

# GI SLIDE DECK 2021

Selected abstracts from:



**ESMO World Congress on Gastrointestinal  
Cancer 2021 Virtual Meeting**

30 June–3 July 2021



**ESMO Congress 2021**

16–21 September 2021

# 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 2021. This slide set specifically focuses on the **ESMO World Congress on Gastrointestinal Cancer 2021 Virtual Meeting** and **ESMO Congress 2021** and is available in English 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](mailto: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**

(ESDO Governing Board)

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**Thomas Gruenberger**

**Jean-Luc Van Laethem**  
**Ana-Maria Bucalau (Young Group)**  
**Pieter-Jan Cuyle (Young Group)**



european society of digestive oncology

# ESDO Medical Oncology Slide Deck

## Editors 2021

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# Glossary

1L	first-line	ECOG	Eastern Cooperative Oncology Group	(m)ITT	(modified) intent-to-treat	QoL	quality of life
2L	second-line			iv	intravenous	R	randomized
5FU	5-fluouracil	EGFR	epidermal growth factor receptor	KRAS	Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	R0/1	resection 0/1
AE	adverse event	Enco	encorafenib	LN	lymph node	RAF	rapidly accelerated fibrosarcoma
ALT	alanine aminotransferase	ESCC	esophageal squamous cell carcinoma	LV	leucovorin	RECIST	Response Evaluation Criteria In Solid Tumors
AST	aspartate aminotransferase			MAF	mutant allele fraction	RP2D	recommended phase 2 dose
Bev	bevacizumab	EU	European	mCRC	metastatic colorectal cancer	RoW	rest of world
BICR	blinded-independent central review	FAS	full analysis set	MEK	mitogen-activated protein kinase	RT	radiotherapy
bid	twice daily	FDR	false discovery rate-adjusted	mo	months	SBA	small bowel adenocarcinoma
Bini	binimatinib	FFPE	formalin-fixed, paraffin-embedded	mono	monotherapy	SD	stable disease
BCLC	Barcelona Clinic Liver Cancer	FOLFIRI	folinic acid + 5-fluouracil + irinotecan	MSI-H	high microsatellite instability	SoC	standard of care
BOR	best overall response	FP	5-fluouracil + cisplatin	MSS	microsatellite stability	SSI	surgical site infection
BRAF	v-raf murine sarcoma viral oncogene homolog B1	Fpy	fluoropyrimidine	NA	not available	TACE	transarterial chemoembolization
BW	body weight	(m)FOLFIRINOX	(modified) oxaliplatin + irinotecan + leucovorin + 5FU	nab-P	nab-paclitaxel	TARE	transarterial radioembolization
CA19-9	carbohydrate antigen 19-9	(m)FOLFOX	(modified) leucovorin + 5-fluorouracil + oxaliplatin	Nal-IRI	nal-irinotecan	T-DXd	trastuzumab deruxtecan
CAPOX	capecitabine + oxaliplatin		oxaliplatin + irinotecan + leucovorin + 5FU	NCCN	National Comprehensive Cancer Network	TEAE	treatment-emergent adverse event
CCR	completeness of cytoreduction	FOLFOXIRI	oxaliplatin + irinotecan + leucovorin + 5FU	NE	not evaluable/estimable	TMB	tumour mutational burden
Cet	cetuximab		gej	NET	neuroendocrine tumour	Torip	toripalimab
cfDNA	cell free DNA		gastro-esophageal junction	NGS	next generation sequencing	TPS	tumour proportion score
Chemo	chemotherapy	Gem	gemcitabine	NIVO	nivolumab	Trast	trastuzumab
CI	confidence interval	GGT	gamma0glutamyltransferase	NR	not reached	TRAE	treatment-related adverse event
Cis	cisplatin	GI	gastrointestinal	ORR	overall/objective response rate	TRG	tumour regression grade
combos	combination therapies	Gy	hepatocellular carcinoma	OR	odds ratio	TTFields	tumour treating fields
CPS	combined positive score	HCC	human epidermal growth factor receptor 2	(m)OS	(median) overall survival	(m)TTP	(median) time to progression
CR	complete response	HER2	hyperthermic intraperitoneal chemotherapy	PCR	pathological complete response	TTR	time to response
CRC	colorectal cancer		hazard ratio	PCI	peritoneal cancer index	ULN	upper limit of normal
CRS	cytoreductive surgery		health-related quality of life	PD	progressive disease	Vem	vemurafenib
CT	computed tomography	HIPEC	independent committee review	PDAC	pancreatic ductal adenocarcinoma	WBC	white blood cell
ctDNA	circulating tumour DNA	HR	immunohistochemistry	PD-(L)1	programmed death-(ligand) 1	WT	wild type
D	day	HRQoL	intraperitoneal	Pembro	pembrolizumab	XELOX	oxaliplatin + capecitabine
DCR	disease control rate	ICR	ipilimumab	(m)PFS	(median) progression-free survival		
ddPCR	droplet digital polymerase chain reaction	IHC	immune-related adverse event	PK	pharmacokinetics		
DFS	disease-free survival	Ip	in-situ hybridisation	PP	per protocol		
DMC	data monitoring committee	IPI	irAE	PR	partial response		
DMFS	distant metastases-free survival			PS	performance status		
dMMR	deficient mismatch repair			q(2/3/4/8)w	every (2/3/4/8) week(s)		
(m)DoR	(median) duration of response	ISH					

