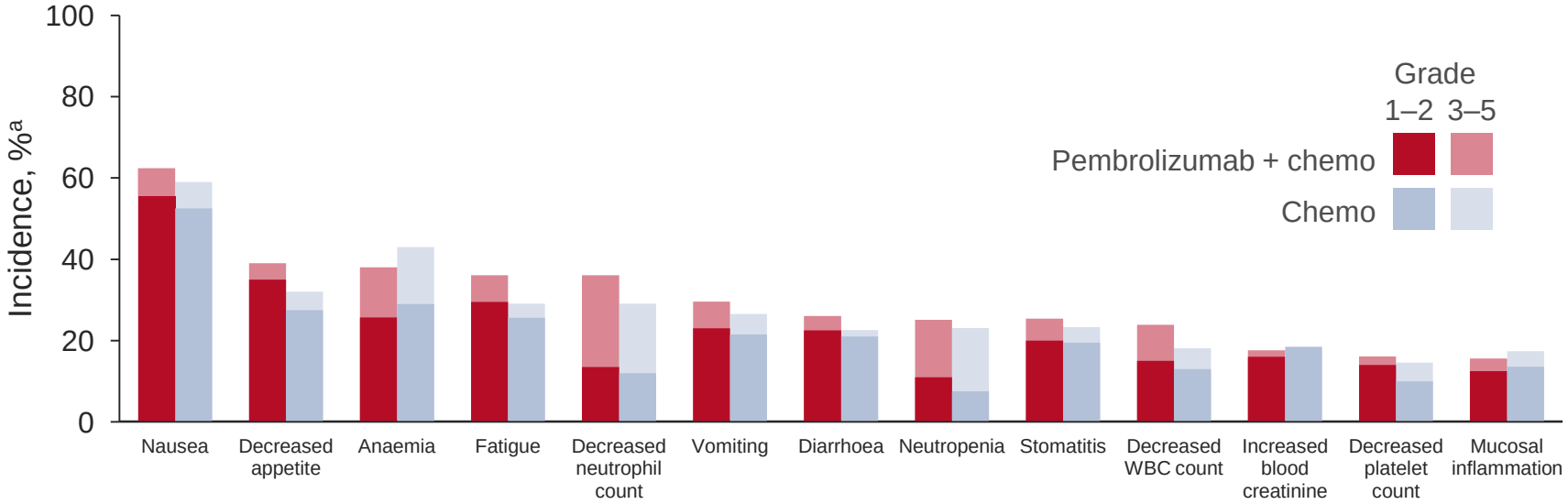
Pembro + chemo	373	289	210	96	79	55	45	25	17	4	2	0	0
Chemo	376	278	172	62	36	22	14	6	2	1	0	0	0

Kato K, et al. Ann Oncol 2020;31(suppl):abstr LBA8

LBA8: Pembrolizumab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced esophageal cancer: The phase 3 KEYNOTE-590 study – Kato K, et al

Key results (cont.)

AEs, %	Pembrolizumab + chemo (n=370)	Chemo (n=370)
Any AE	100	99.5
TRAE	98.4	97.3
Grade ≥3	71.9	67.6
Led to discontinuation	19.5	11.6
Led to death	2.4	1.4
Immune-mediated and infusion reactions	25.7	11.6
Grade ≥3	7.0	2.2



[a] TRAEs occurring in ≥15% of patients in any arm.

Kato K, et al. Ann Oncol 2020;31(suppl):abstr LBA8

LBA8: Pembrolizumab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced esophageal cancer: The phase 3 KEYNOTE-590 study – Kato K, et al

Conclusion

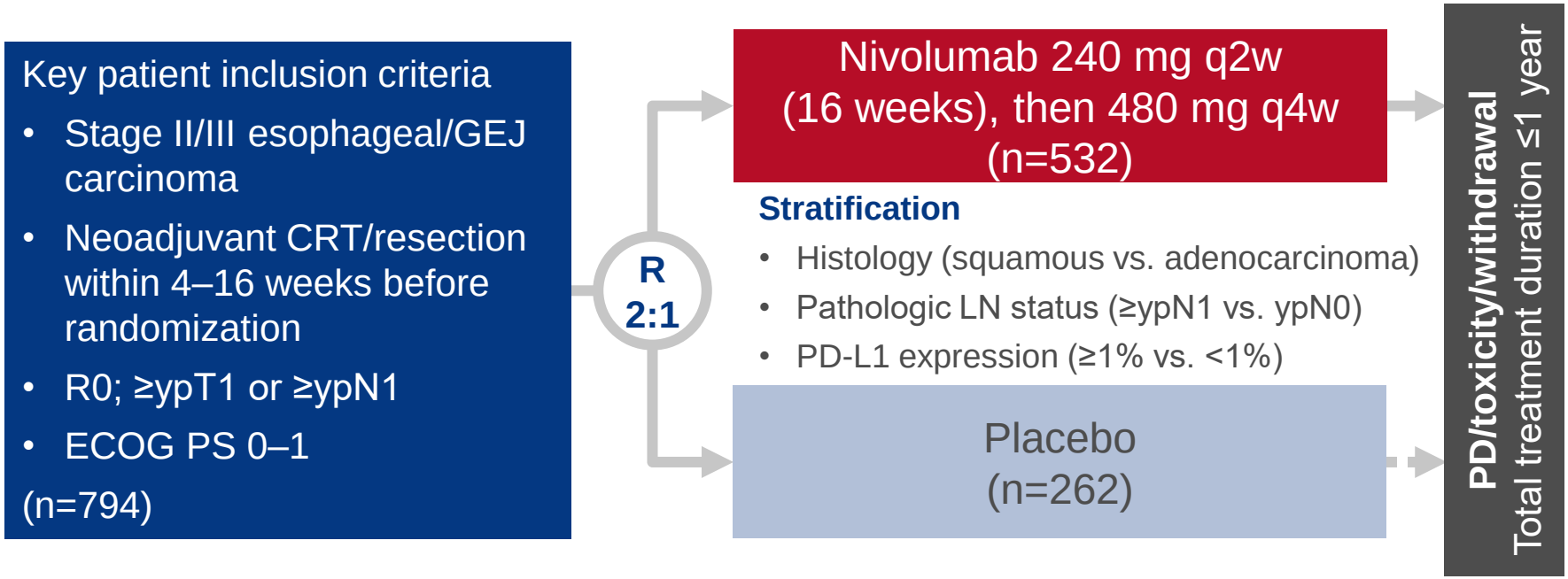
- **In patients with advanced esophageal cancer, 1L pembrolizumab + chemotherapy demonstrated significant improvements in OS, PFS and ORR compared with chemotherapy alone and no new safety signals were observed**

Kato K, et al. Ann Oncol 2020;31(suppl):abstr LBA8

LBA9: Adjuvant nivolumab in resected esophageal or gastroesophageal junction cancer (EC/GEJC) following neoadjuvant chemoradiation therapy (CRT): First results of the CheckMate 577 study – Kelly RJ, et al

Study objective

- To evaluate the safety and efficacy of adjuvant nivolumab in patients with esophageal/GEJ cancer and residual disease after CRT and surgery



PRIMARY ENDPOINT

- DFS

SECONDARY ENDPOINTS

- OS, safety

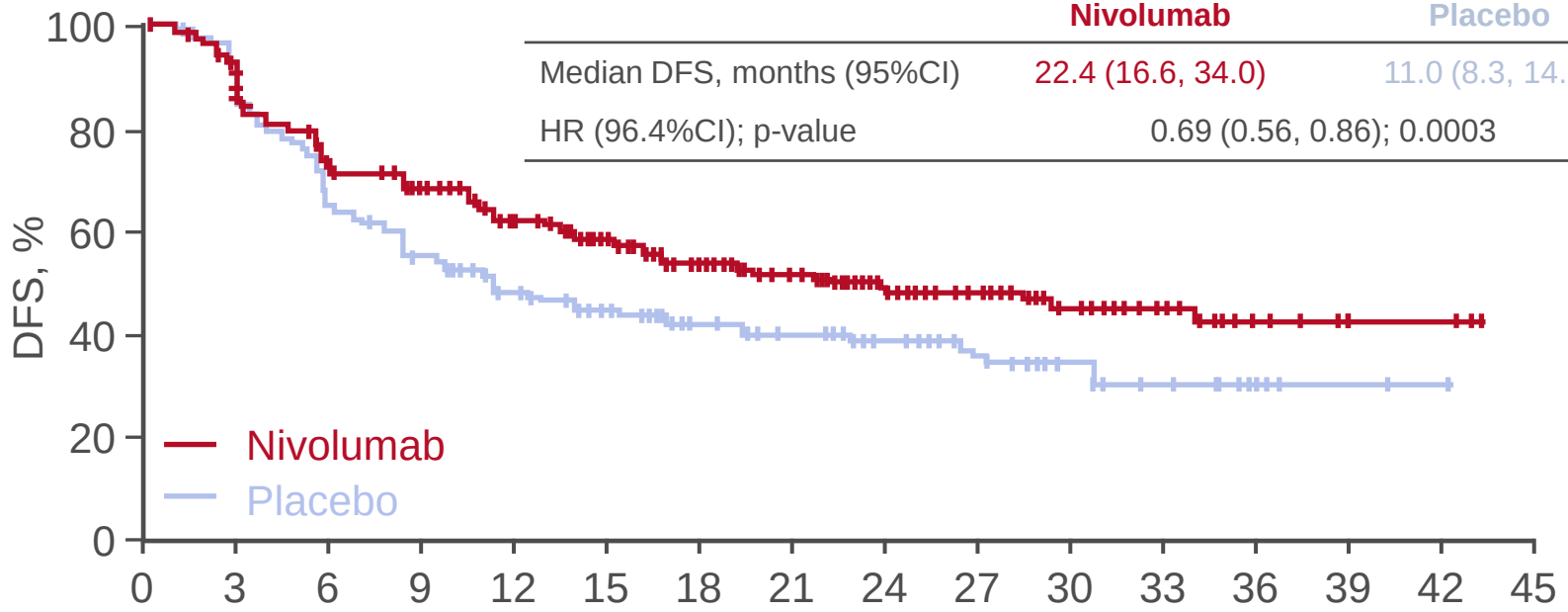
Kelly RJ, et al. Ann Oncol 2020;31(suppl):abstr LBA9

LBA9: Adjuvant nivolumab in resected esophageal or gastroesophageal junction cancer (EC/GEJC) following neoadjuvant chemoradiation therapy (CRT): First results of the CheckMate 577 study – Kelly RJ, et al

Key results

Disease-free survival

	Nivolumab	Placebo
Median DFS, months (95%CI)	22.4 (16.6, 34.0)	11.0 (8.3, 14.3)
HR (96.4%CI); p-value	0.69 (0.56, 86); 0.0003	



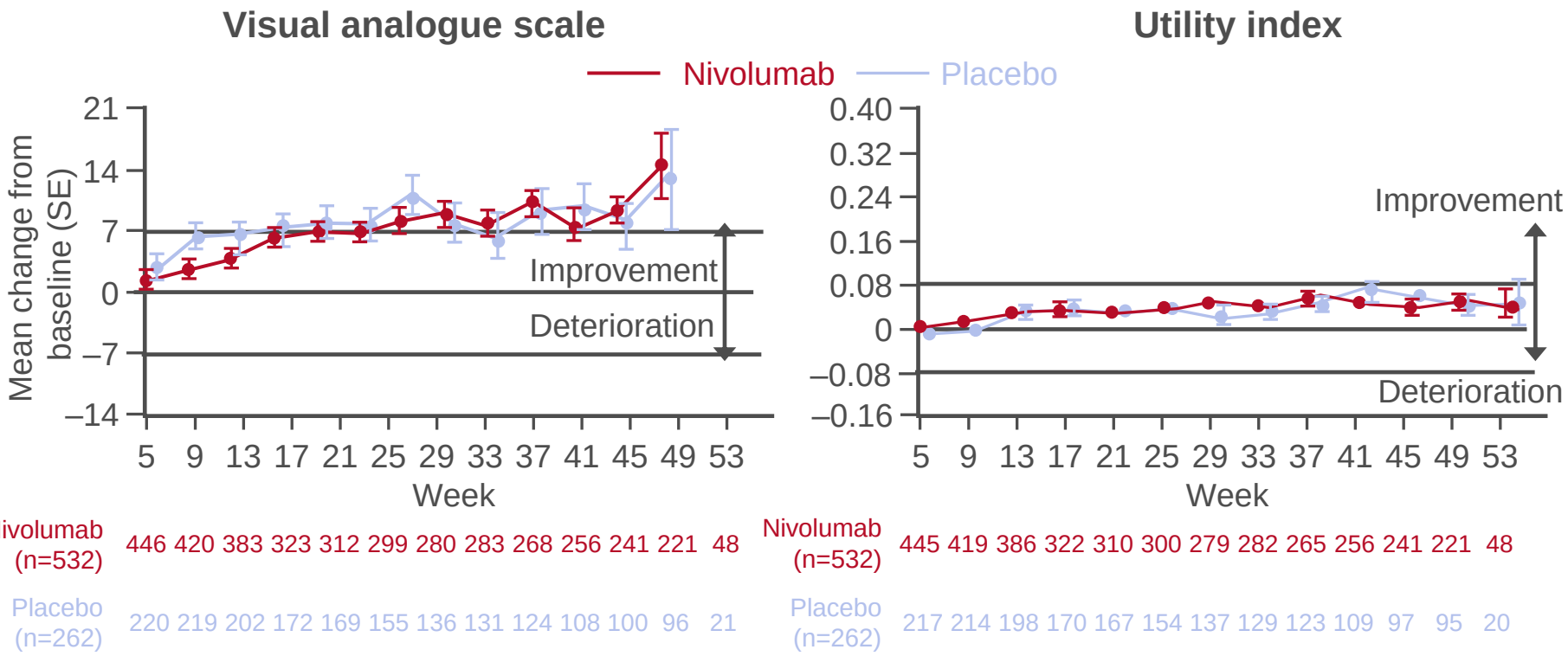
No. at risk																
Nivolumab	532	430	364	306	249	212	181	147	92	68	41	22	8	4	3	0
Placebo	262	214	163	126	96	80	65	53	38	28	17	12	5	2	1	0

Kelly RJ, et al. Ann Oncol 2020;31(suppl):abstr LBA9

LBA9: Adjuvant nivolumab in resected esophageal or gastroesophageal junction cancer (EC/GEJC) following neoadjuvant chemoradiation therapy (CRT): First results of the CheckMate 577 study – Kelly RJ, et al

Key results (cont.)

Overall health status using EQ-5D-3L



Nivolumab (n=532)	446	420	383	323	312	299	280	283	268	256	241	221	48
Placebo (n=262)	220	219	202	172	169	155	136	131	124	108	100	96	21

Nivolumab (n=532)	445	419	386	322	310	300	279	282	265	256	241	221	48
Placebo (n=262)	217	214	198	170	167	154	137	129	123	109	97	95	20

Kelly RJ, et al. Ann Oncol 2020;31(suppl):abstr LBA9

LBA9: Adjuvant nivolumab in resected esophageal or gastroesophageal junction cancer (EC/GEJC) following neoadjuvant chemoradiation therapy (CRT): First results of the CheckMate 577 study – Kelly RJ, et al

Key results (cont.)

AEs, n (%)	Nivolumab (n=532)		Placebo (n=260)	
	Any grade	Grade 3–4	Any grade	Grade 3–4
Any AE	510 (96)	183 (34)	243 (93)	84 (32)
Any TRAE	376 (71)	71 (13)	119 (46)	15 (6)
Serious TRAE	40 (8)	29 (5)	7 (3)	3 (1)
TRAE leading to discontinuation	48 (9)	26 (5)	8 (3)	7 (3)
Selected TRAE				
Endocrine	93 (17)	5 (<1)	6 (2)	0
Gastrointestinal	91 (17)	4 (<1)	40 (15)	3 (1)
Hepatic	49 (9)	6 (1)	18 (7)	4 (2)
Pulmonary	23 (4)	6 (1)	4 (2)	1 (<1)
Renal	7 (1)	1 (<1)	2 (<1)	0
Skin	130 (24)	7 (1)	28 (11)	1 (<1)

Kelly RJ, et al. Ann Oncol 2020;31(suppl):abstr LBA9

LBA9: Adjuvant nivolumab in resected esophageal or gastroesophageal junction cancer (EC/GEJC) following neoadjuvant chemoradiation therapy (CRT): First results of the CheckMate 577 study – Kelly RJ, et al

Key results (cont.)

AEs, n (%)	Nivolumab (n=532)		Placebo (n=260)	
	Any grade	Grade 3–4	Any grade	Grade 3–4
TRAEs occurring in ≥10% of patients in either arm				
Fatigue	90 (17)	6 (1)	29 (11)	1 (<1)
Diarrhoea	88 (17)	2 (<1)	39 (15)	2 (<1)
Pruritus	53 (10)	2 (<1)	9 (3)	0
Rash	52 (10)	4 (<1)	10 (4)	1 (<1)

Conclusion

- **In patients with esophageal/GEJ carcinoma and pathological residual disease after neoadjuvant CRT and surgery, adjuvant nivolumab demonstrated significant and clinically meaningful improvement in DFS compared with placebo and was generally well-tolerated**

Kelly RJ, et al. Ann Oncol 2020;31(suppl):abstr LBA9

1421MO: Final results and subgroup analysis of the PETRARCA randomized phase II AIO trial: Perioperative trastuzumab and pertuzumab in combination with FLOT versus FLOT alone for HER2 positive resectable esophagogastric adenocarcinoma – Al-Batran S-E, et al

Study objective

- To evaluate the efficacy and safety of trastuzumab + pertuzumab + FLOT in patients with resectable HER2-positive esophagogastric adenocarcinoma

Key patient inclusion criteria

- Resectable esophagogastric adenocarcinoma (cT2–4, cN any, cM0 or T any, cN+, cM0)
- HER2-positive
- ECOG PS ≤2

(n=81)

R 1:1

Trastuzumab* + pertuzumab† + FLOT‡ x4 then resection then trastuzumab* + pertuzumab† + FLOT‡ x4 followed by trastuzumab* + pertuzumab† (9 cycles q3w) (n=40)

FLOT‡ x4 then resection then FLOT‡ x4 (n=41)

Stratification

- ECOG PS (0–1 vs. 2), location of primary tumor (GEJ vs. stomach), age (<60 vs. 60–69 vs. ≥70 years)

PRIMARY ENDPOINT

- pCR

SECONDARY ENDPOINTS

- DFS, OS, R0 rate, safety

*Trastuzumab 8 (loading)/6 mg/kg D1, 22, 43; †pertuzumab 840 mg D1, 22, 43; ‡docetaxel 50 mg/m^2 + oxaliplatin 85 mg/m^2 + leucovorin 200 mg/m^2 + 5FU 2600 mg/m^2 D1, 15, 29, 43

Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1421MO

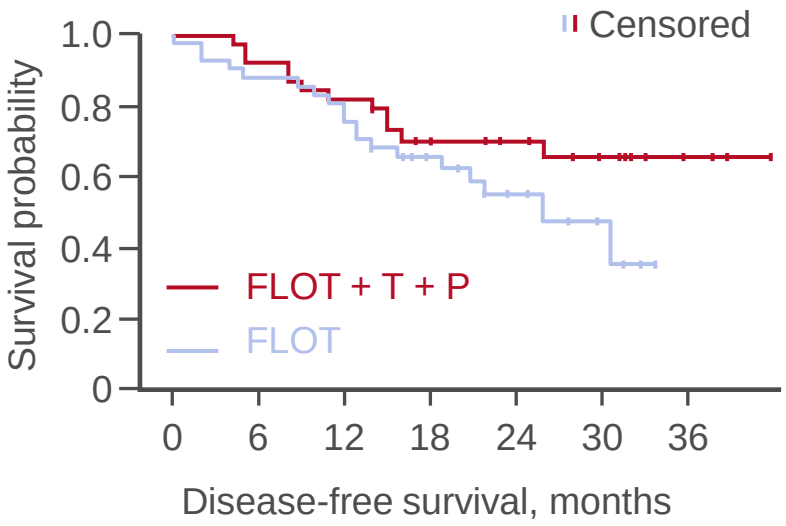
1421MO: Final results and subgroup analysis of the PETRARCA randomized phase II AIO trial: Perioperative trastuzumab and pertuzumab in combination with FLOT versus FLOT alone for HER2 positive resectable esophagogastric adenocarcinoma – Al-Batran S-E, et al

Key results

Outcome, n (%)	Trastuzumab + pertuzumab + FLOT (n=40)	FLOT (n=41)
≤T1	17 (43)	11 (27)
T2	8 (20)	9 (22)
T3	14 (29)	17 (41)
T4	0 (0)	3 (7)
N0	27 (68)	16 (39)
R0 rate (ITT)	37 (93)	37 (90)
pCR	14 (35)	5 (12)
p-value	0.02	

	FLOT + T + P	FLOT
DFS, months (95%CI)	NR	26 (13, NR)
HR (95%CI); p-value	0.576 (0.278, 1.139); p=0.14	

Median follow-up: 22 months



Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1421MO

1421MO: Final results and subgroup analysis of the PETRARCA randomized phase II AIO trial: Perioperative trastuzumab and pertuzumab in combination with FLOT versus FLOT alone for HER2 positive resectable esophagogastric adenocarcinoma – Al-Batran S-E, et al

Key results (cont.)