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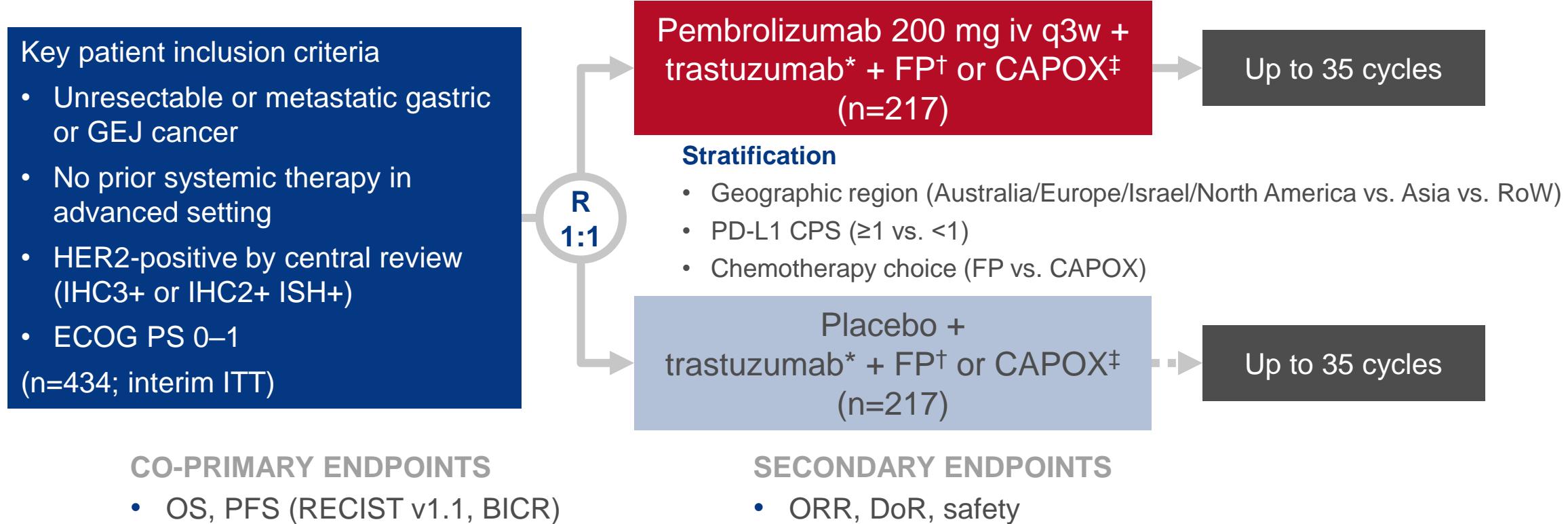
Note: To jump to a section, right click on the number and 'Open Hyperlink'