Grade ≥3 AEs, n (%)	Trastuzumab + pertuzumab + FLOT (n=39)	FLOT (n=40)
Any	33 (85)	30 (75)
Leukopenia	9 (23)	5 (13)
Diarrhea	16 (41)	2 (5)
Fatigue	9 (23)	6 (15)

Conclusions

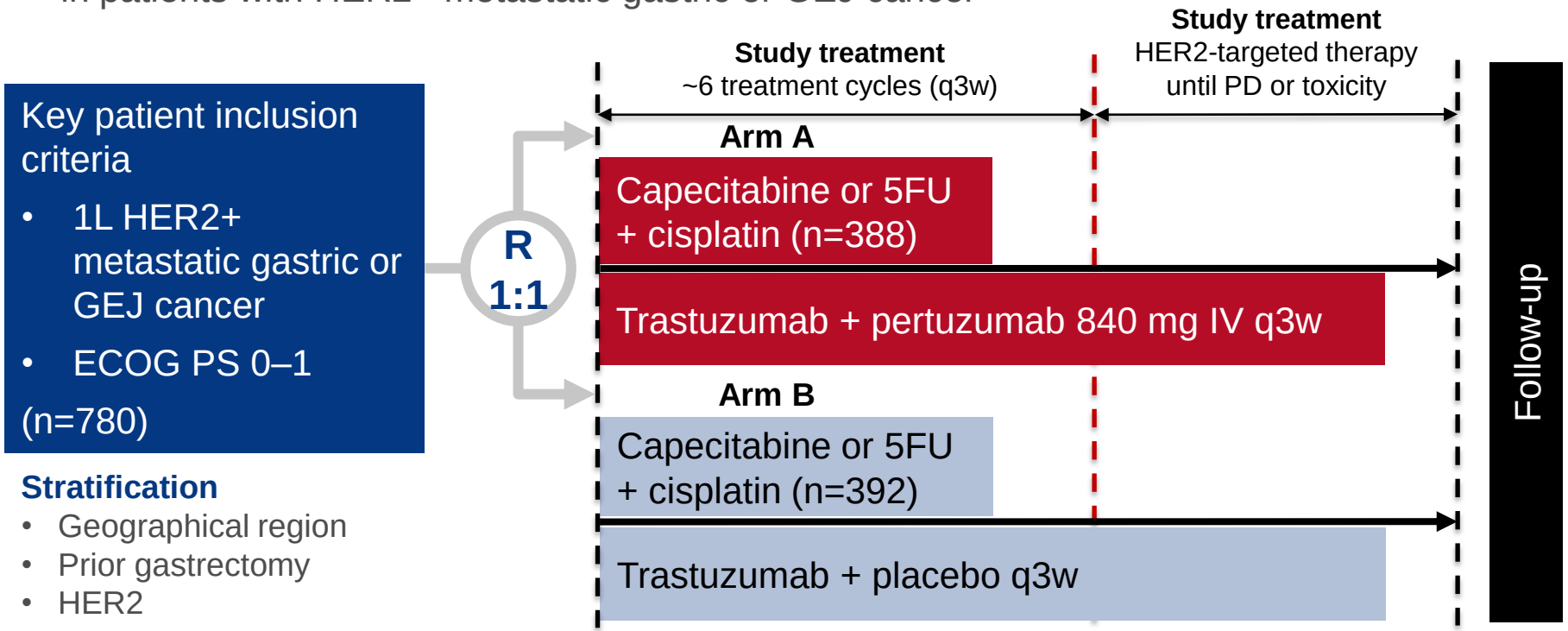
- **In patients with resectable esophagogastric adenocarcinoma, adding trastuzumab + pertuzumab to FLOT provided significant improvement in the pCR, but not R0 resection**
- **There was a higher incidence of AEs in the combination arm**

Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1421MO

1423MO: End-of-study analysis from JACOB: a phase III study of pertuzumab (P) + trastuzumab (H) and chemotherapy (CT) in HER2-positive metastatic gastric or gastro-esophageal junction cancer (mGC/GEJC) – Tabernero J, et al

Study objective

- To evaluate the efficacy and safety of adding pertuzumab to trastuzumab + chemotherapy in patients with HER2+ metastatic gastric or GEJ cancer



PRIMARY ENDPOINT

- OS

SECONDARY ENDPOINTS

- PFS, ORR, DoR, CBR, PK, QoL, safety

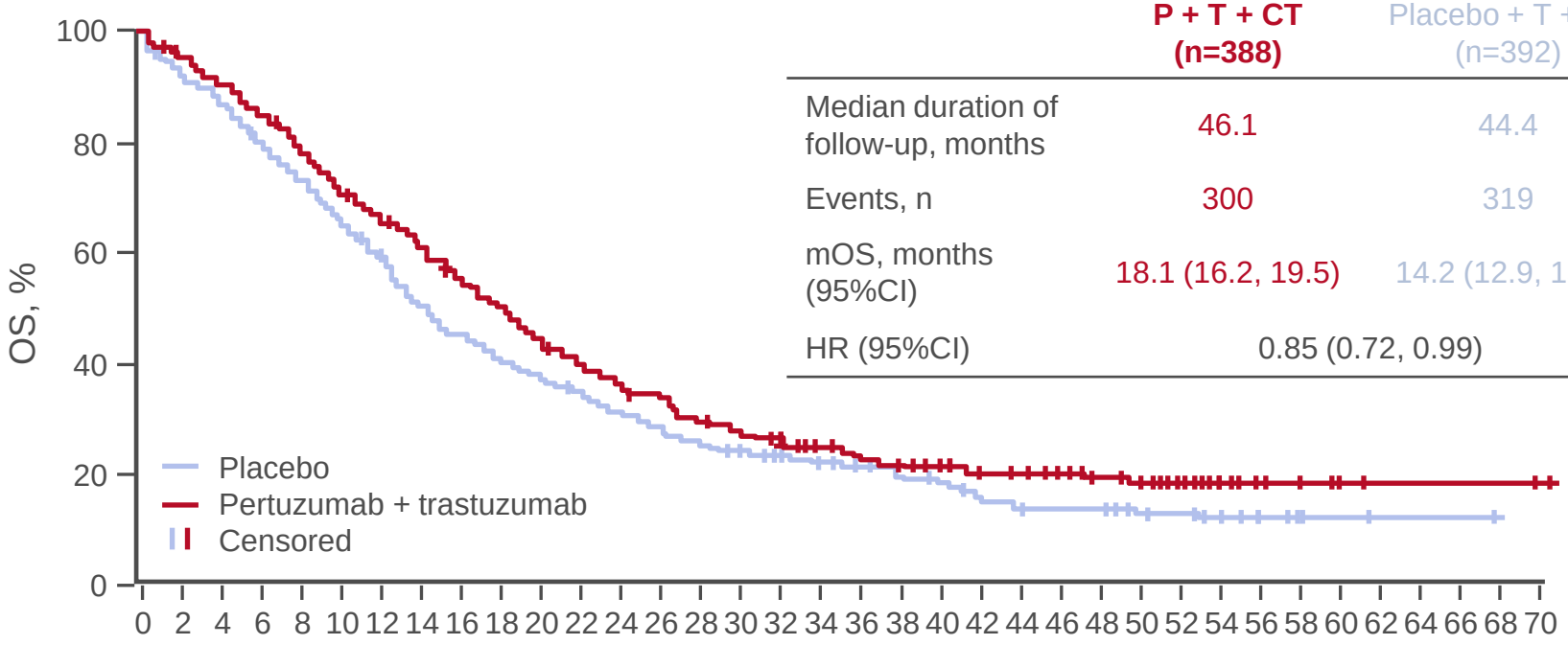
Tabernero J, et al. Ann Oncol 2020;31(suppl):abstr 1423MO

1423MO: End-of-study analysis from JACOB: a phase III study of pertuzumab (P) + trastuzumab (H) and chemotherapy (CT) in HER2-positive metastatic gastric or gastro-esophageal junction cancer (mGC/GEJC) – Tabernero J, et al

Key results

Overall survival

	P + T + CT (n=388)	Placebo + T + CT (n=392)
Median duration of follow-up, months	46.1	44.4
Events, n	300	319
mOS, months (95%CI)	18.1 (16.2, 19.5)	14.2 (12.9, 15.7)
HR (95%CI)	0.85 (0.72, 0.99)	



No. at risk

Placebo + T + CT	392	339	279	222	166	137	109	89	75	59	41	27	23	15	8	2	1					
	358	306	252	188	149	124	98	82	65	50	31	23	17	12	5	1	1					
P + T + CT	388	342	297	244	203	160	127	102	84	66	49	42	28	21	8	4	2	2				
	363	323	266	225	183	142	118	93	72	57	45	36	26	12	7	2	2	1				

Tabernero J, et al. Ann Oncol 2020;31(suppl):abstr 1423MO

1423MO: End-of-study analysis from JACOB: a phase III study of pertuzumab (P) + trastuzumab (H) and chemotherapy (CT) in HER2-positive metastatic gastric or gastro-esophageal junction cancer (mGC/GEJC) – Tabernero J, et al

Key results (cont.)

Secondary endpoints	P + T + CT (n=388)	Placebo + T + CT (n=392)
Events, n	342	353
Median PFS, months (95%CI)	8.5 (8.3, 9.7)	7.2 (6.4, 8.2)
Stratified HR (95%CI)	0.73 (0.62, 0.85)	
Baseline measurable disease	n=351	n=352
ORR, % (CR + PR)	57.0	48.6
Median DoR, months (95%CI)	n=203 10.2 (8.5, 12.0)	n=175 8.4 (6.8, 9.1)

Tabernero J, et al. Ann Oncol 2020;31(suppl):abstr 1423MO

1423MO: End-of-study analysis from JACOB: a phase III study of pertuzumab (P) + trastuzumab (H) and chemotherapy (CT) in HER2-positive metastatic gastric or gastro-esophageal junction cancer (mGC/GEJC) – Tabernero J, et al

Key results (cont.)

AEs, n (%)	P + T + CT (n=385)	Placebo + T + CT (n=388)
Any	381 (99.0)	385 (99.2)
All-grade diarrhoea	241 (62.6)	139 (35.8)
AEs leading to death	27 (7.0)	31 (8.0)
SAEs	178 (46.2)	156 (40.2)
Grade ≥3 AEs	310 (80.5)	288 (74.2)
Dose modifications		
AEs leading to P/placebo discontinuation	48 (12.5)	46 (11.9)
AEs leading to P/placebo dose interruption/delay	110 (28.6)	94 (24.2)
Cardiac safety		
Symptomatic LVSD/heart failure	3 (0.8)	1 (0.3)
Asymptomatic LVSD/heart failure	20 (5.2)	18 (4.6)

Tabernero J, et al. Ann Oncol 2020;31(suppl):abstr 1423MO

1423MO: End-of-study analysis from JACOB: a phase III study of pertuzumab (P) + trastuzumab (H) and chemotherapy (CT) in HER2-positive metastatic gastric or gastro-esophageal junction cancer (mGC/GEJC) – Tabernero J, et al

Conclusions

- In previously untreated patients with metastatic gastric or GEJ cancer, adding pertuzumab to trastuzumab and chemotherapy failed to significantly improve OS although risk of death was reduced
- The safety profile of P + H + CT was manageable, although there was a higher incidence of all-grade diarrhoea when adding pertuzumab

Tabernero J, et al. Ann Oncol 2020;31(suppl):abstr 1423MO

1424MO: Perioperative FLOT plus ramucirumab versus FLOT alone for resectable esophagogastric adenocarcinoma– Updated results and subgroup analyses of the randomized phase II/III trial RAMSES/FLOT7 of the German AIO and Italian GOIM – Al-Batran S-E, et al

Study objective

- To evaluate the efficacy and safety of perioperative ramucirumab + FLOT in patients with resectable esophagogastric adenocarcinoma

Key patient inclusion criteria

- Resectable gastric or GEJ adenocarcinoma (≥cT2 or cN+)
- No distant metastases
- HER2 negative
- ECOG PS ≤1

(n=180)

R 1:1

Ramucirumab 8 mg/kg q2w + FLOT* (4 cycles) then surgery then ramucirumab 8 mg/kg q2w + FLOT* (4 cycles) followed by ramucirumab (16 cycles) (n=89)

FLOT* (4 cycles) then surgery followed by FLOT* (4 cycles) (n=91)

Stratification

- Tumour site (GEJ vs. gastric)
- Stage (T1/2 vs. T3/4 and/or N+)
- Histology (intestinal vs. diffuse/mixed or unknown)

PRIMARY ENDPOINT

- Response (near or pCR)

SECONDARY ENDPOINTS

- R0 rate, PFS, OS, safety

*Four pre- and postoperative cycles of docetaxel 50 mg/m^2 + oxaliplatin 85 mg/m^2 + leucovorin 200 mg/m^2 + 5FU 2600 mg/m^2 q2w

Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1424MO

1424MO: Perioperative FLOT plus ramucirumab versus FLOT alone for resectable esophagogastric adenocarcinoma– Updated results and subgroup analyses of the randomized phase II/III trial RAMSES/FLOT7 of the German AIO and Italian GOIM – Al-Batran S-E, et al

Key results

Outcome, n (%)	Ramucirumab + FLOT (n=86)	FLOT (n=87)
≤T1	17 (20)	22 (25)
T2	12 (14)	10 (12)
T3	49 (57)	33 (38)
T4	6 (7)	12 (14)
N0	43 (50)	34 (39)
R0 rate, %	97	83
p-value	0.0049	
R0 rate in subgroups, %		
cT4 (8 of 8 vs. 1 of 4)	100	25
Diffuse type	95	77

Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1424MO

1424MO: Perioperative FLOT plus ramucirumab versus FLOT alone for resectable esophagogastric adenocarcinoma– Updated results and subgroup analyses of the randomized phase II/III trial RAMSES/FLOT7 of the German AIO and Italian GOIM – Al-Batran S-E, et al

Conclusion

- **In patients with resectable esophagogastric adenocarcinoma, adding ramucirumab to FLOT significantly improved the R0 rate**

Al-Batran S-E, et al. Ann Oncol 2020;31(suppl):abstr 1424MO

CANCERS OF THE PANCREAS, SMALL BOWEL AND HEPATOBILIARY TRACT

Cancers of the pancreas, small bowel and hepatobiliary tract

PANCREATIC CANCER

LBA65: The Canadian Cancer Trials Group PA.7 trial: Results of a randomized phase II study of gemcitabine (GEM) and nab-paclitaxel (Nab-P) vs. GEM, Nab-P, durvalumab (D) and tremelimumab (T) as first line therapy in metastatic pancreatic ductal adenocarcinoma (mPDAC) – Renouf DJ, et al

Study objective

- To evaluate the safety and efficacy of immune checkpoint blockade as 1L treatment for patients with metastatic PDAC

Key patient inclusion criteria

- Metastatic PDAC
- No prior therapy with PD-(L)1 or CTLA-4 blockade
- No symptomatic or uncontrolled brain metastases
- ECOG PS 0–1

(n=180)

R 2:1

Durvalumab 1500 mg iv q4w (cycles 1–4) + tremelimumab 75 mg iv q4w (cycles 1–4) + gemcitabine 1000 mg/m^2 D1, 8, 15 + nab-paclitaxel 125 mg/m^2 D1, 8, 15 (n=119)

Stratification

- ECOG PS
- Prior adjuvant therapy

Gemcitabine 1000 mg/m^2 D1, 8, 15 + nab-paclitaxel 125 mg/m^2 D1, 8, 15 (n=61)

PRIMARY ENDPOINT

- OS

SECONDARY ENDPOINTS

- PFS, ORR, safety

Data cut-off 15 March 2020.

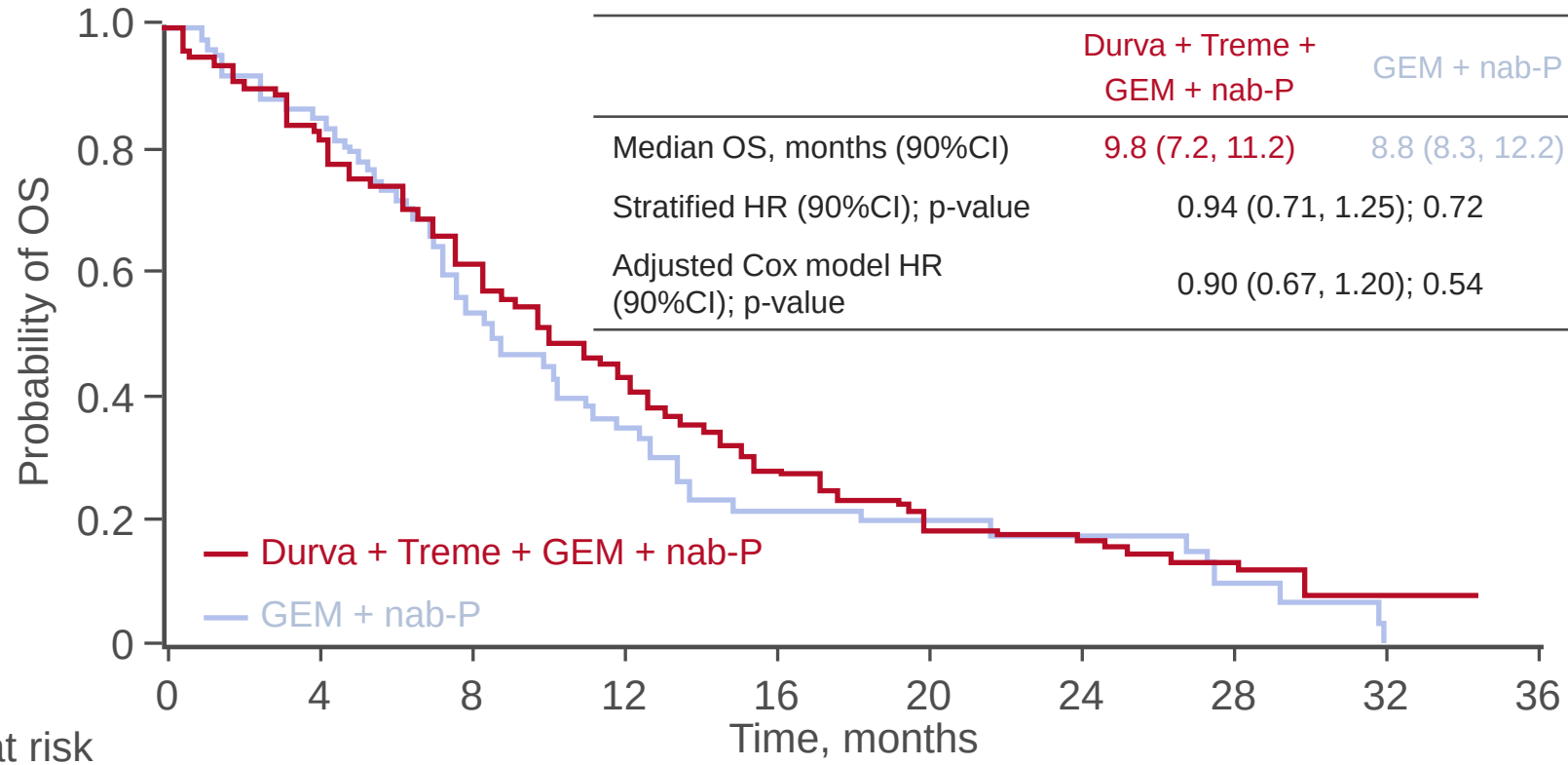
Renouf DJ, et al. Ann Oncol 2020;31(suppl):abstr LBA65

LBA65: The Canadian Cancer Trials Group PA.7 trial: Results of a randomized phase II study of gemcitabine (GEM) and nab-paclitaxel (Nab-P) vs. GEM, Nab-P, durvalumab (D) and tremelimumab (T) as first line therapy in metastatic pancreatic ductal adenocarcinoma (mPDAC) – Renouf DJ, et al

Key results

Overall survival

	Durva + Treme + GEM + nab-P	GEM + nab-P
Median OS, months (90%CI)	9.8 (7.2, 11.2)	8.8 (8.3, 12.2)
Stratified HR (90%CI); p-value	0.94 (0.71, 1.25); 0.72	
Adjusted Cox model HR (90%CI); p-value	0.90 (0.67, 1.20); 0.54	



No. at risk									
D + T + G + N	119	97	71	48	31	20	15	7	1	0
G + N	61	51	32	21	13	11	7	4	0	0

Renouf DJ, et al. Ann Oncol 2020;31(suppl):abstr LBA65

LBA65: The Canadian Cancer Trials Group PA.7 trial: Results of a randomized phase II study of gemcitabine (GEM) and nab-paclitaxel (Nab-P) vs. GEM, Nab-P, durvalumab (D) and tremelimumab (T) as first line therapy in metastatic pancreatic ductal adenocarcinoma (mPDAC) – Renouf DJ, et al

Key results (cont.)