# **CANCERS OF THE OESOPHAGUS AND STOMACH**

# LBA-4: Initial data from the phase 3 KEYNOTE-811 study of trastuzumab and chemotherapy with or without pembrolizumab for HER2-positive metastatic gastric or gastroesophageal junction (G/GEJ) cancer – Janjigian YY, et al

## Study objective

- To evaluate the efficacy and safety of trastuzumab + chemotherapy with or without pembrolizumab in patients with HER2-positive metastatic gastric or GEJ cancer at an interim analysis of the KEYNOTE-811 study

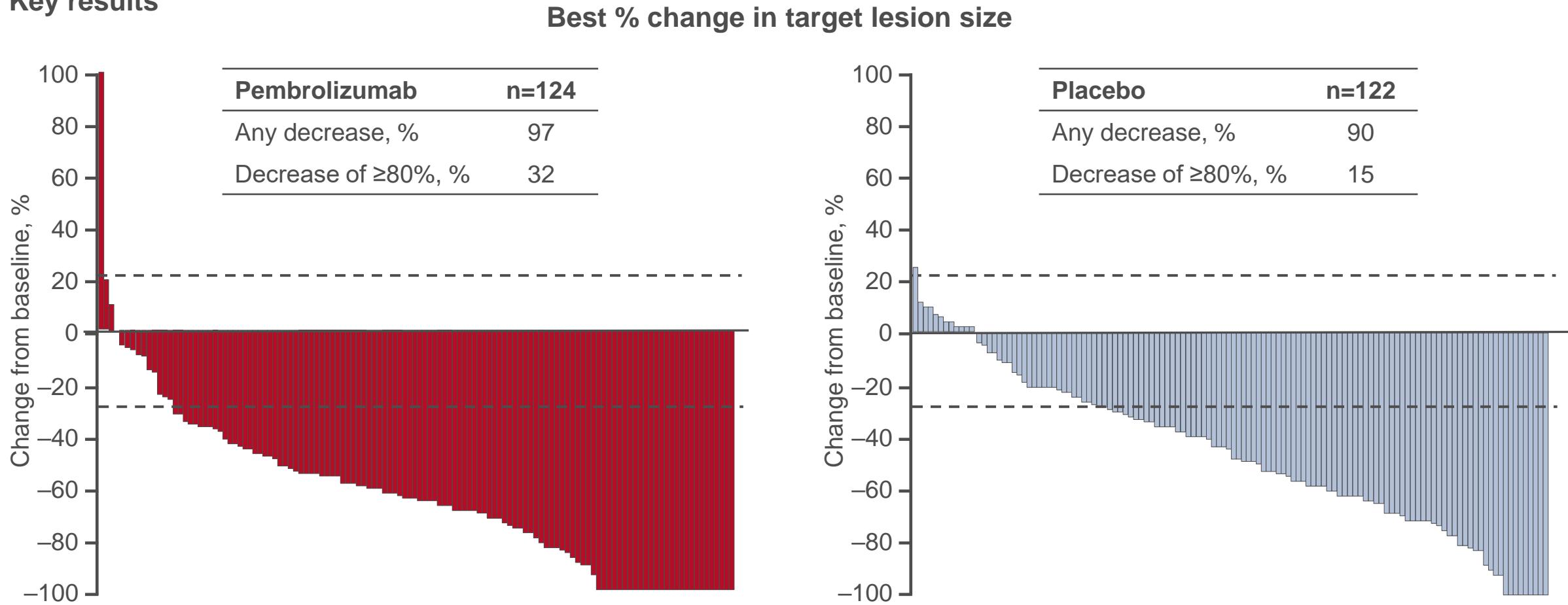


\*Trastuzumab 6 mg/kg iv q3w following an 8 mg/kg loading dose; †5FU 800 mg/m<sup>2</sup> iv D1–5 q3w + cisplatin 80 mg/m<sup>2</sup> iv q3w; ‡capecitabine 1000 mg/m<sup>2</sup> bid D1–14 q3w + oxaliplatin 130 mg/m<sup>2</sup> iv q3w