AEs occurring in ≥10% of patients in either arm, n (%)	Durva + Treme + GEM + nab-P (n=119)	GEM + nab-P (n=58)
Any grade ≥3 AE	100 (84)	44 (76)
Fatigue	24 (20)	12 (21)
Thromboembolic event	16 (15)	7 (12)
Sepsis	13 (11)	7 (12)
Peripheral sensory neuropathy	13 (11)	4 (7)
Diarrhoea	6 (5)	6 (10)
Abdominal pain	6 (5)	6 (10)

Conclusion

- **In patients with metastatic PDAC, adding durvalumab and tremelimumab to gemcitabine and nab-paclitaxel did not provide any significant improvement in OS, PFS or ORR, although there was a non-significant trend to improved DCR**

Renouf DJ, et al. Ann Oncol 2020;31(suppl):abstr LBA65

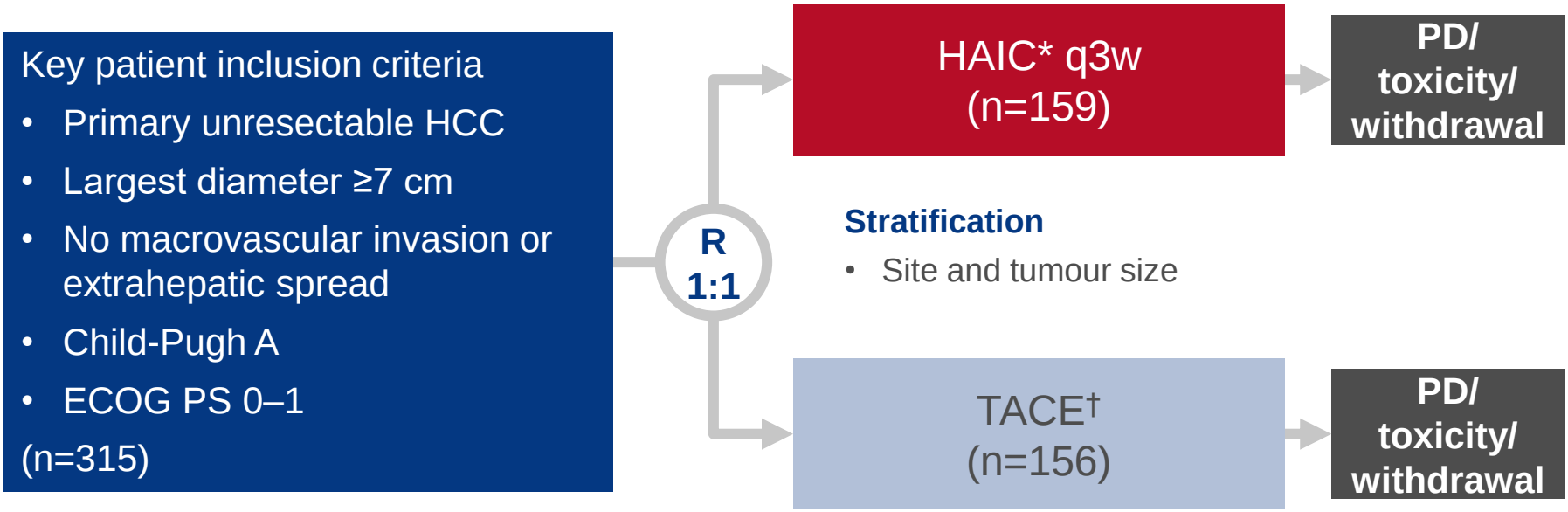
Cancers of the pancreas, small bowel and hepatobiliary tract

HEPATOCELLULAR CARCINOMA

981O: Hepatic arterial infusion chemotherapy (HAIC) with oxaliplatin, fluorouracil, and leucovorin (FOLFOX) versus transarterial chemoembolization (TACE) for unresectable hepatocellular carcinoma (HCC): a randomised phase 3 trial – Shi M, et al

Study objective

- To evaluate the safety and efficacy of HAIC compared with TACE in patients with unresectable HCC



PRIMARY ENDPOINT

- OS

SECONDARY ENDPOINTS

- PFS, ORR, safety

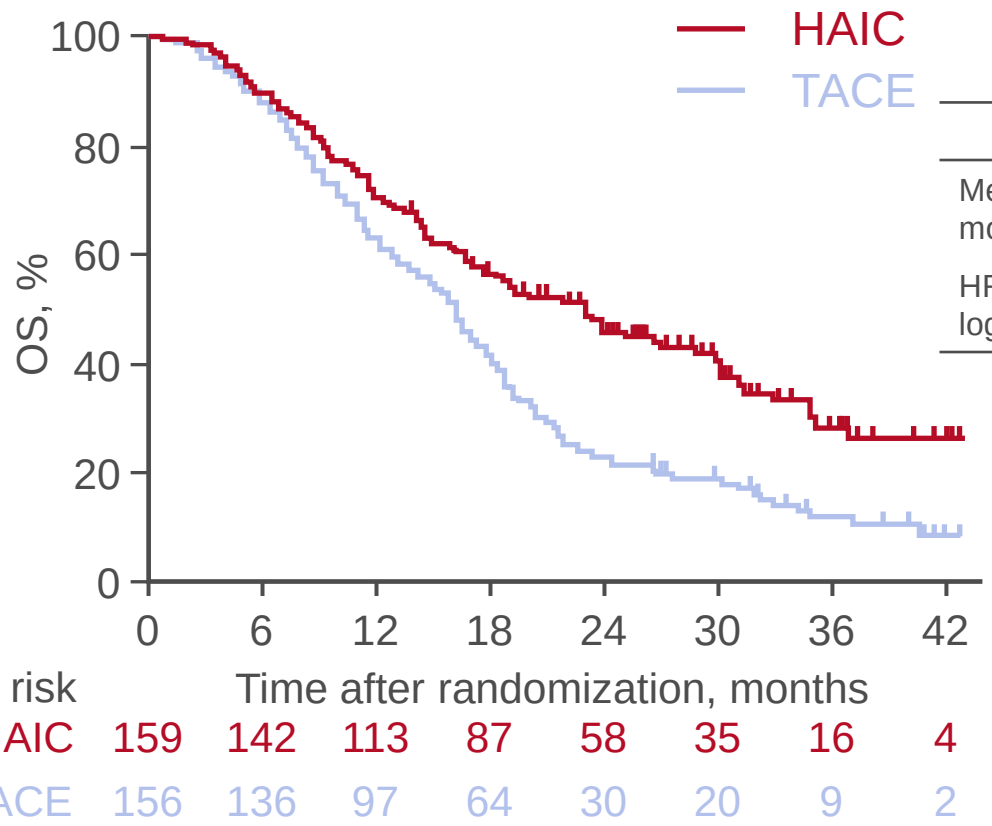
*Oxaliplatin 130 mg/m^2, leucovorin 400 mg/m^2, FU bolus 400 mg/m^2 then FU infusion 2400 mg/m^2 24 hours (up to 6 cycles); †epirubicin 50 mg, lobaplatin 50 mg mixed with lipiodol/polyvinyl alcohol particles.
Data cut-off April 2020; follow-up is ongoing.

Shi M, et al. Ann Oncol 2020;31(suppl):abstr 981O

981O: Hepatic arterial infusion chemotherapy (HAIC) with oxaliplatin, fluorouracil, and leucovorin (FOLFOX) versus transarterial chemoembolization (TACE) for unresectable hepatocellular carcinoma (HCC): a randomised phase 3 trial – Shi M, et al

Key results

Overall survival



	HAIC	TACE
Median OS, months (95%CI)	23.1 (18.23, 27.97)	16.07 (14.26, 17.88)
HR (95%CI); log-rank p-value	0.58 (0.45, 0.75); <0.001	

Shi M, et al. Ann Oncol 2020;31(suppl):abstr 981O

981O: Hepatic arterial infusion chemotherapy (HAIC) with oxaliplatin, fluorouracil, and leucovorin (FOLFOX) versus transarterial chemoembolization (TACE) for unresectable hepatocellular carcinoma (HCC): a randomised phase 3 trial – Shi M, et al

Key results (cont.)

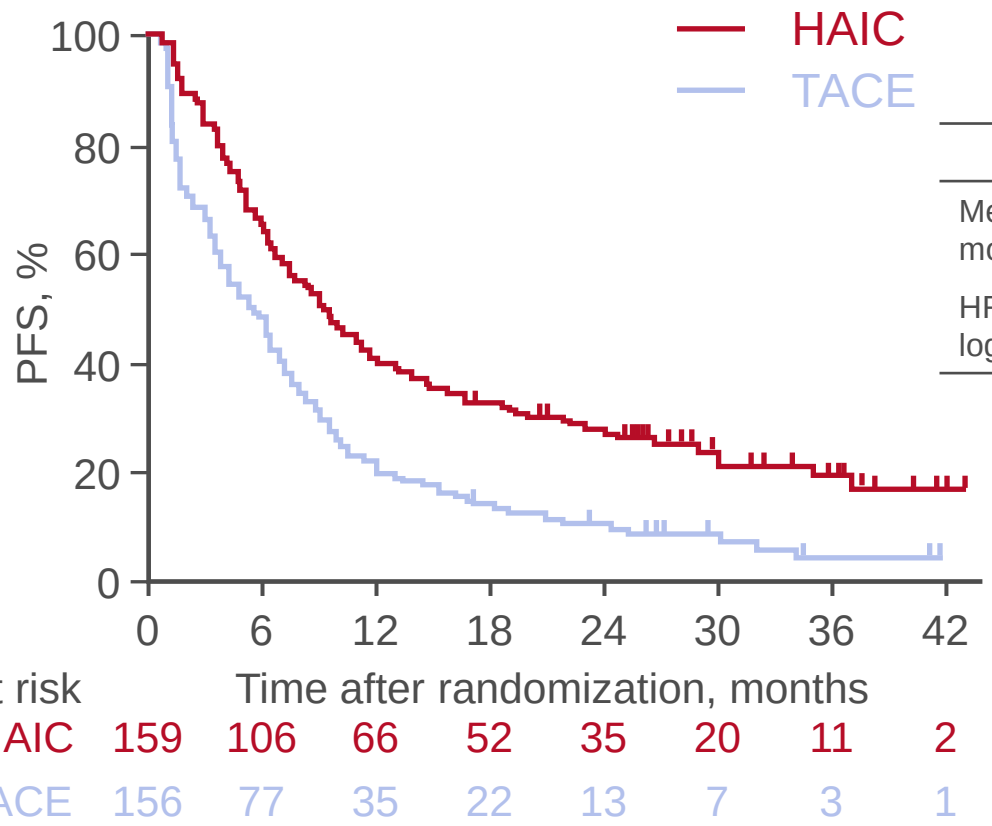
	RECIST		mRECIST	
	HAIC (n=159)	TACE (n=156)	HAIC (n=159)	TACE (n=156)
ORR, % (95%CI)	73 (45.9)	28 (17.9)	77 (48.4)	51 (32.7)
	p<0.001		p=0.004	
BOR, n (%)				
CR	0 (0)	0 (0)	20 (12.6)	5 (3.2)
PR	73 (45.9)	28 (17.9)	57 (35.8)	46 (29.5)
SD	58 (36.5)	67 (42.9)	54 (34.0)	51 (32.7)
PD	20 (12.6)	49 (31.4)	20 (12.6)	44 (28.2)
NA	8 (5.0)	10 (6.4)	8 (5.0)	10 (6.4)
DCR, % (95%CI)	141 (88.7)	95 (60.9)	141 (88.7)	102 (65.4)
	p<0.001		p<0.001	

Shi M, et al. Ann Oncol 2020;31(suppl):abstr 981O

981O: Hepatic arterial infusion chemotherapy (HAIC) with oxaliplatin, fluorouracil, and leucovorin (FOLFOX) versus transarterial chemoembolization (TACE) for unresectable hepatocellular carcinoma (HCC): a randomised phase 3 trial – Shi M, et al

Key results (cont.)

Progression-free survival



	HAIC	TACE
Median PFS, months (95%CI)	9.63 (7.40, 11.86)	5.40 (3.82, 6.98)
HR (95%CI); log-rank p-value	0.55 (0.43, 0.71); <0.001	

Shi M, et al. Ann Oncol 2020;31(suppl):abstr 981O

981O: Hepatic arterial infusion chemotherapy (HAIC) with oxaliplatin, fluorouracil, and leucovorin (FOLFOX) versus transarterial chemoembolization (TACE) for unresectable hepatocellular carcinoma (HCC): a randomised phase 3 trial – Shi M, et al

Key results (cont.)

Serious TRAEs, n (%)	HAIC (n=157)	TACE (n=155)
Any	30 (19)	47 (30)*
Thrombocytopenia	5	1
Neutropenia	3	1
Diarrhoea	2	0
Vomiting	5	6
Renal failure	2	1
Upper GI bleeding	5	7
Ascites	6	10
Cholangitis	1	7
Hyperbilirubinemia	1	8
Infection	1	6
Grade 5	2	2

Conclusion

- **In patients with unresectable HCC, HAIC demonstrated significant improvements in OS, PFS and ORR and was associated with fewer serious TRAEs compared with TACE**

*p=0.03.

Shi M, et al. Ann Oncol 2020;31(suppl):abstr 981O

Cancers of the pancreas, small bowel and hepatobiliary tract

NEUROENDOCRINE TUMOUR

1156O: Surufatinib (S) for patients (Pts) with advanced pancreatic neuroendocrine tumors (SANET-p): a randomized, double-blind, placebo (P)-controlled Phase III trial (NCT02589821) – Xu J, et al

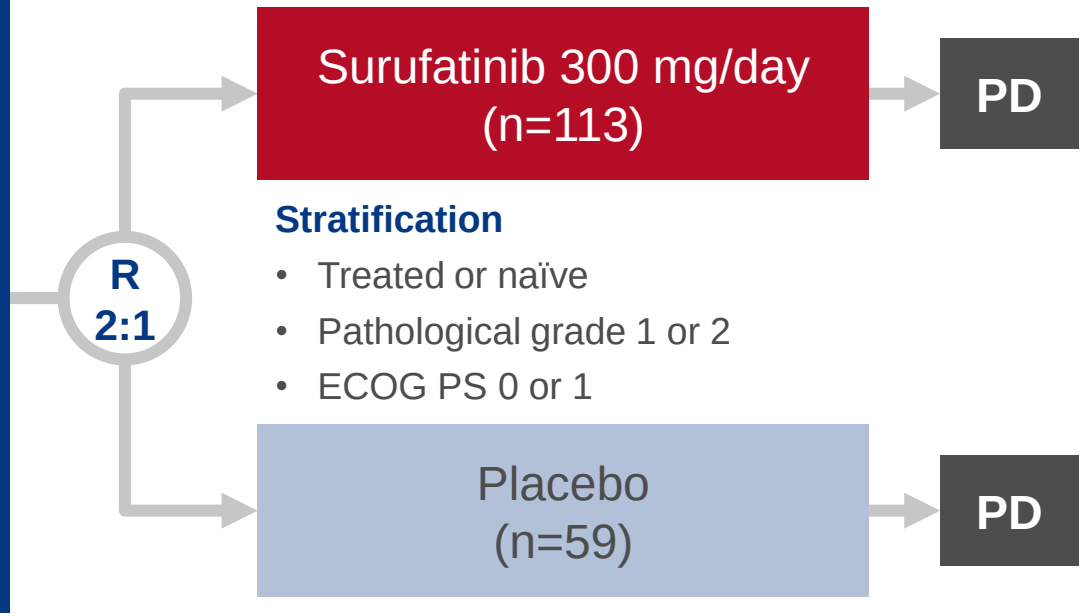
Study objective

- To evaluate the efficacy and safety of surufatinib in patients with well-differentiated progressive pancreatic neuroendocrine tumours

Key patient inclusion criteria

- Well-differentiated locally advanced or metastatic pancreatic NETs
- Pathological grade 1 or 2
- Progression on ≤2 prior systemic therapies
- No prior VEGF(R) inhibitors
- ECOG PS 0–1

(n=172)



PRIMARY ENDPOINT

- PFS (investigator-assessed)

SECONDARY ENDPOINTS

- ORR, DCR, DoR, TTR, OS, safety

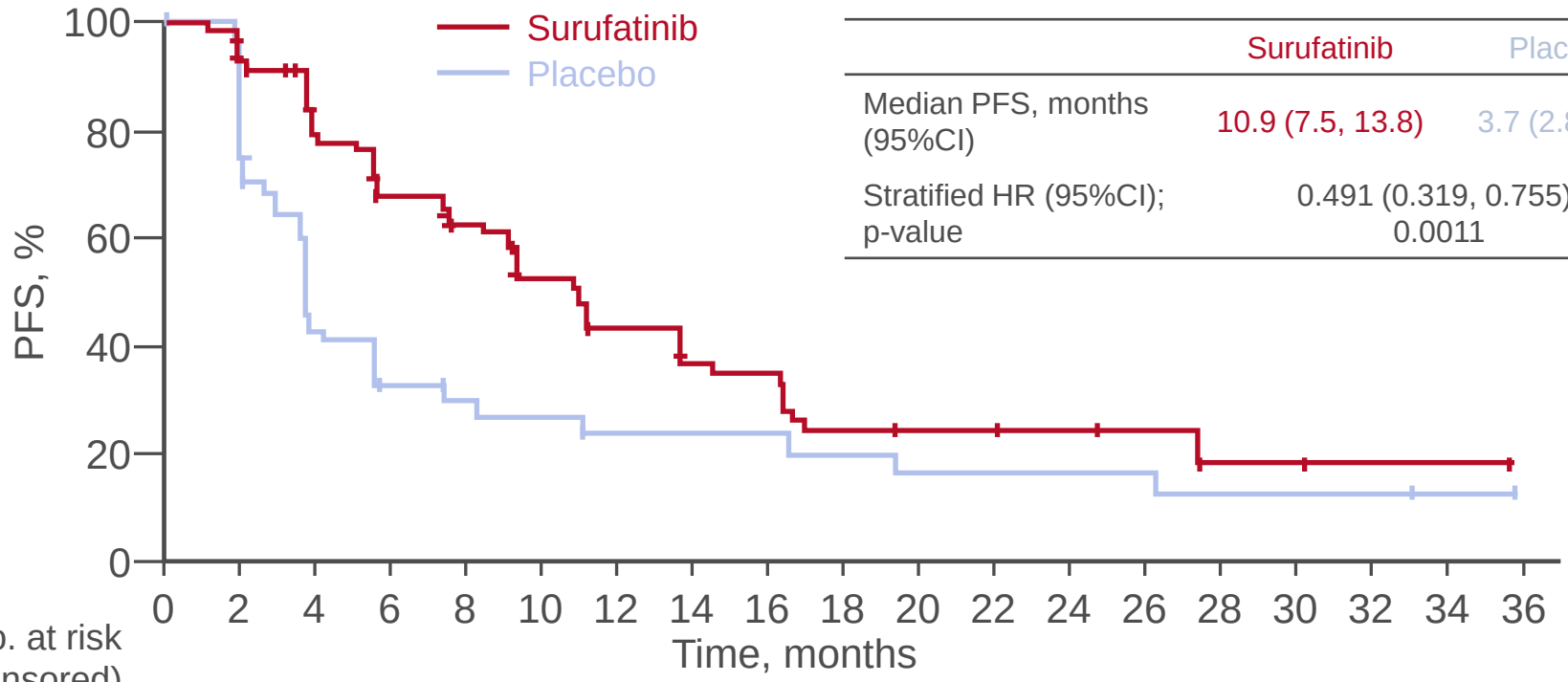
Data cut-off 11 November 2019.