Janjigian YY, et al. Ann Oncol 2021;32(suppl):abstr LBA-4

# LBA-4: Initial data from the phase 3 KEYNOTE-811 study of trastuzumab and chemotherapy with or without pembrolizumab for HER2-positive metastatic gastric or gastroesophageal junction (G/GEJ) cancer – Janjigian YY, et al

## Key results



# LBA-4: Initial data from the phase 3 KEYNOTE-811 study of trastuzumab and chemotherapy with or without pembrolizumab for HER2-positive metastatic gastric or gastroesophageal junction (G/GEJ) cancer – Janjigian YY, et al

## Key results (cont.)

	Pembrolizumab (n=133)	Placebo (n=131)
ORR, % (95%CI)	74.4 (66.2, 81.6)	51.9 (43.0, 60.7)
ORR difference, % (95%CI); p-value	22.7 (11.2, 33.7); 0.00006	
DCR, % (95%CI)	96.2 (91.4, 98.8)	89.3 (82.7, 94.0)
Median DoR, mo (range)	10.6 (1.1+ to 16.5+)	9.5 (1.4+ to 15.4+)
DoR ≥6 months, %	70	61
BOR, n (%)		
CR	15 (11)	4 (3)
PR	84 (63)	64 (49)
SD	29 (22)	49 (37)
PD	5 (4)	7 (5)
NE	0	2 (2)
NA	0	5 (4)

	All-cause AEs	
	Pembrolizumab (n=217)	Placebo (n=216)
Any grade	211 (97)	212 (98)
Grade 3–5	124 (57)	124 (57)
Serious	68 (31)	83 (38)
Led to discontinuation	53 (24)	56 (26)
Led to death	7 (3)	10 (5)

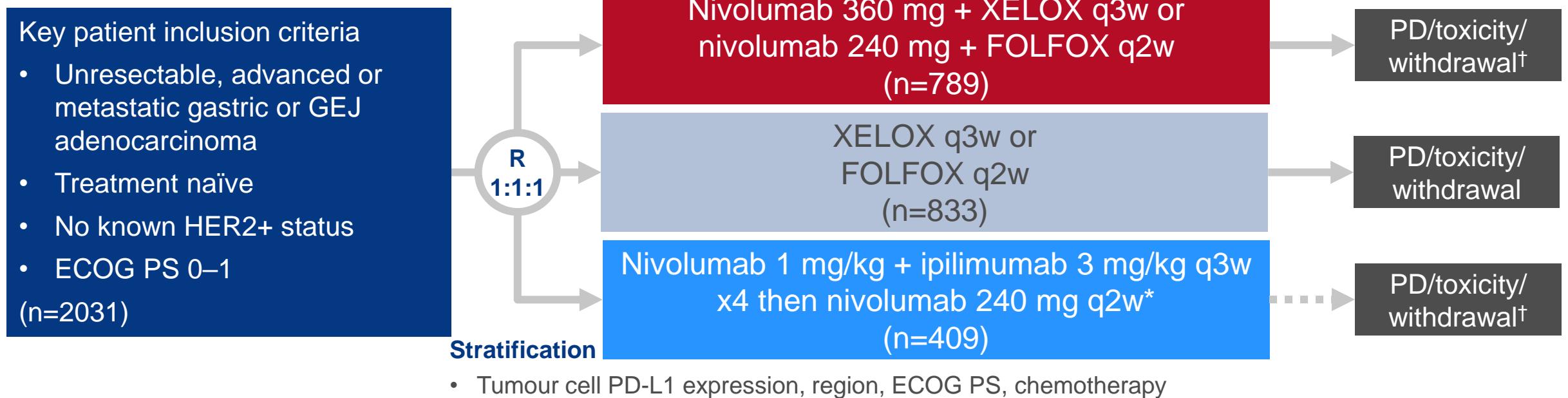
## Conclusions

- In patients with HER2-positive metastatic gastric or GEJ cancer, at interim analysis, pembrolizumab + trastuzumab + chemotherapy demonstrated promising and durable clinical responses and was generally well-tolerated