Xu J, et al. Ann Oncol 2020;31(suppl):abstr 1156O

1156O: Surufatinib (S) for patients (Pts) with advanced pancreatic neuroendocrine tumors (SANET-p): a randomized, double-blind, placebo (P)-controlled Phase III trial (NCT02589821) – Xu J, et al

Key results

Progression-free survival (investigator-assessed)



	Surufatinib	Placebo
Median PFS, months (95%CI)	10.9 (7.5, 13.8)	3.7 (2.8, 5.6)
Stratified HR (95%CI); p-value	0.491 (0.319, 0.755); 0.0011	

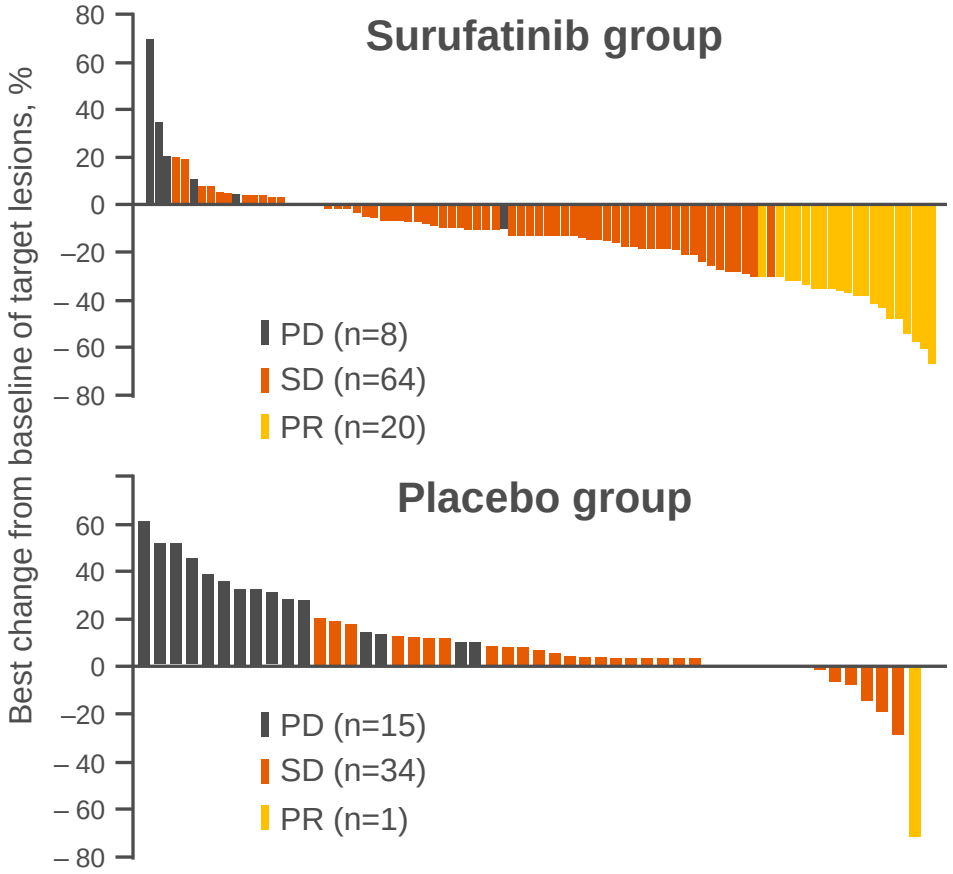
No. at risk (censored)

Surufatinib	113 (0)	79 (27)	61 (33)	50 (36)	43 (39)	33 (42)	25 (44)	20 (45)	19 (45)	13 (45)	8 (50)	8 (50)	5 (53)	4 (54)	2 (55)	2 (55)	1 (56)	1 (56)	1 (57)
Placebo	59 (0)	33 (10)	20 (11)	12 (14)	10 (15)	9 (15)	6 (17)	6 (17)	6 (17)	5 (17)	4 (17)	4 (17)	4 (17)	4 (17)	3 (17)	3 (17)	3 (17)	2 (18)	0 (20)

Xu J, et al. Ann Oncol 2020;31(suppl):abstr 1156O

1156O: Surufatinib (S) for patients (Pts) with advanced pancreatic neuroendocrine tumors (SANET-p): a randomized, double-blind, placebo (P)-controlled Phase III trial (NCT02589821) – Xu J, et al

Key results (cont.)



Investigator assessment in iITT[a]	Surufatinib (n=104)	Placebo (n=53)
ORR, % (95%CI)	19.2 (12.2, 28.1)	1.9 (0.0, 10.1)
	p=0.0021	
BOR, n (%)		
PR	20 (19.2)	1 (1.9)
SD	64 (61.5)	34 (62.4)
PD	8 (7.7)	16 (30.2)
NE	12 (11.5)	2 (3.8)
DCR, % (95%CI)	80.8 (71.9, 87.8)	66.0 (51.7, 78.5)
	p=0.0774	
TTR, months (95%CI)	3.8 (2.3, 7.3)	7.4 (NR, NR)
DoR, months (95%CI)	7.4 (3.7, NR)	NR

[a] Patients who were on treatment, but had not yet received a post-baseline tumour evaluation (n=15) were excluded from the iITT set.

Xu J, et al. Ann Oncol 2020;31(suppl):abstr 1156O

1156O: Surufatinib (S) for patients (Pts) with advanced pancreatic neuroendocrine tumors (SANET-p): a randomized, double-blind, placebo (P)-controlled Phase III trial (NCT02589821) – Xu J, et al

Key results (cont.)

AEs, n (%)	Surufatinib (n=113)	Placebo (n=59)
Any TEAE	108 (95.6)	54 (91.5)
Grade 1	5 (4.4)	19 (32.2)
Grade 2	24 (21.2)	19 (32.2)
Grade 3	67 (59.3)	14 (23.7)
Grade 4	9 (8.0)	2 (3.4)
Grade 5	3 (2.7)	0
Any Grade ≥3 TEAE	79 (69.9)	16 (27.1)
Any SAE	29 (25.7)	5 (8.5)
Any TEAE leading to dose interruption	51 (45.1)	14 (23.7)
Any TEAE leading to dose reduction	44 (38.9)	3 (5.1)
Any TEAE leading to dose discontinuation	12 (10.6)	4 (6.8)

Xu J, et al. Ann Oncol 2020;31(suppl):abstr 1156O

1156O: Surufatinib (S) for patients (Pts) with advanced pancreatic neuroendocrine tumors (SANET-p): a randomized, double-blind, placebo (P)-controlled Phase III trial (NCT02589821) – Xu J, et al

Key results (cont.)

Most frequently occurring AEs, n (%)	Surufatinib (n=113)		Placebo (n=59)	
	Any grade	Grade ≥3	Any grade	Grade ≥3
Hypertension	75 (66.4)	44 (38.9)	13 (22.0)	5 (8.5)
Proteinuria	74 (65.5)	11 (9.7)	32 (54.2)	1 (1.7)
Diarrhoea	58 (51.3)	5 (4.4)	15 (25.4)	1 (1.7)
Blood thyroid-stimulating hormone increased	49 (43.4)	0	6 (10.2)	0
Hypertriglyceridemia	42 (37.2)	8 (7.1)	9 (15.3)	0
Blood bilirubin increased	42 (37.2)	2 (1.8)	11 (18.6)	0
Hypoalbuminemia	31 (27.4)	0	8 (13.6)	0
Occult blood positive	30 (26.5)	0	14 (23.7)	0
AST increased	27 (23.9)	2 (1.8)	20 (33.9)	1 (1.7)
Abdominal pain	27 (23.9)	2 (1.8)	5 (8.5)	0
Hyperuricemia	24 (21.2)	2 (1.8)	1 (1.7)	0

Conclusion

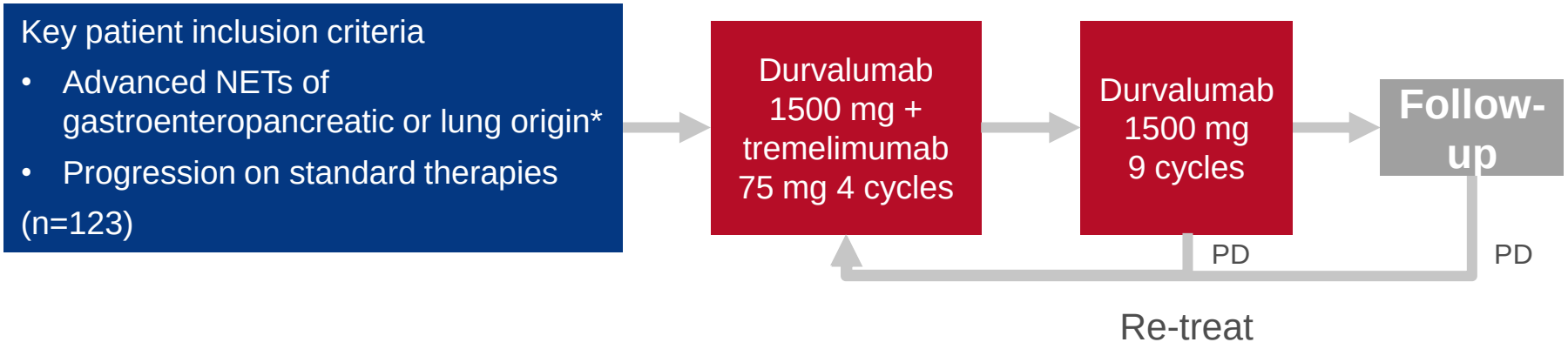
- **In patients with advanced NETs, surufatinib demonstrated significant and clinically meaningful improvement in PFS, however, it appears to be relatively toxic with grade ≥3 AEs occurring in two-thirds of cases with less than 10% of the patients over 65 years of age**

Xu J, et al. Ann On col 2020;31(suppl):abstr 1156O

1157O: A multi-cohort phase II study of durvalumab plus tremelimumab for the treatment of patients (pts) with advanced neuroendocrine neoplasms (NENs) of gastroenteropancreatic or lung origin: The DUNE trial (GETNE 1601) – Capdevila J, et al

Study objective

- To evaluate the efficacy and safety of immune checkpoint inhibitors in patients with NETs of gastroenteropancreatic or lung origin



PRIMARY ENDPOINT(S)

- Cohort 1–3: 9-month CBR (RECIST v1.1)
- Cohort 4: 9-month OS rate

SECONDARY ENDPOINTS

- PFS, OS, ORR, DoR by irRECIST, biomarker analysis

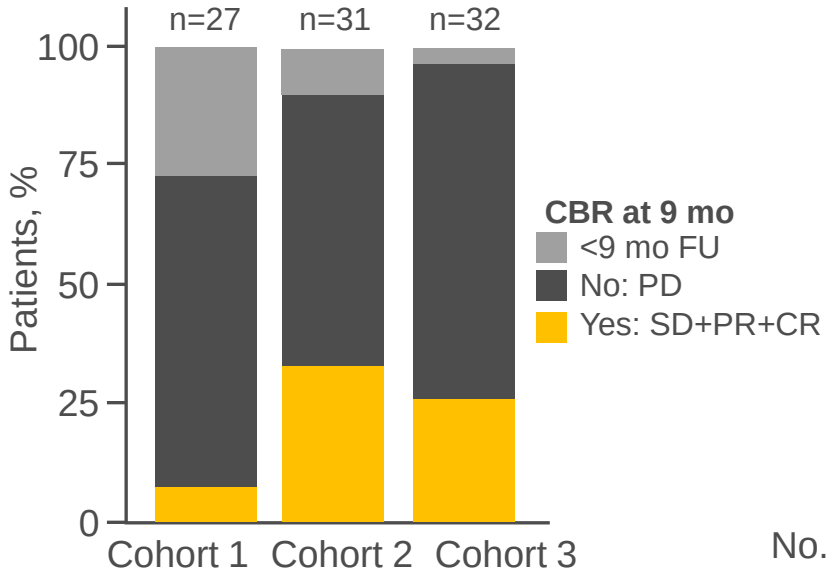
*Cohort 1, lung (n=27); cohort 2, grade 1/2 GI (n=31); cohort 3, grade 1/2 pancreatic (n=32); cohort 4, grade 3 gastroenteropancreatic (n=33)

Capdevila J, et al. Ann Oncol 2020;31(suppl):abstr 1157O

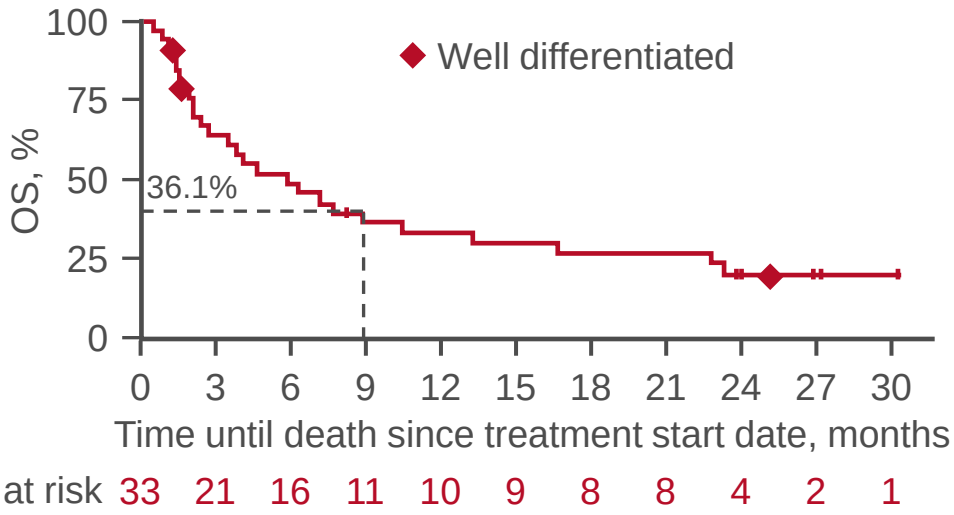
1157O: A multi-cohort phase II study of durvalumab plus tremelimumab for the treatment of patients (pts) with advanced neuroendocrine neoplasms (NENs) of gastroenteropancreatic or lung origin: The DUNE trial (GETNE 1601) – Capdevila J, et al

Key results

CBR: cohorts 1–3



Overall survival: cohort 4



	n	9-month CBR, %
Cohort 1, typical/atypical lung	27	7.4
Cohort 2, grade 1/2 GI	31	32.3
Cohort 3, grade 1/2 pancreatic	32	25

	n	9-month OS rate, % (95%CI)
Cohort 4, grade 3 GEP	33	36.1 (22.9, 57)

Capdevila J, et al. Ann Oncol 2020;31(suppl):abstr 1157O

1157O: A multi-cohort phase II study of durvalumab plus tremelimumab for the treatment of patients (pts) with advanced neuroendocrine neoplasms (NENs) of gastroenteropancreatic or lung origin: The DUNE trial (GETNE 1601) – Capdevila J, et al

Key results (cont.)

	n	ORR (RECIST), %	ORR (irRECIST), %	PFS, months (95%CI)
Cohort 1 Lung	27	0	7.4	5.3 (4.5, 6.1)
Cohort 2 GI	31	0	0	8.0 (4.9, 11.2)
Cohort 3 Pancreatic	32	6.9	6.3	8.1 (3.8, 12.5)
Cohort 4 GEP	33	7.2	9.1	2.5 (2.2, 2.8)

AEs, n (%)	All cohorts (n=123)	
	Any grade	Grade ≥3
Fatigue	53 (43.1)	3 (2.4)
Diarrhoea	39 (31.7)	8 (6.5)
Pruritus	29 (23.6)	0
Nausea	17 (13.8)	1 (0.8)
Skin and subcutaneous tissue disorders	11 (8.9)	0
Hypothyroidism	12 (9.8)	1 (0.8)

Conclusions

- **In patients with advanced NETs of GEP or lung origin, durvalumab + tremelimumab demonstrated modest activity with infrequent objective responses**
- **No new safety signals were identified**

Capdevila J, et al. Ann Oncol 2020;31(suppl):abstr 1157O

1159MO: Survival and prognostic factors analysis of 535 grade 3 gastroenteropancreatic neuroendocrine neoplasm (GEP-NEN): Data from the Spanish Taskforce of Neuroendocrine Tumors Registry (R-GETNE) – Jiménez-Fonseca P, et al

Study objective

- To analyse prognostic factors predicting survival in patients with grade 3 GEP-NETs

Key patient inclusion criteria

- Poorly differentiated neuroendocrine cancer* with Ki-67 index 20%
- Patients diagnosed between 2004 and 2019 at 58 centres included in the Spanish National Cancer Registry of GEP-NEN

(n=535)

→ Resection (87%, with 54% receiving adjuvant CT) Platinum and etoposide (73%)

→ **Survival**

PRIMARY ENDPOINT

- OS

*Colorectum (30%), pancreas (24%), unknown (16%), stomach (13%) and small intestine (4%).

Jiménez-Fonseca P, et al. Ann Oncol 2020;31(suppl):abstr 1159O

1159MO: Survival and prognostic factors analysis of 535 grade 3 gastroenteropancreatic neuroendocrine neoplasm (GEP-NEN): Data from the Spanish Taskforce of Neuroendocrine Tumors Registry (R-GETNE) – Jiménez-Fonseca P, et al

Key results

- Median follow-up was 4 years; median OS was 14 months

Prognostic factors for OS (multivariate analysis, p<0.05)	HR (95%CI)
Stage	
IV	Reference
I–III	0.43 (0.27, 0.81)
Primary tumour	
Others	Reference
Intestine, pancreas, rectum	0.63 (0.44, 0.92)
ECOG PS	
2	Reference
0–1	0.64 (0.37, 0.77)
Gender	
Male	Reference
Female	0.89 (0.74, 0.95)

Jiménez-Fonseca P, et al. Ann Oncol 2020;31(suppl):abstr 1159O

1159MO: Survival and prognostic factors analysis of 535 grade 3 gastroenteropancreatic neuroendocrine neoplasm (GEP-NEN): Data from the Spanish Taskforce of Neuroendocrine Tumors Registry (R-GETNE) – Jiménez-Fonseca P, et al

Conclusions

- In patients with grade 3 gastroenteropancreatic NETs, stage, primary tumour location, performance status and gender were all found to be prognostic factors for survival

Jiménez-Fonseca P, et al. Ann Oncol 2020;31(suppl):abstr 1159O

CANCERS OF THE COLON, RECTUM AND ANUS

LBA21: Neoadjuvant mFOLFIRINOX and preoperative chemoradiation (CRT) versus preoperative CRT in patients with T3-4 rectal cancer: Surgical and quality of life results of PRODIGE 23 phase III trial – Borg C, et al

Study objective

- To evaluate the surgical outcomes and QoL of patients with locally advanced rectal cancer receiving neoadjuvant mFOLFIRINOX compared with preoperative chemoradiotherapy

Key patient inclusion criteria

- cT3 or cT4, M0 rectal adenocarcinomas <15 cm from anal verge
- WHO PS 0–1

(n=461)

R 1:1

mFOLFIRINOX* (6 cycles) then preoperative chemoradiotherapy (50.4 Gy, 2 Gy/fraction; 25 fractions + capecitabine) then surgery followed by adjuvant chemotherapy† (3 months) (n=231)

Preoperative chemoradiotherapy (50.4 Gy, 2 Gy/fraction; 25 fractions + capecitabine) then surgery followed by adjuvant chemotherapy‡ (6 months) (n=230)

Stratification

- Centre, T stage, N status, tumour location, perirectal fat extramural extension

PRIMARY ENDPOINT

- 3-year DFS

SECONDARY ENDPOINTS

- pCR (ypT0N0) rate, OS, MFS, safety, QoL

*Oxaliplatin 85 mg/m^2 + leucovorin 400 mg/m^2 + irinotecan 180 mg/m^2 + 5FU 2.4 g/m^2 over 46 h q2w; †mFOLFOX6, 6 cycles; or capecitabine, 4 cycles; ‡mFOLFOX6, 12 cycles; or capecitabine, 8 cycles

Borg C, et al. Ann Oncol 2020;31(suppl):abstr LBA21

LBA21: Neoadjuvant mFOLFIRINOX and preoperative chemoradiation (CRT) versus preoperative CRT in patients with T3-4 rectal cancer: Surgical and quality of life results of PRODIGE 23 phase III trial – Borg C, et al

Key results

3-year DFS

	mFOLFIRINOX (n=231)	Chemoradiotherapy (n=230)
3-year DFS, %	75.7	68.5
HR (95%CI); p-value	0.69 (0.49, 0.97); 0.034	
3-year metastasis-free survival, %	78.8	71.7
HR (95%CI); p-value	0.64 (0.44, 0.93); <0.02	

Pathological results

	mFOLFIRINOX (n=231)	Chemoradiotherapy (n=230)
Underwent surgery, n (%)	218 (94.8)	213 (92.2)
ypN0, %	82.6	67.4
ypT0N0, %	27.8	12.1
Neoadjuvant rectal score	8.4	15

Borg C, et al. Ann Oncol 2020;31(suppl):abstr LBA21

LBA21: Neoadjuvant mFOLFIRINOX and preoperative chemoradiation (CRT) versus preoperative CRT in patients with T3-4 rectal cancer: Surgical and quality of life results of PRODIGE 23 phase III trial – Borg C, et al

Key results (cont.)

Surgical outcomes	mFOLFIRINOX (n=231)	Chemoradiotherapy (n=230)	p-value
Underwent surgery, n (%)	213 (92.2)	218 (94.8)	0.262
Postoperative morbidity, n (%)	62 (29.3)	67 (31.2)	0.666
Mortality, n (%)			
During hospitalization	0	2 (0.9)	
Postoperative (≤30 days)	0	5 (2.3)	0.061
Postoperative (≤60 days)	0	6 (2.8)	0.030

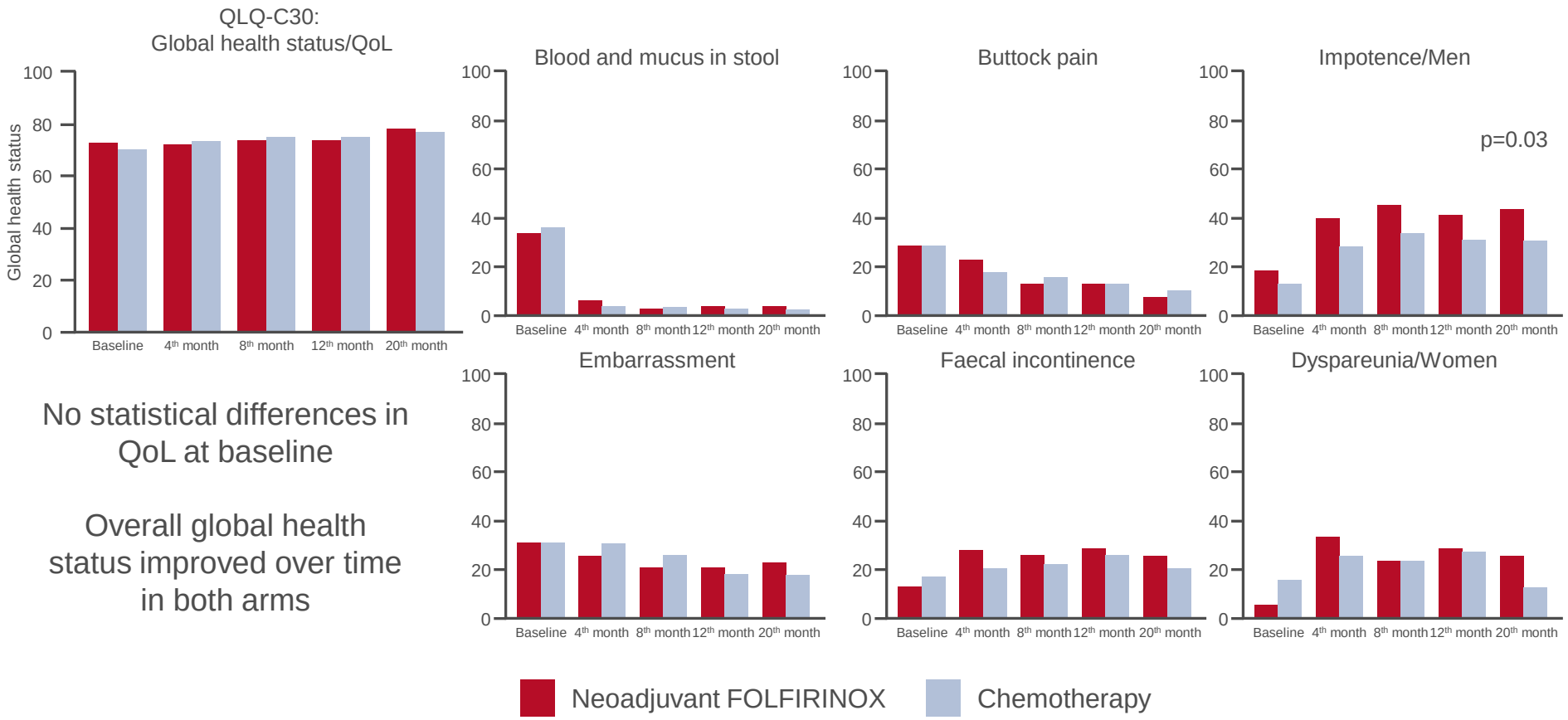
Adjuvant treatment	mFOLFIRINOX (n=213)	Chemoradiotherapy (n=218)	p-value
Eligible for adjuvant chemotherapy, n (%)	207 (97.2)	201 (92.2)	0.021
All adjuvant cycles received, n (%)	130 (80.3)	119 (75.3)	0.346
At least 1 administration delayed, n (%)	64 (39.5)	100 (63.3)	<0.001
Grade 3–4 AE, %	44.4	74.1	<0.001
Grade 3–4 neutropenia, %	5.6	18.1	<0.001
Peripheral neuropathy, %	11.7	20.7	0.033

Borg C, et al. Ann Oncol 2020;31(suppl):abstr LBA21

LBA21: Neoadjuvant mFOLFIRINOX and preoperative chemoradiation (CRT) versus preoperative CRT in patients with T3-4 rectal cancer: Surgical and quality of life results of PRODIGE 23 phase III trial – Borg C, et al

Key results (cont.)

Quality of life related to rectal cancer (QLQ-CR29)



No statistical differences in QoL at baseline

Overall global health status improved over time in both arms

Borg C, et al. Ann Oncol 2020;31(suppl):abstr LBA21

LBA21: Neoadjuvant mFOLFIRINOX and preoperative chemoradiation (CRT) versus preoperative CRT in patients with T3-4 rectal cancer: Surgical and quality of life results of PRODIGE 23 phase III trial – Borg C, et al

Conclusions

- **In patients with stage II/III rectal cancer, mFOLFORINOX showed a manageable safety profile with no impairment of overall treatment feasibility or tolerance**
- **In patients receiving neoadjuvant FOLFORINOX, there was less toxicity after surgery or adjuvant chemotherapy reported**
- **There were no significant differences in the global QoL scores between the two treatment arms**

Borg C, et al. Ann Oncol 2020;31(suppl):abstr LBA21

LBA42: POD1UM-202: Phase 2 study of retifanlimab in patients (pts) with squamous carcinoma of the anal canal (SCAC) who progressed following platinum-based chemotherapy – Rao S, et al

Study objective

- To evaluate the efficacy and safety of retifanlimab in patients with SCAC after platinum-based CT

Key patient inclusion criteria

- Locally advanced or metastatic SCAC
- PD on or after platinum-based CT (≤2 lines)
- HIV+ eligible if CD4+ ≥300/uL and receiving HAART
- ECOG PS 0–1

(n=94)

→ Retifanlimab 500 mg iv q4w for up to 2 years

PRIMARY ENDPOINT(S)

- ORR (independent central review, RECIST v1.1)

SECONDARY ENDPOINTS

- DoR, DCR, PFS, OS, safety

Data cut-off date: June 8, 2020.

Rao S, et al. Ann Oncol 2020;31(suppl):abstr LBA42

LBA42: POD1UM-202: Phase 2 study of retifanlimab in patients (pts) with squamous carcinoma of the anal canal (SCAC) who progressed following platinum-based chemotherapy – Rao S, et al

Key results

Variable	n=94
ORR by independent central review, % (95%CI)	13.8 (7.6, 22.5)
BOR, n (%)	
CR	1 (1.1)
PR	12 (12.8)
SD	33 (35.1)
PD	43 (45.7)
Missing	5 (5.3)
DCR, n (%)	46 (48.9)
Median DoR, months (95%CI)	9.5 (5.6, NE)
Median PFS, months (95%CI)	2.3 (1.9, 3.6)
Median OS, months (95%CI)	10.1 (7.9, NE)

Median follow-up was 7.1 months.

Rao S, et al. Ann Oncol 2020;31(suppl):abstr LBA42

LBA42: POD1UM-202: Phase 2 study of retifanlimab in patients (pts) with squamous carcinoma of the anal canal (SCAC) who progressed following platinum-based chemotherapy – Rao S, et al

Key results (cont.)

AEs, n (%)	n=94
Any TRAE	55 (58.5)
Grade ≥3	11 (11.7)
Led to treatment discontinuation	4 (4.2)
Any immune-related AE	24 (25.5)
Grade ≥3	6 (6.4)
Led to treatment discontinuation	2 (2.1)
Infusion reactions (none were grade ≥3)	4 (4.3)

Conclusion

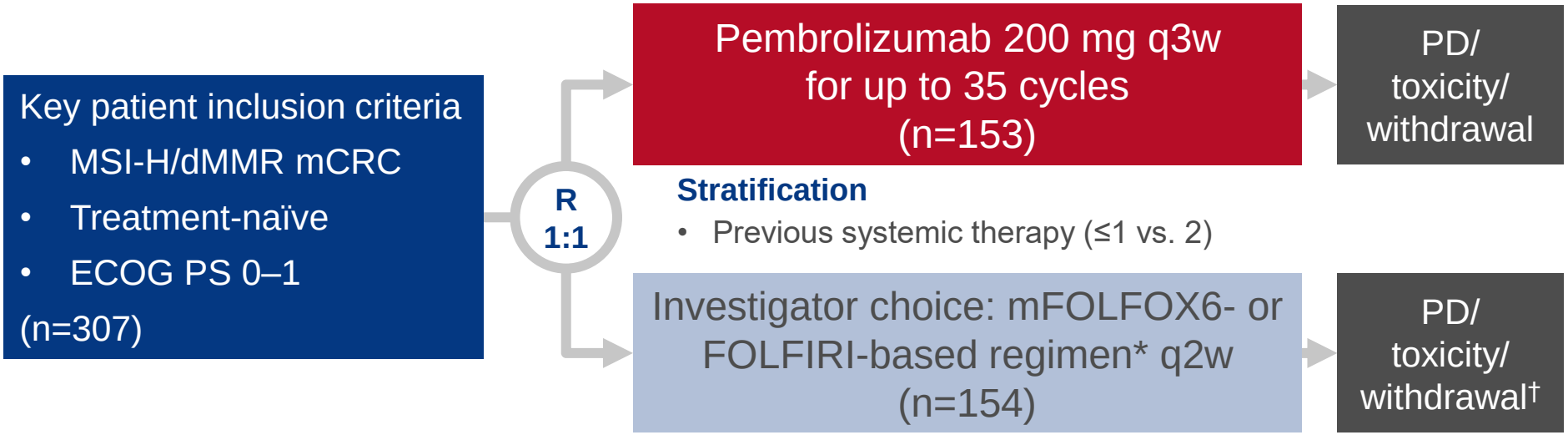
- **In patients with platinum-refractory SCAC, including HIV-positive patients, retifanlimab demonstrated encouraging activity with a safety profile that was consistent with other PD-1 inhibitors**

Rao S, et al. Ann Oncol 2020;31(suppl):abstr LBA42

396O: Health-related quality of life (HRQoL) in patients (pts) treated with pembrolizumab (pembro) vs chemotherapy as first-line treatment in microsatellite instability-high (MSI-H) and/or deficient mismatch repair (dMMR) metastatic colorectal cancer (mCRC): Phase 3 KEYNOTE-177 study – André T, et al

Study objective

- To evaluate the HRQoL of patients with MSI-H/dMMR mCRC receiving pembrolizumab vs. standard of care chemotherapy in the 1L setting



CO-PRIMARY ENDPOINTS

- PFS (RECIST v1.1 by BICR), OS

SECONDARY ENDPOINTS

- ORR (RECIST v1.1 by BICR), DoR, TTR, safety

PRESPECIFIED EXPLORATORY ANALYSIS

- Mean score change from baseline to Week 18 in EORTC QLQ-C30, EORTC QLQ-CR29 and EQ-5D-3L
- Time to deterioration in EORTC QLQ-C30 scales

*mFOLFOX6 or FOLFIRI alone or plus bevacizumab 5 mg/kg or plus cetuximab 400 mg/m^2 over 2 h then 250 mg/m^2 over 1 h q1w; †potential for crossover to pembrolizumab for ≤35 cycles after PD. Data cut-off: February 19, 2020.

André T, et al. Ann Oncol 2020;31(suppl):abstr 396O

396O: Health-related quality of life (HRQoL) in patients (pts) treated with pembrolizumab (pembro) vs chemotherapy as first-line treatment in microsatellite instability-high (MSI-H) and/or deficient mismatch repair (dMMR) metastatic colorectal cancer (mCRC): Phase 3 KEYNOTE-177 study – André T, et al

Key results

Change in QoL scores from baseline to Week 18

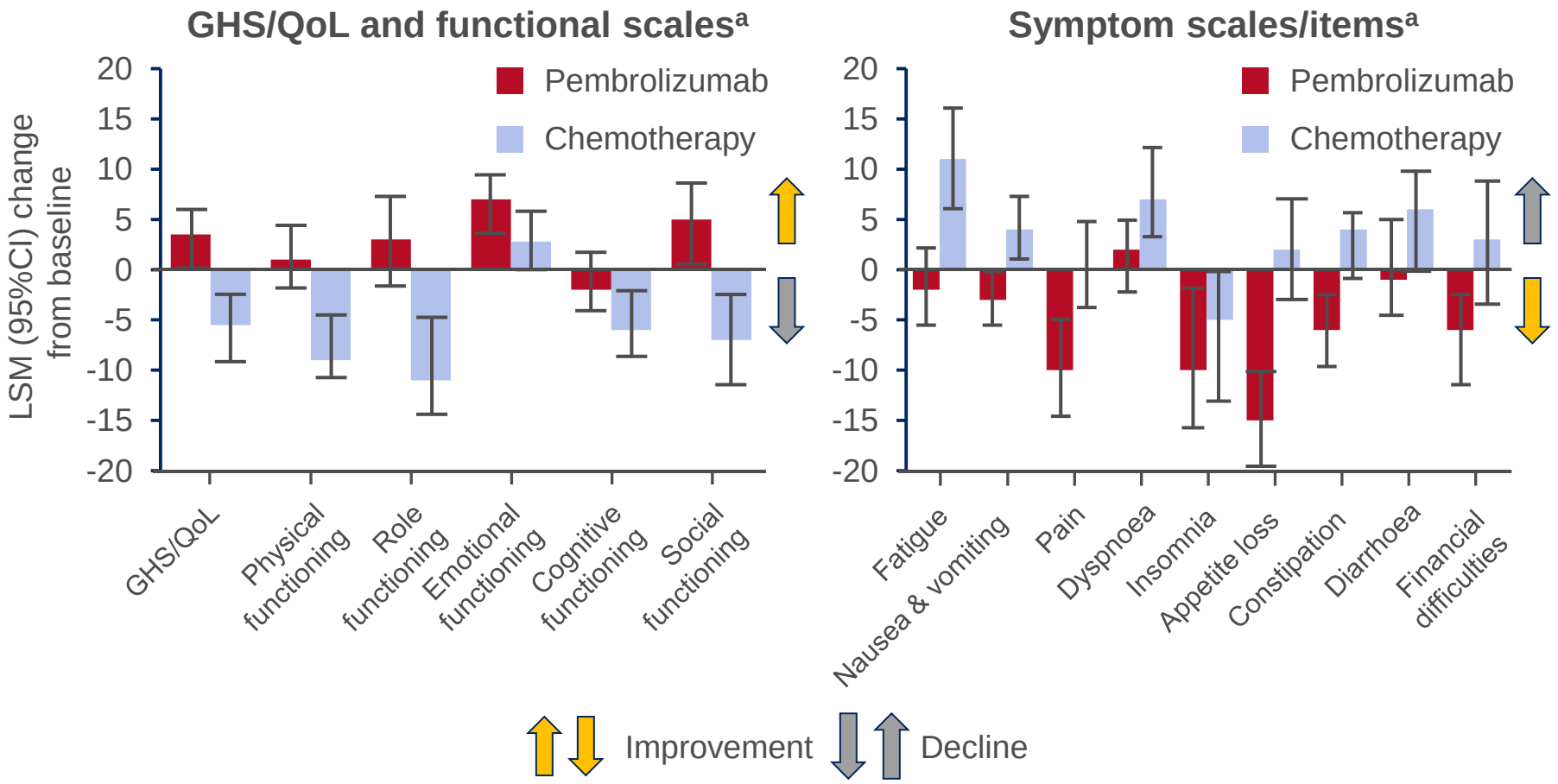
	QLQ-C30 General health/QoL score		EQ-5D VAS score	
	Pembrolizumab	Chemotherapy	Pembrolizumab	Chemotherapy
Baseline score, mean (SD)	66.2 (21.0)	66.6 (20.7)	70.1 (18.9)	70.8 (19.8)
Week 18 score, mean (SD)	72.1 (20.5)	62.6 (17.7)	76.9 (17.9)	70.8 (18.2)
LSM change from baseline (95%CI)	3.3 (-0.05, 6.7)	-5.6 (-9.3, -1.9)	4.5 (1.2, 7.8)	-2.9 (-6.5, 0.7)
LSM difference (95%CI)	9.0 (4.2, 13.7) p=0.0002		7.4 (2.8, 11.9) p=0.0016	

André T, et al. Ann Oncol 2020;31(suppl):abstr 396O

396O: Health-related quality of life (HRQoL) in patients (pts) treated with pembrolizumab (pembro) vs chemotherapy as first-line treatment in microsatellite instability-high (MSI-H) and/or deficient mismatch repair (dMMR) metastatic colorectal cancer (mCRC): Phase 3 KEYNOTE-177 study – André T, et al

Key results (cont.)

Change in score from baseline to Week 18



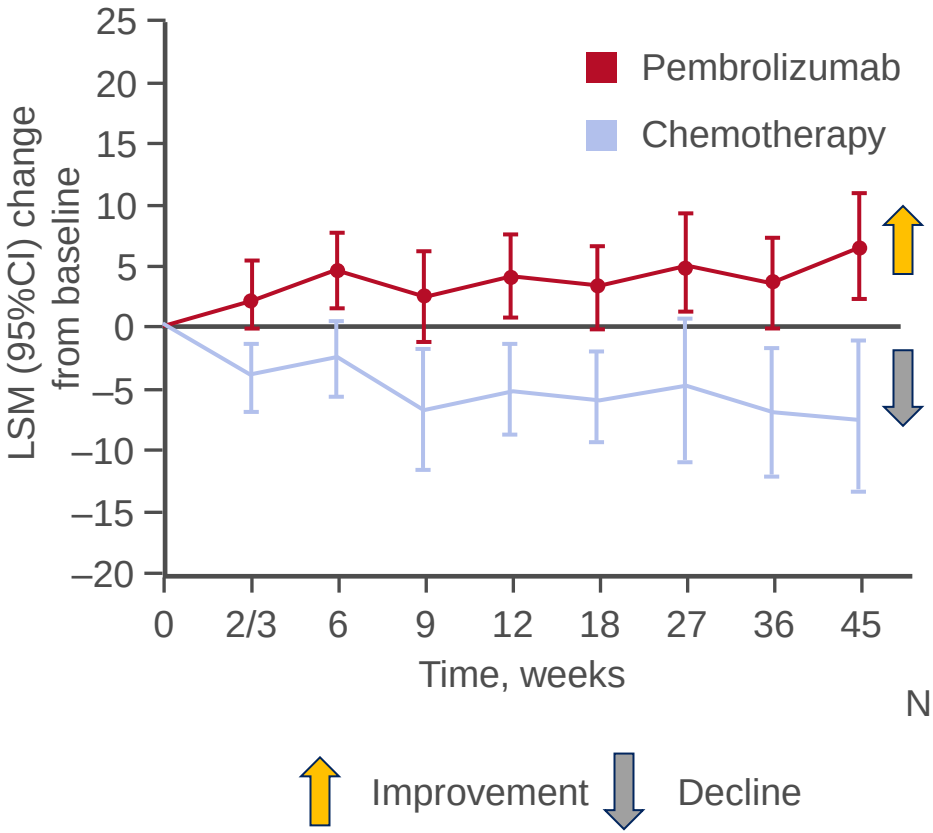
[a] Error bars indicate 95%CIs around the mean.

André T, et al. Ann Oncol 2020;31(suppl):abstr 396O

396O: Health-related quality of life (HRQoL) in patients (pts) treated with pembrolizumab (pembro) vs chemotherapy as first-line treatment in microsatellite instability-high (MSI-H) and/or deficient mismatch repair (dMMR) metastatic colorectal cancer (mCRC): Phase 3 KEYNOTE-177 study – André T, et al

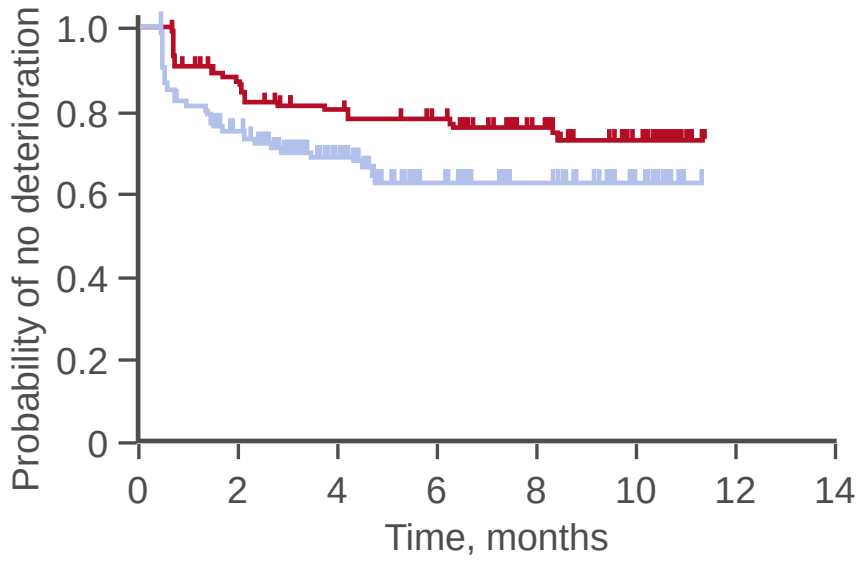
Key results (cont.)

Change in GHS/QoL from baseline over time



GHS/QoL: Time to deterioration

	Events	Median, mo (95%CI)	HR (95%CI)	p-value
Pembrolizumab (n=153)	30	NR (NR, NR)	0.61 (0.38, 0.98)	0.0195
Chemotherapy (n=154)	39	NR (NR, NR)		



No. at risk

Pembro	141	104	82	71	58	42	0	0
Chemo	131	85	57	32	25	10	0	0

André T, et al. Ann Oncol 2020;31(suppl):abstr 396O

396O: Health-related quality of life (HRQoL) in patients (pts) treated with pembrolizumab (pembro) vs chemotherapy as first-line treatment in microsatellite instability-high (MSI-H) and/or deficient mismatch repair (dMMR) metastatic colorectal cancer (mCRC): Phase 3 KEYNOTE-177 study – André T, et al

Key results (cont.)

Time to deterioration	Events	Median, months (95%CI)	HR (95%CI)	p-value
Physical functioning				
Pembrolizumab	29	NR (NR, NR)	0.50 (0.32, 0.81)	0.0016
Chemotherapy	45	NR (5.2, NR)		
Social functioning				
Pembrolizumab	27	NR (NR, NR)	0.53 (0.32, 0.87)	0.0050
Chemotherapy	39	NR (NR, NR)		
Physical functioning				
Pembrolizumab	50	NR (8.5, NR)	0.48 (0.33, 0.69)	<0.0001
Chemotherapy	72	2.1 (1.6, 4.4)		

Conclusions

- **In patients with previously untreated MSI-H/dMMR mCRC, pembrolizumab monotherapy demonstrated clinically meaningful improvements in HRQoL outcomes in comparison with chemotherapy**

André T, et al. Ann Oncol 2020;31(suppl):abstr 396O

397O: Avelumab plus cetuximab in pre-treated RAS wild type metastatic colorectal cancer patients as rechallenge strategy: the phase II CAVE (cetuximab-avelumab) mCRC study – Martinelli E, et al

Study objective

- To evaluate the efficacy of avelumab and cetuximab in patients with RAS wild-type mCRC

Key patient inclusion criteria
- mCRC
- RAS wild-type
- 1L CT + anti-EGFR
- CR or PR in 1L
- Received a 2L therapy
- ECOG PS 0–1

(n=77)

→ Avelumab 10 mg/kg iv q2w + cetuximab at 400 mg/m^2 iv (subsequently 250 mg/m^2) qw → **PD/ toxicity**

PRIMARY ENDPOINT

- OS

SECONDARY ENDPOINTS

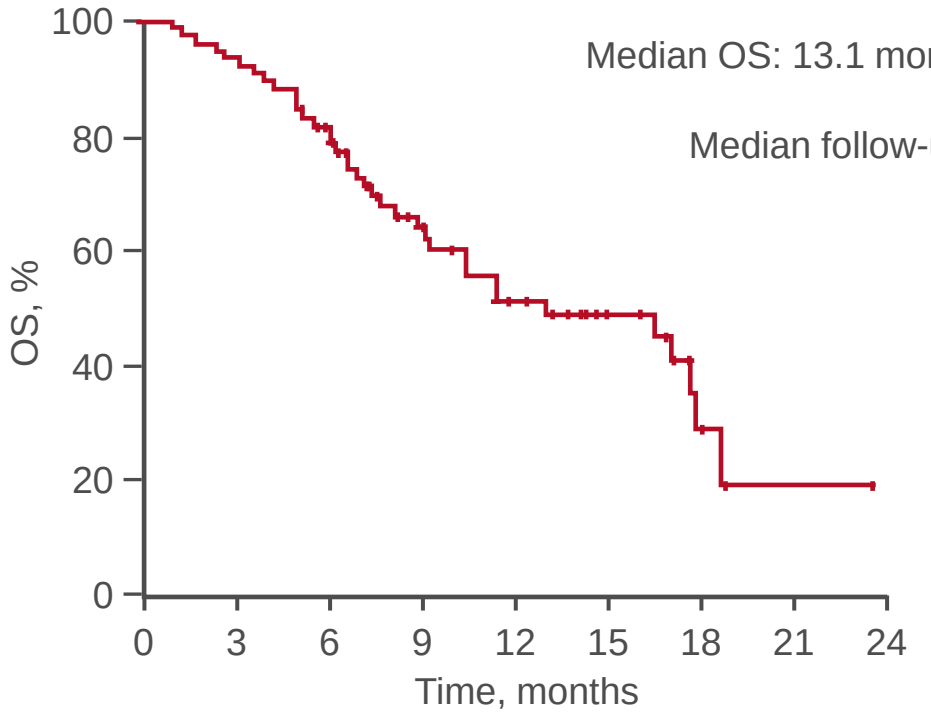
- PFS, ORR, DCR, safety

Martinelli E, et al. Ann Oncol 2020;31(suppl):abstr 397O

397O: Avelumab plus cetuximab in pre-treated RAS wild type metastatic colorectal cancer patients as rechallenge strategy: the phase II CAVE (cetuximab-avelumab) mCRC study – Martinelli E, et al

Key results

Overall survival



Median OS: 13.1 months (90%CI 8.1, 18.0)

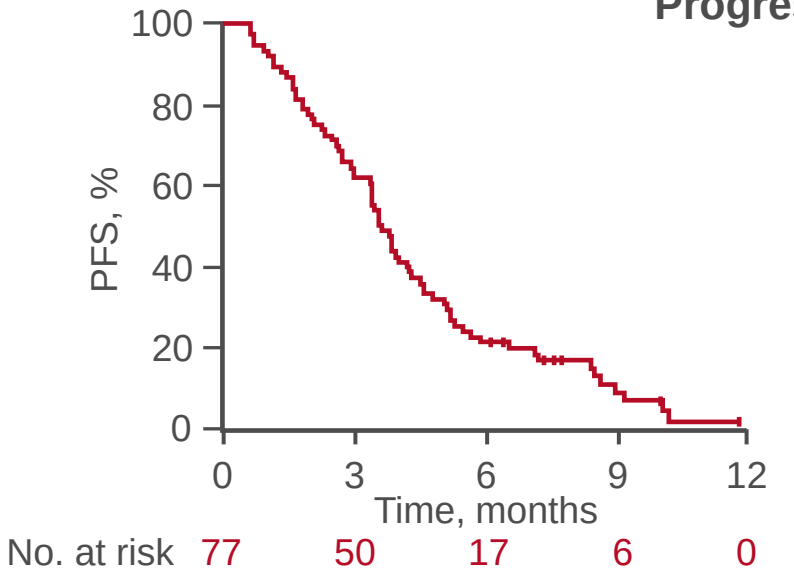
Median follow-up: 13.8 months

Martinelli E, et al. Ann Oncol 2020;31(suppl):abstr 397O

397O: Avelumab plus cetuximab in pre-treated RAS wild type metastatic colorectal cancer patients as rechallenge strategy: the phase II CAVE (cetuximab-avelumab) mCRC study – Martinelli E, et al

Key results (cont.)

Progression-free survival



Median PFS 3.6 months (95%CI 3.2, 4.1)

ctDNA was collected from 56 plasma samples and analyzed for RAS, RAF and EGFR-ECD mutations

BOR, n (%) [95%CI]	ITT (n=77)	Basal ctDNA (n=56)	RAS/BRAF wild-type (n=41)	RAS/BRAF mutant (n=15)
CR	1 (1) [0, 7]	2 (2) [0, 6.4]	1 (2) [0, 8.6]	1 (0) [0, 0.22]
PR	5 (6) [2, 14]	3 (5) [1.1, 14.9]	3 (7) [1.5, 20]	0 (0) [0, 0.22]
SD	44 (57) [45, 68]	33 (59) [45, 71.9]	26 (63) [47, 78]	7 (47) [21.3, 73.4]
PD	27 (35) [24, 47]	19 (34) [21.8, 47.8]	11 (27) [14, 43]	8 (53) [26.6, 78.7]
DCR, % (95%CI)	50 (65) [53, 75]	37 (66) [55.2, 78.2]	30 (73) [57, 85.8]	7 (47) [21.3, 73.4]

Martinelli E, et al. Ann Oncol 2020;31(suppl):abstr 397O

397O: Avelumab plus cetuximab in pre-treated RAS wild type metastatic colorectal cancer patients as rechallenge strategy: the phase II CAVE (cetuximab-avelumab) mCRC study – Martinelli E, et al

Key results (cont.)

AEs, n (%) (n=77)	Grade 1–2	Grade 3–4
Rash	46 (60)	11 (14)
Dry skin	13 (17)	0
Nail disorders	11 (14)	0
Pruritus	8 (10)	0
Conjunctivitis	7 (10)	0
Blepharitis	2 (3)	0
Diarrhoea	19 (25)	3 (4)
Abdominal pain	6 (7)	0
Nausea	5 (6)	0
Vomiting	2 (3)	0
AST/ALT increase	6 (7)	1 (1)
Blood bilirubin increase	3 (4)	0
Lipase and/or amylase increase	2 (3)	2 (3)
Hypothyroidism	2 (3)	0

Martinelli E, et al. Ann Oncol 2020;31(suppl):abstr 397O

397O: Avelumab plus cetuximab in pre-treated RAS wild type metastatic colorectal cancer patients as rechallenge strategy: the phase II CAVE (cetuximab-avelumab) mCRC study – Martinelli E, et al

Key results (cont.)

	RAS/BRAF wild-type (n=41)	RAS/BRAF mutant (n=15)
Median PFS, months (95%CI)	4.3 (3.0, 5.5)	3.0 (2.6, 3.3)
Median OS, months (95%CI)	16.1 (9.0, 24.1)	11.5 (5.4, 17.5)

Conclusion

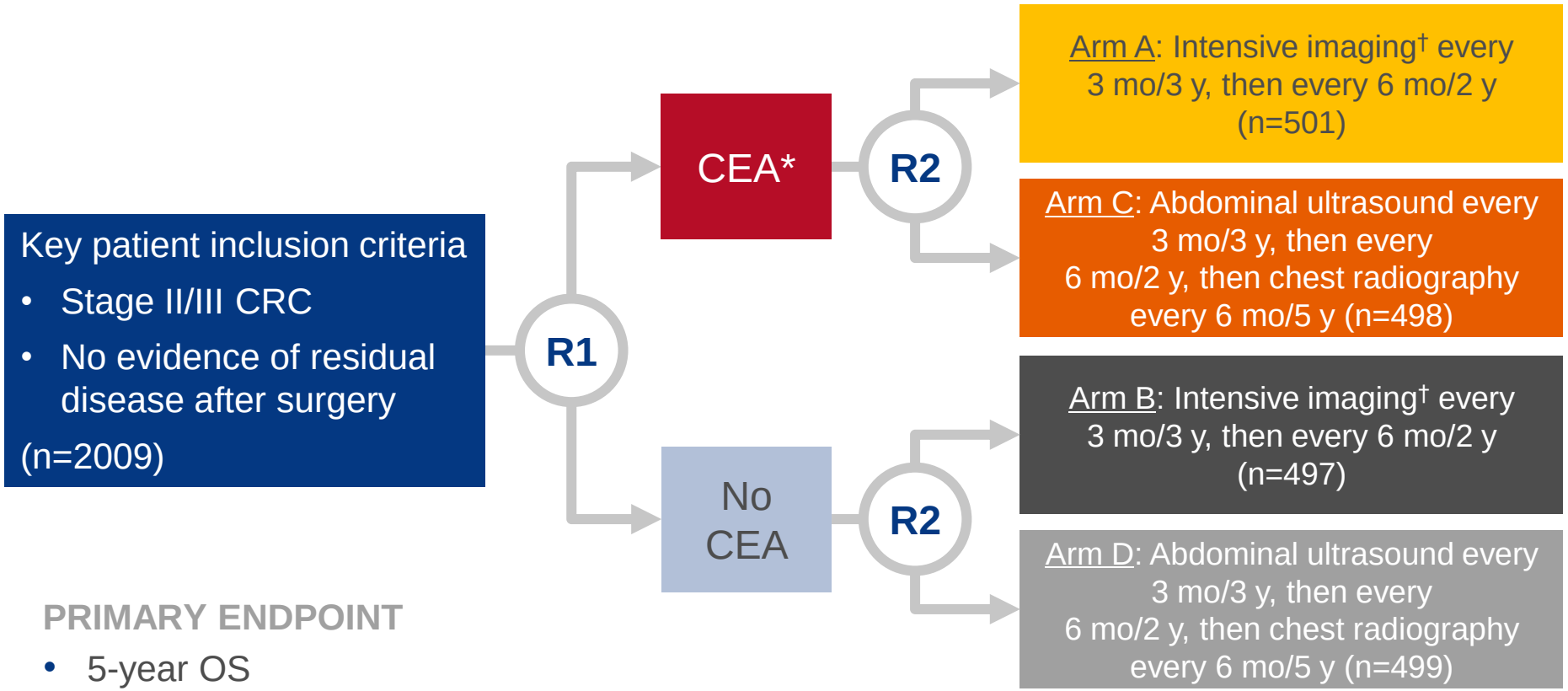
- **In patients with RAS wild-type mCRC, avelumab + cetuximab as part of a rechallenge strategy demonstrated clinically meaningful improvement in OS and was generally well-tolerated**

Martinelli E, et al. Ann Oncol 2020;31(suppl):abstr 397O

398O: Effect of 5 years of imaging and CEA follow-up to detect recurrence of colorectal cancer (CRC) - PRODIGE 13 a FFCD phase III trial – Lepage C, et al

Study objective

- To evaluate the impact of intensive radiological monitoring and CEA assessment in the post-operative surveillance of patients with resected stage II/III CRC



PRIMARY ENDPOINT

- 5-year OS

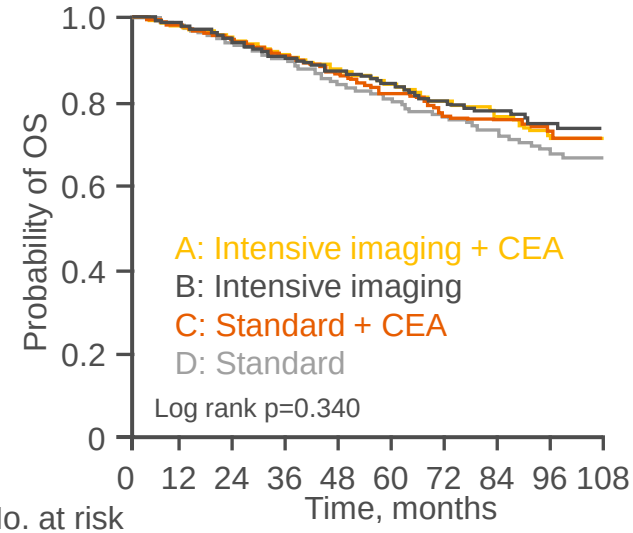
*Every 3 mo for 2 years, then every 6 mo for 3 years;
†intensive imaging: computed tomography alternating with abdominal ultrasound.

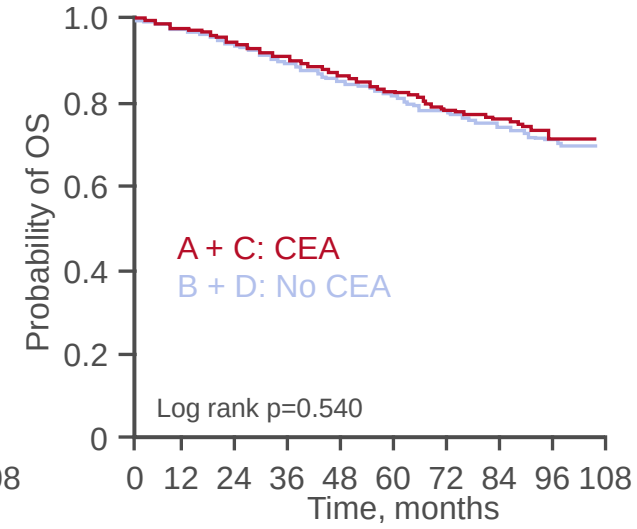
Lepage C, et al. Ann Oncol 2020;31(suppl):abstr 398O

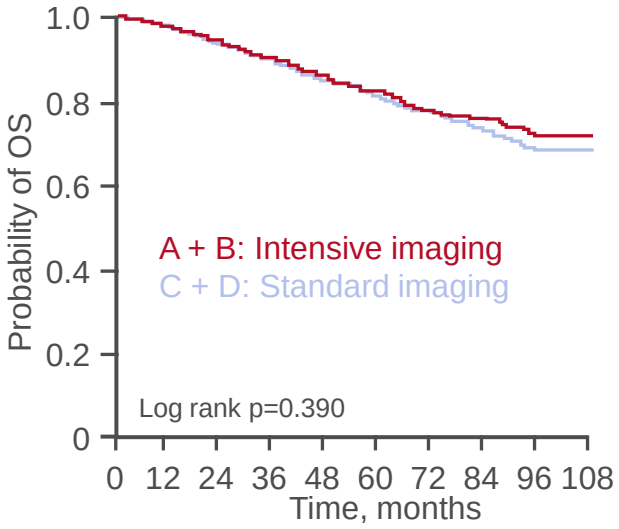
398O: Effect of 5 years of imaging and CEA follow-up to detect recurrence of colorectal cancer (CRC) - PRODIGE 13 a FFCD phase III trial – Lepage C, et al

Key results

5-year overall survival







No. at risk

A: Intensive imaging + CEA	501	487	471	449	408	310	216	145	75	11
B: Intensive imaging	497	482	467	446	411	316	242	152	70	10
C: Standard + CEA	498	484	465	448	415	315	235	143	66	7
D: Standard	499	487	466	447	396	311	227	139	65	10

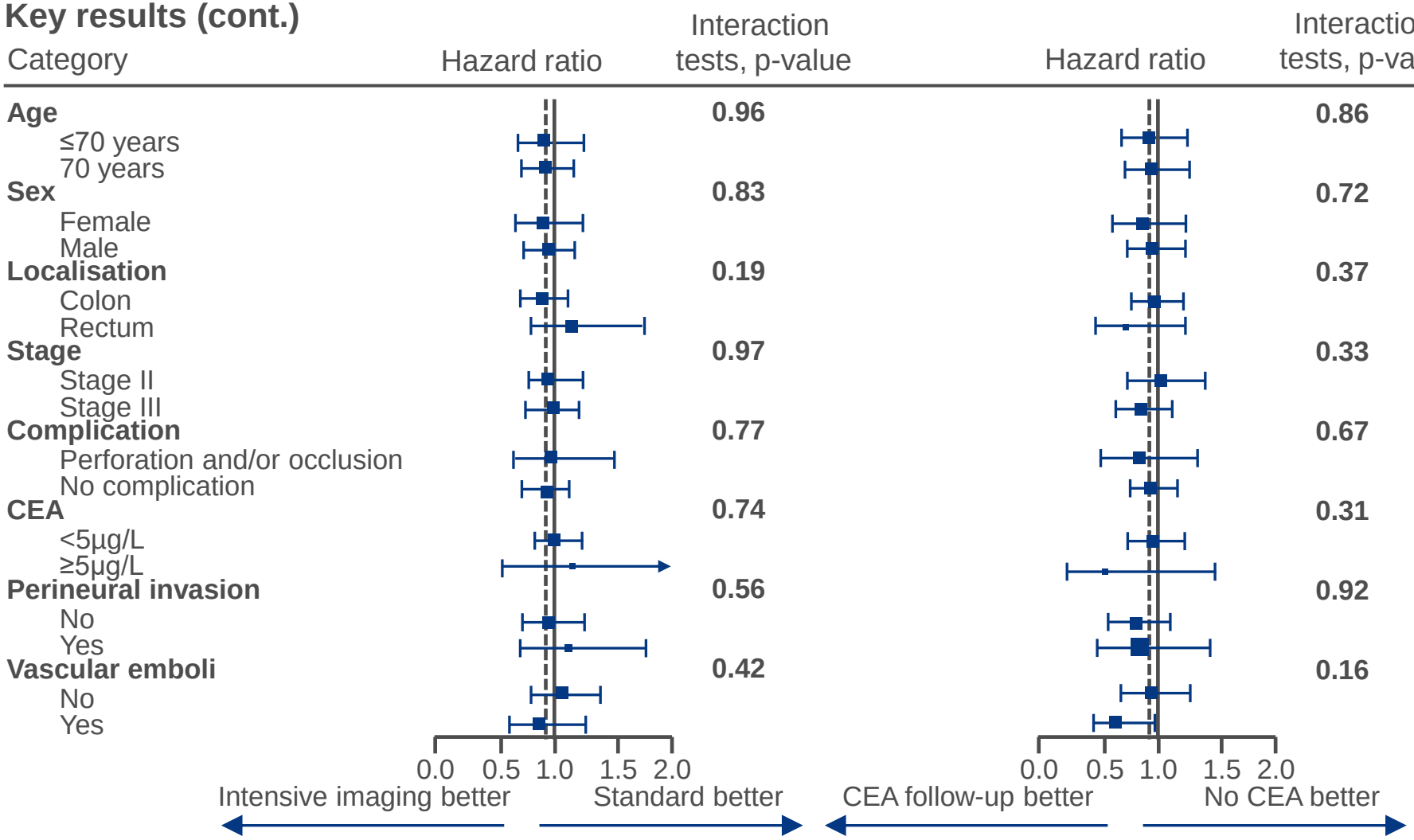
A + C: CEA	999	971	936	897	823	625	451	288	141	18
B + D: No CEA	996	969	933	893	807	627	469	291	135	20

A + B: Intensive imaging	998	969	938	895	819	626	458	297	145	21
C + D: Standard imaging	997	971	931	895	811	626	462	282	131	17

Lepage C, et al. Ann Oncol 2020;31(suppl):abstr 398O

398O: Effect of 5 years of imaging and CEA follow-up to detect recurrence of colorectal cancer (CRC) - PRODIGE 13 a FFCD phase III trial – Lepage C, et al

Key results (cont.)



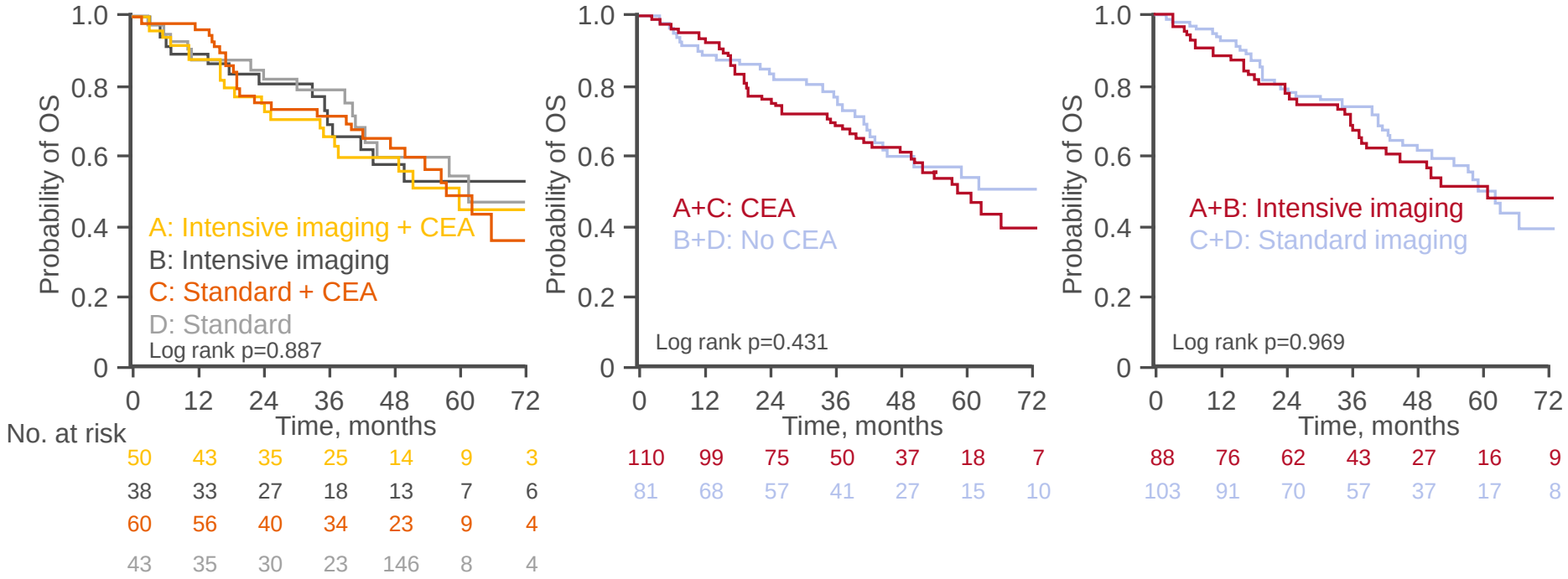
Lepage C, et al. Ann Oncol 2020;31(suppl):abstr 398O

398O: Effect of 5 years of imaging and CEA follow-up to detect recurrence of colorectal cancer (CRC) - PRODIGE 13 a FFCD phase III trial – Lepage C, et al

Key results (cont.)

Surgery for recurrence, %	Intensive imaging + CEA	Intensive imaging	Standard + CEA	Standard	p-value
Colon (n=356)	59.5	50.7	66.3	40.9	0.0035
Rectum (n=83)	47.8	55.0	57.9	42.9	ns

Colon cancer: OS curative surgery



Lepage C, et al. Ann Oncol 2020;31(suppl):abstr 398O

398O: Effect of 5 years of imaging and CEA follow-up to detect recurrence of colorectal cancer (CRC) - PRODIGE 13 a FFCD phase III trial – Lepage C, et al

Conclusions

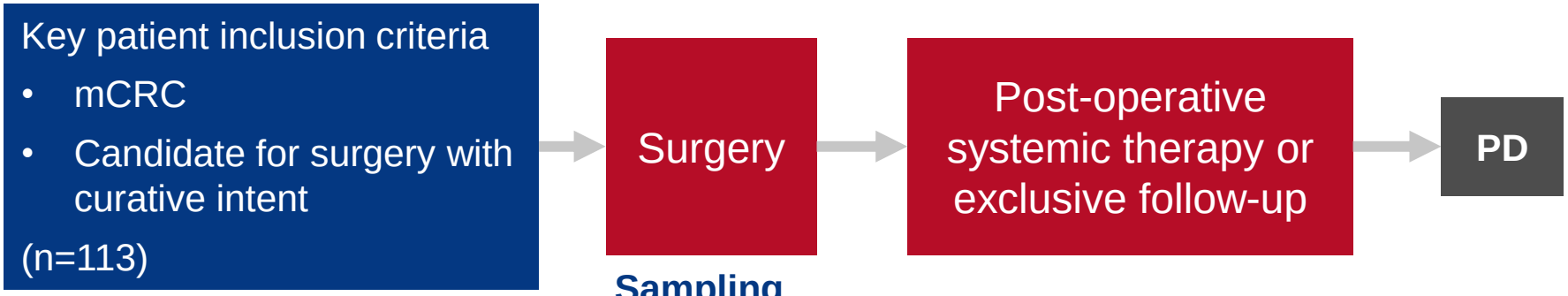
- **In patients with CRC, there were no significant differences in OS or RFS across the surveillance arms**
- **The findings suggest that the guidelines for CRC surveillance after curative resection should emphasize a regular clinical assessment of patients using ultrasound and chest radiography, while CT scans should only be performed in case of suspicion of recurrence**
- **Other results from this study associating survival data with promising markers (e.g. immune contexture, exosomes) will be available in the near future and allow adjustment of these conclusions**

Lepage C, et al. Ann Oncol 2020;31(suppl):abstr 398O

405MO: Personalized circulating tumor DNA assay for the detection of minimal residual disease in CRC patients after resection of metastases – Loupakis F, et al

Study objective

- To evaluate the prognostic utility of SignateraTM ctDNA (an mPCR and next-generation sequencing-based assay) in predicting progression in patients with mCRC after resection of metastases



Sampling

- ctDNA post-operative
- CT scan and ctDNA every 8–12 weeks

PRIMARY ENDPOINT

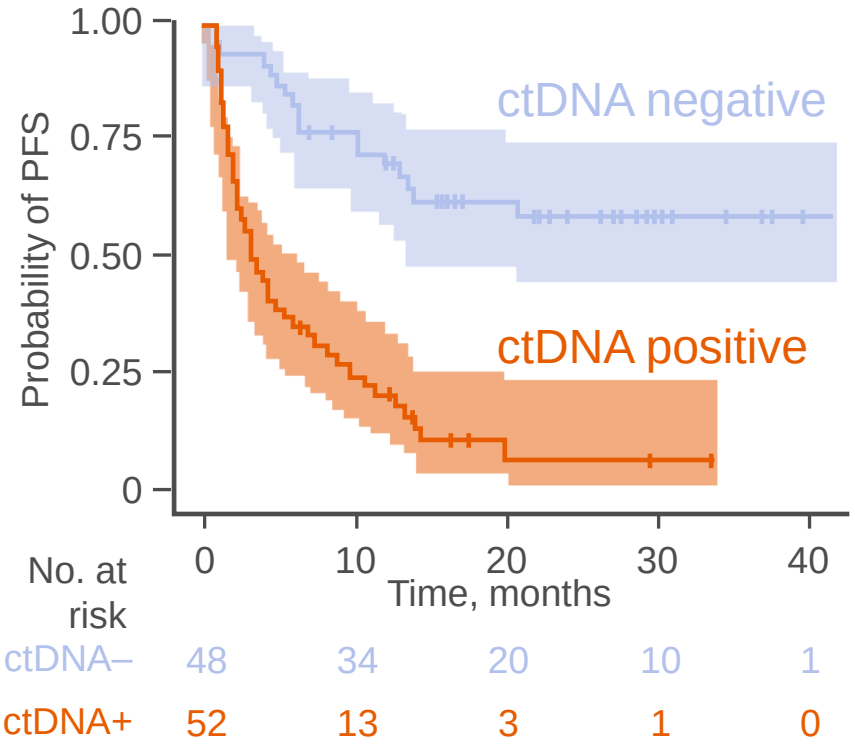
- PFS according to post-operative ctDNA status

Loupakis F, et al. Ann Oncol 2020;31(suppl):abstr 405MO

405MO: Personalized circulating tumor DNA assay for the detection of minimal residual disease in CRC patients after resection of metastases – Loupakis F, et al

Key results

Progression-free survival according to post-operative ctDNA status



Positive vs. negative
HR 4.6 (95%CI 2.6, 8.1); p<0.001

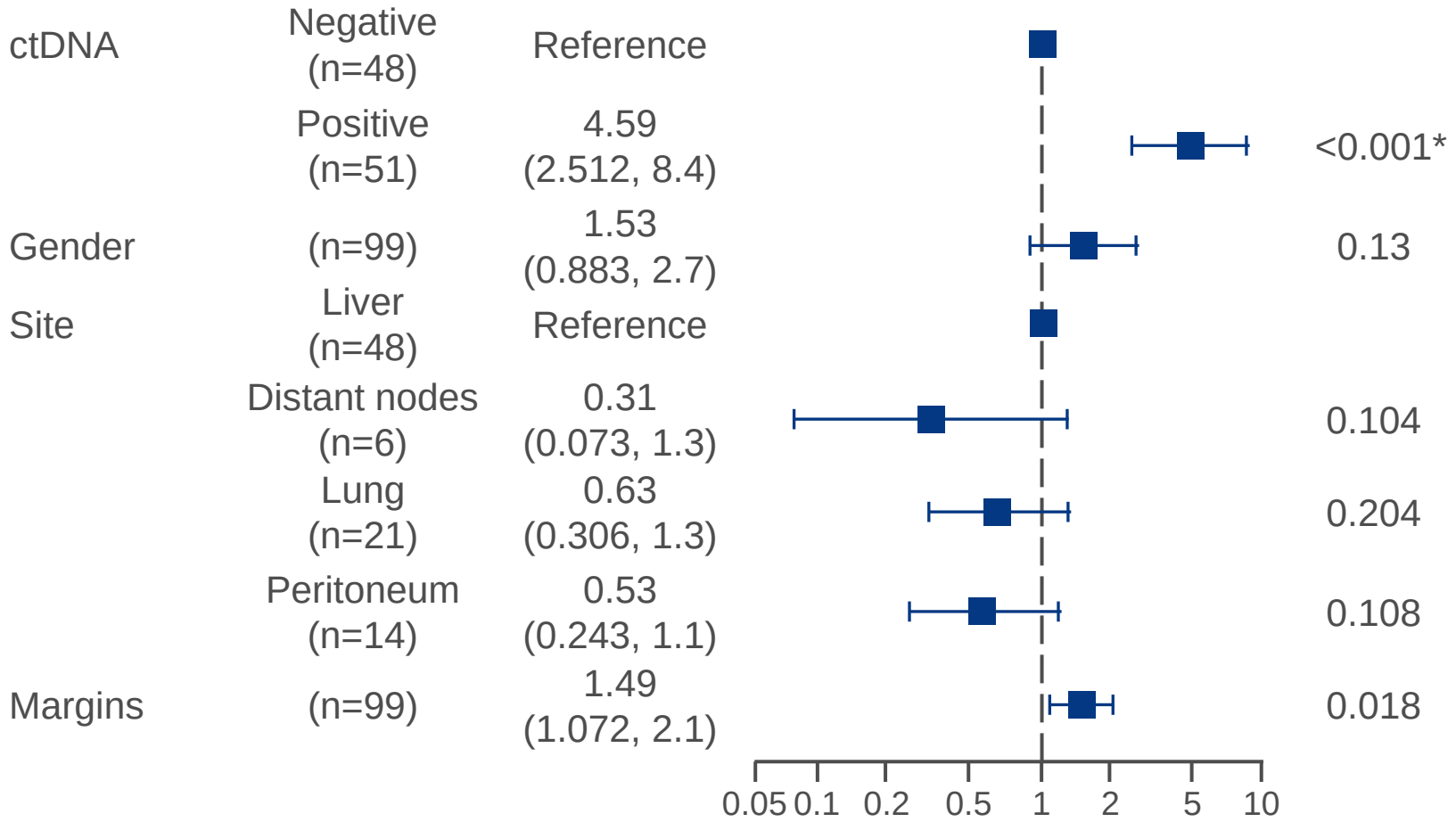
Median follow-up was 8.7 months
(95%CI 0.9, 42.2)

Loupakis F, et al. Ann Oncol 2020;31(suppl):abstr 405MO

405MO: Personalized circulating tumor DNA assay for the detection of minimal residual disease in CRC patients after resection of metastases – Loupakis F, et al

Key results (cont.)

Progression-free survival (multivariate analysis)



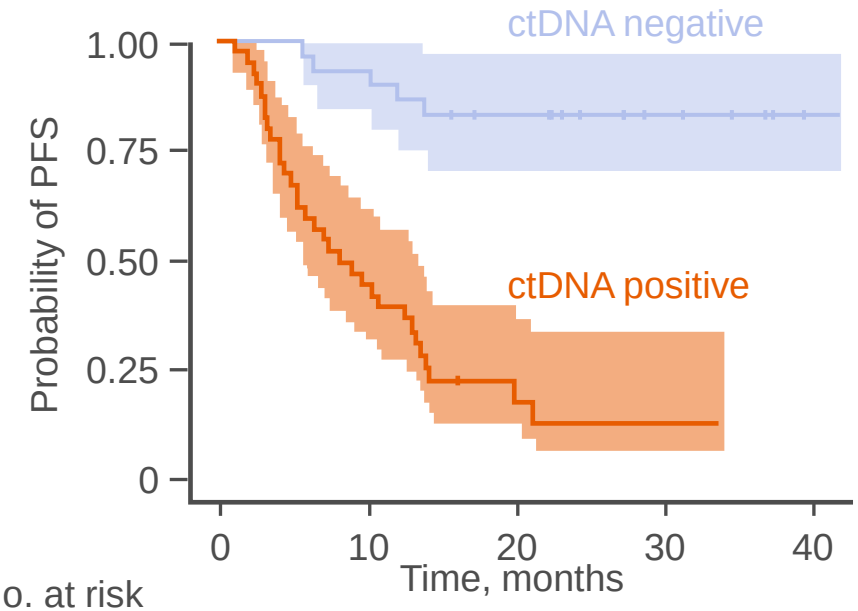
*No. of events: 62; global p-value (log-rank): 3.2177e–08
A/C: 479.32; Concordance index: 0.74

Loupakis F, et al. Ann Oncol 2020;31(suppl):abstr 405MO

405MO: Personalized circulating tumor DNA assay for the detection of minimal residual disease in CRC patients after resection of metastases – Loupakis F, et al

Key results (cont.)

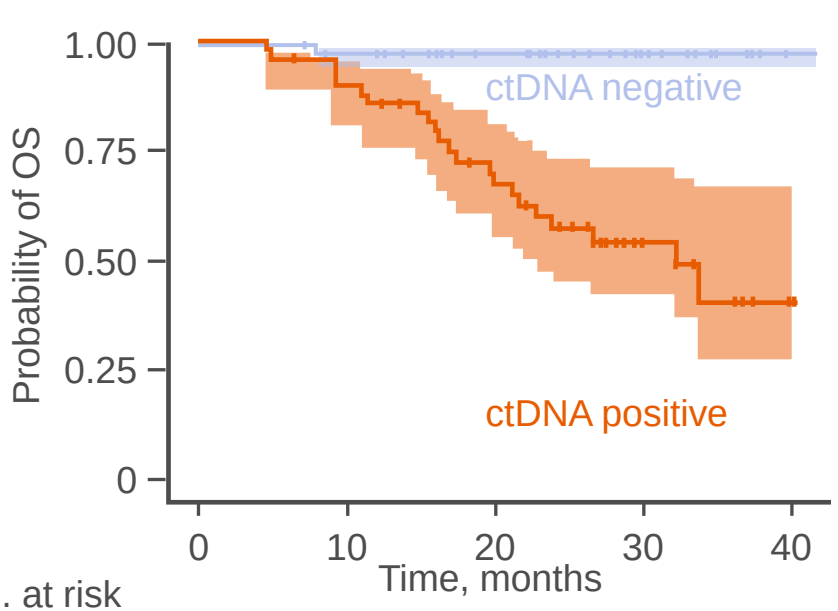
PFS (serial)[a]



No. at risk					
ctDNA–	29	27	18	10	1
ctDNA+	38	16	4	1	0

Positive vs. negative
HR 10 (95%CI 3.8, 26); p<0.001

OS (serial)[a]



No. at risk					
ctDNA–	48	44	30	16	2
ctDNA+	52	45	29	12	2

Positive vs. negative
HR 22 (95%CI 3.0, 166); p=0.002

[a] Exploratory analysis separated patients by ctDNA positivity at any time point.

Loupakis F, et al. Ann Oncol 2020;31(suppl):abstr 405MO

405MO: Personalized circulating tumor DNA assay for the detection of minimal residual disease in CRC patients after resection of metastases – Loupakis F, et al

Conclusions

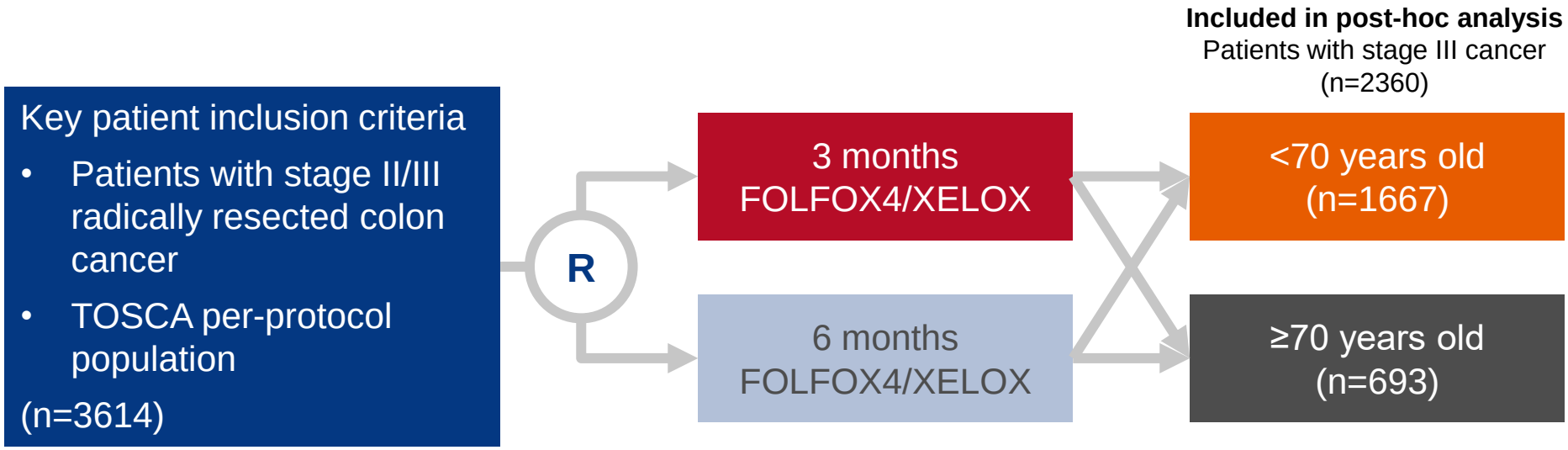
- **In patients with oligometastatic CRC undergoing surgery with curative intent, the SignateraTM assay was able to detect residual disease**
- **A significant reduction in PFS was associated with a ctDNA positive status post-surgery**

Loupakis F, et al. Ann Oncol 2020;31(suppl):abstr 405MO

399O: Oxaliplatin plus fluoropyrimidines as adjuvant therapy for colon cancer in elderly patients: a subgroup analysis from TOSCA trial – Rosati G, et al

Study objective

- To evaluate the impact of age (<70 vs ≥70 years old) on efficacy of and compliance to oxaliplatin-based adjuvant chemotherapy in patients with stage III colon cancer from both treatment arms of the TOSCA trial



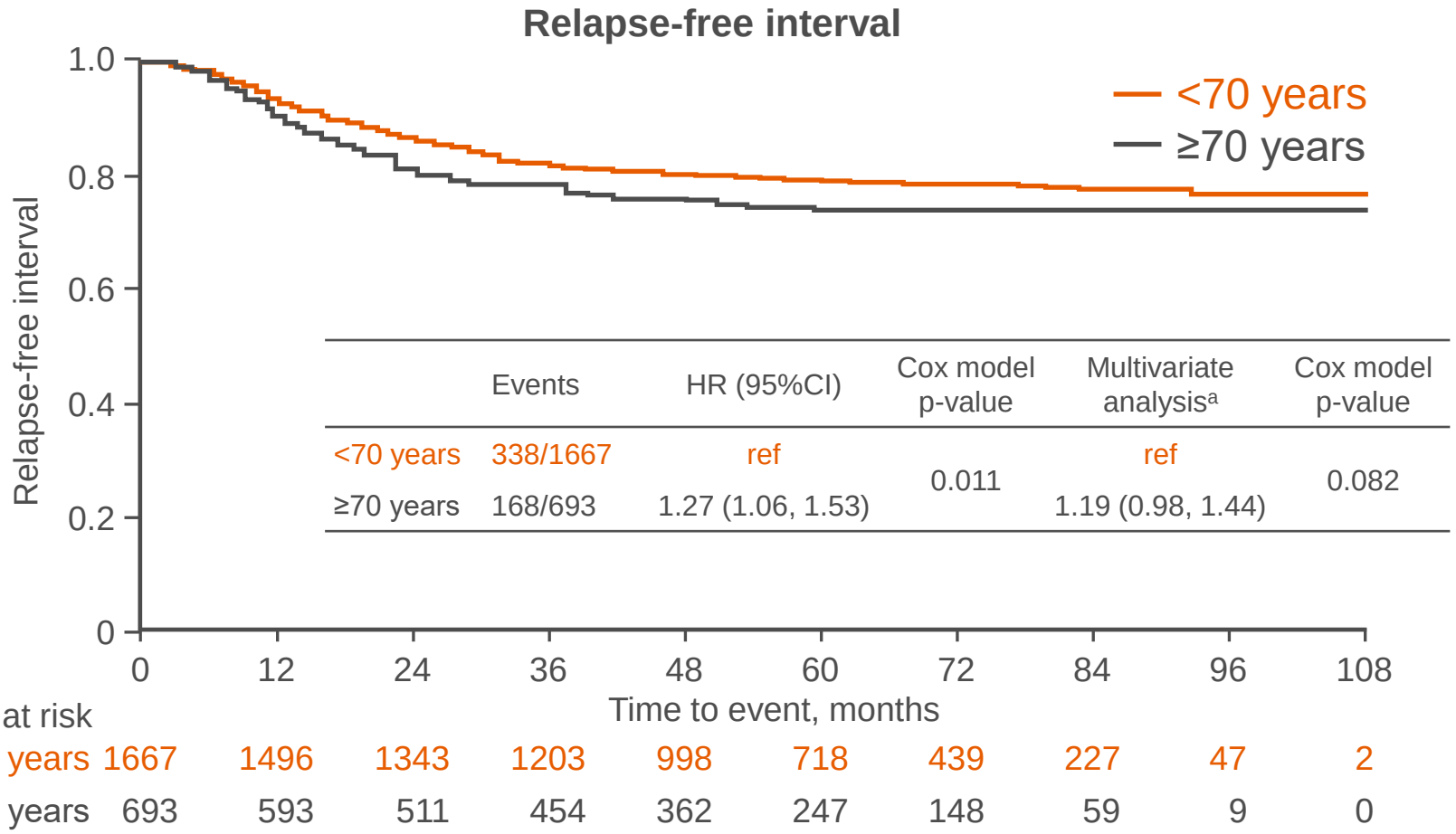
PRIMARY ENDPOINT

- Relapse-free interval

Rosati G, et al. Ann Oncol 2020;31(suppl):abstr 399O

399O: Oxaliplatin plus fluoropyrimidines as adjuvant therapy for colon cancer in elderly patients: a subgroup analysis from TOSCA trial – Rosati G, et al

Key results



	Events	HR (95%CI)	Cox model p-value	Multivariate analysis[a]	Cox model p-value
<70 years	338/1667	ref	0.011	ref	0.082
≥70 years	168/693	1.27 (1.06, 1.53)		1.19 (0.98, 1.44)	

[a] Adjusted for gender, ECOG PS, tumour site, clinical risk stage, grade, regimen, treatment duration and dose reduction.

Rosati G, et al. Ann Oncol 2020;31(suppl):abstr 399O

399O: Oxaliplatin plus fluoropyrimidines as adjuvant therapy for colon cancer in elderly patients: a subgroup analysis from TOSCA trial – Rosati G, et al

Key results (cont.)

Treatment compliance	<70 years (n=1667)	≥70 years (n=693)	Chi-square p-value
Mean treatment duration, weeks (median)	18.5 (15.1)	17.8 (14.9)	0.040
Treatment completed as allocated, n (%)	1344 (81)	512 (74)	
Treatment prematurely interrupted, n (%)	321 (19)	181 (26)	<0.001
Dose reduction, n (%)	685 (41)	321 (47)	0.018

Conclusion

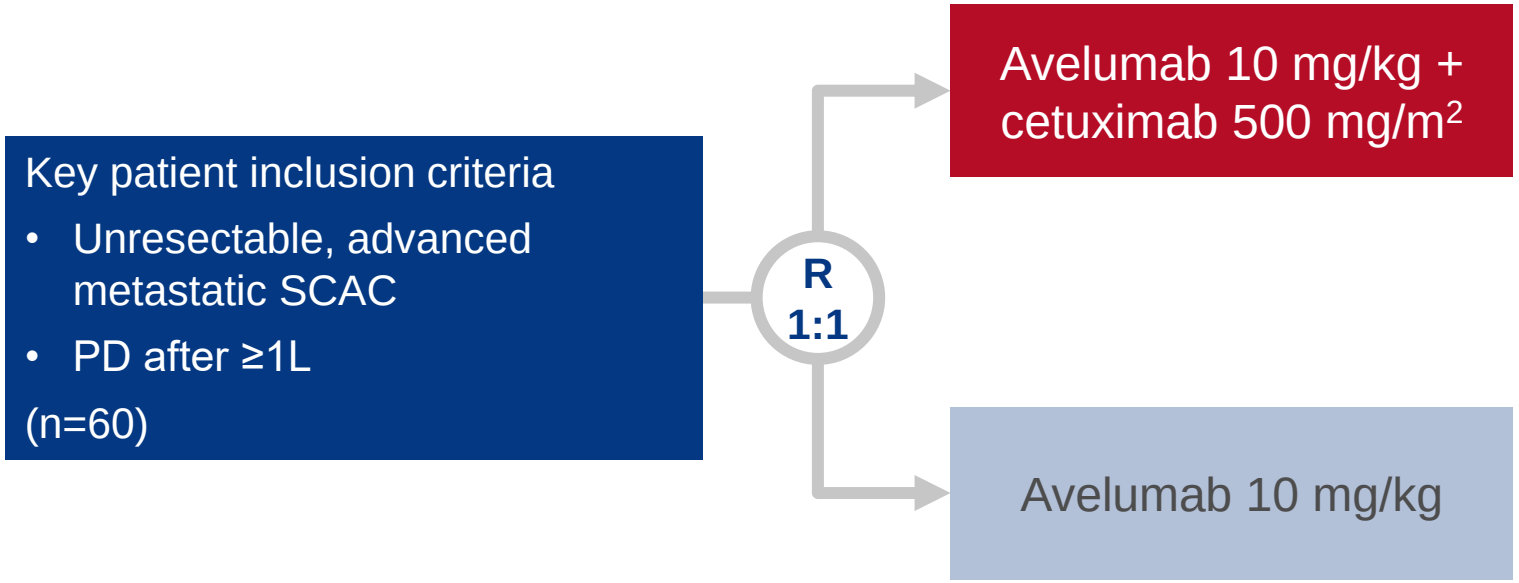
- **In elderly patients with colon cancer, there was a higher incidence of relapses in those aged ≥70 years compared with <70 years old (24.2% vs. 20.3%, p=0.033), although a multivariate analysis indicated that age did not have a significant impact on relapse-free survival**

Rosati G, et al. Ann Oncol 2020;31(suppl):abstr 399O

402MO: Final results of the CARACAS study: randomized phase 2 trial of avelumab alone or with cetuximab for unresectable, locally advanced or metastatic squamous cell anal carcinoma progressed to at least one line of treatment – Lonardi S, et al

Study objective

- To evaluate the safety and activity of avelumab alone or in combination with cetuximab in patients with previously treated advanced squamous cell anal carcinoma (SCAC)



PRIMARY ENDPOINT

- ORR (RECIST v1.1)

SECONDARY ENDPOINTS

- PFS, OS, safety

Response assessment at n=13 per arm: if at least 1 response per arm, recruit 17 additional patients.

Lonardi S, et al. Ann Oncol 2020;31(suppl):abstr 402MO

402MO: Final results of the CARACAS study: randomized phase 2 trial of avelumab alone or with cetuximab for unresectable, locally advanced or metastatic squamous cell anal carcinoma progressed to at least one line of treatment – Lonardi S, et al

Key results

	Avelumab + cetuximab (n=30)	Avelumab (n=30)
ORR, % (95%CI)	17 (6.3, 34.1)	10 (2.5, 27)
BOR, n (%)		
CR	0 (0)	0 (0)
PR	5 (17)	3 (10)
SD	12 (40)	12 (40)
PD	13 (43)	15 (50)
DCR, % (95%CI)	57 (42.4, 77.6)	50 (35.3, 71.3)
Median TTR, months (95%CI)	5.9 (2.1, NE)	5.7 (2.6, NE)
Median DoR, months (95%CI)	7.6 (2.0, NE)	5.5 (2.3, NE)
Median DCR, months (95%CI)	4.3 (2.0, NE)	4.2 (1.9, NE)
Median PFS, months (95%CI)	3.88 (2.07, 6.14)	2.05 (1.84, 5.52)

Median follow-up was 11 months (95%CI 10.1, 13.4).

Lonardi S, et al. Ann Oncol 2020;31(suppl):abstr 402MO

402MO: Final results of the CARACAS study: randomized phase 2 trial of avelumab alone or with cetuximab for unresectable, locally advanced or metastatic squamous cell anal carcinoma progressed to at least one line of treatment – Lonardi S, et al

Key results (cont.)

Grade 3–4 AEs, n (%)	Avelumab + cetuximab (n=30)	Avelumab (n=30)
Anaemia	1 (3)	-
Hypomagnesemia	1 (3)	-
Blood bilirubin increase	1 (3)	-
Fatigue	1 (3)	-
Skin disorders	2 (6)	-
AST/ALT increased	2 (6)	-

Conclusion

- **In patients with unresectable, locally advanced or metastatic SCAC, avelumab + cetuximab demonstrated encouraging antitumor activity with a manageable safety profile**

Lonardi S, et al. Ann Oncol 2020;31(suppl):abstr 402MO

403MO: Atezolizumab in combination with bevacizumab for patients with unresectable/metastatic anal cancer – Morris V, et al

Study objective

- To evaluate the safety and activity of atezolizumab in combination with bevacizumab in patients with metastatic squamous cell carcinoma of the anal canal (SCCA)

Key patient inclusion criteria
- Histologically confirmed incurable/metastatic SCCA
- ≥1 line of prior systemic therapy
- No prior immunotherapy
- ECOG PS 0–1

(n=20)

→ Atezolizumab 1200 mg + bevacizumab 7.5 mg/kg iv q3w → **PD/ toxicity/ withdrawal**

PRIMARY ENDPOINT

- ORR (RECIST v1.1)

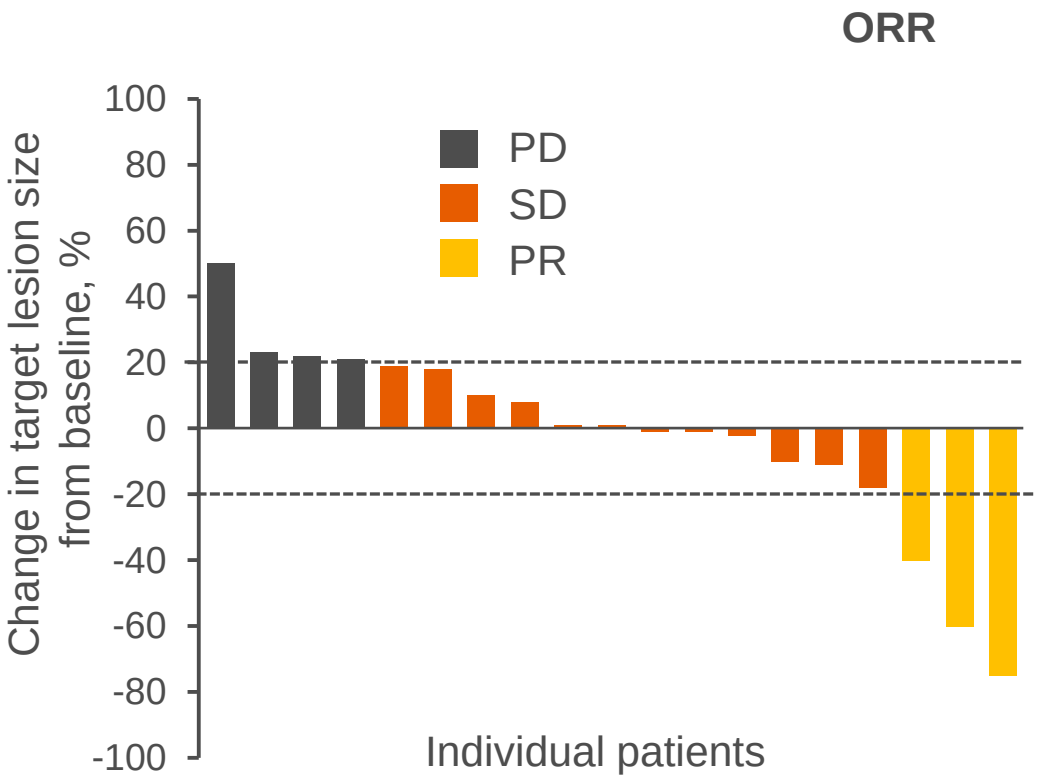
SECONDARY ENDPOINTS

- PFS, OS, safety

Morris V, et al. Ann Oncol 2020;31(suppl):abstr 403MO

403MO: Atezolizumab in combination with bevacizumab for patients with unresectable/metastatic anal cancer – Morris V, et al

Key results



ORR 11% (95%CI 1, 33)

n=19 evaluable	n (%)
PR	2 (11)
SD	11 (58)
PD	6 (32)

Median PFS: 4.1 months (95%CI 2.6, NA)
12-month PFS rate: 20% (95%CI 8, 52)

Median OS: 11.6 months (95%CI 9.5, 20)
12-month OS rate: 40% (95%CI 23, 71)

Morris V, et al. Ann Oncol 2020;31(suppl):abstr 403MO

403MO: Atezolizumab in combination with bevacizumab for patients with unresectable/metastatic anal cancer – Morris V, et al

Key results (cont.)

Grade 3–4 AEs, n (%)	n=20
Hyponatremia	4 (20)
Hypertension	2 (10)
Infection	2 (10)
MDS	1 (5)
Abdominal pain	1 (5)
Abscess	1 (5)
Lymphopenia	1 (5)
Neutropenia	1 (5)
Anaemia	1 (5)
Encephalopathy	1 (5)
Fistula	1 (5)
Hyperkalemia	1 (5)
Bowel perforation (grade 5)	1 (5)

Conclusion

- **In patients with unresectable SCCA, atezolizumab + bevacizumab demonstrated modest activity and was generally well-tolerated**

Morris V, et al. Ann Oncol 2020;31(suppl):abstr 403MO