# LBA7: Nivolumab (NIVO) plus chemotherapy (chemo) or ipilimumab (IPI) vs chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer/esophageal adenocarcinoma (GC/GEJC/EAC): CheckMate 649 study – Janjigian YY, et al

## Study objective

- To evaluate the efficacy and safety of 1L nivolumab + chemotherapy or ipilimumab in patients with advanced gastric or GEJ adenocarcinoma in the CheckMate 649 study



## CO-PRIMARY ENDPOINTS

- OS, PFS (BICR, PD-L1 CPS  $\geq 5$ )

## SECONDARY ENDPOINTS (HIERACHICAL)

- OS (PD-L1 CPS  $\geq 1$ , all randomized patients)

XELOX: oxaliplatin 130 mg/m<sup>2</sup> iv D1 + capecitabine 1000 mg/m<sup>2</sup> bid D1–14

FOLFOX: oxaliplatin 85 mg/m<sup>2</sup> + leucovorin 400 mg/m<sup>2</sup> + FU 400 mg/m<sup>2</sup> iv D1 & FU 1200 mg/m<sup>2</sup> iv D1–2

\*Unless consented to treatment beyond progression for nivolumab + chemotherapy or ipilimumab;

†nivolumab + ipilimumab arm stopped early based on DMC recommendation

Janjigian YY, et al. Ann Oncol 2021;32(suppl):abstr LBA7

# LBA7: Nivolumab (NIVO) plus chemotherapy (chemo) or ipilimumab (IPI) vs chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer/esophageal adenocarcinoma (GC/GEJC/EAC): CheckMate 649 study – Janjigian YY, et al

## Key results

	Nivolumab + chemotherapy	Chemotherapy		Nivolumab + ipilimumab	Chemotherapy
<b>PD-L1 CPS ≥5, n</b>	473	482	<b>PD-L1 CPS ≥5, n</b>	234	239
mOS, mo (95%CI)	14.4 (13.1, 16.2)	11.1 (10.0, 12.1)	mOS, mo (95%CI)	11.2 (9.2, 13.4)	11.6 (10.1, 12.7)
HR (95%CI)	0.70 (0.61, 0.81)		HR (95%CI)	0.89 (0.71, 1.10); p=0.2302	
mPFS, mo (95%CI)	8.1 (7.0, 9.2)	6.1 (5.6, 6.9)	mPFS, mo (95%CI)	2.8 (2.6, 4.0)	6.3 (5.6, 7.1)
HR (95%CI)	0.70 (0.60, 0.81)		HR (95%CI)	1.42 (1.14, 1.76)	
mDoR, mo (95%CI)	9.7 (8.2, 12.4)	7.0 (5.6, 7.9)	mDoR, mo (95%CI)	13.2 (8.3, 18.3)	6.9 (5.2, 7.6)
<b>All randomized, n</b>	789	792	<b>All randomized, n</b>	409	404
mOS, mo (95%CI)	13.8 (12.4, 14.5)	11.6 (10.9, 12.5)	mOS, mo (95%CI)	11.7 (9.6, 13.5)	11.8 (11.0, 12.7)
HR (95%CI)	0.79 (0.71, 0.88)		HR (95%CI)	0.91 (0.77, 1.07)	
mPFS, mo (95%CI)	7.7 (7.1, 8.6)	6.9 (6.7, 7.2)	mPFS, mo (95%CI)	2.8 (2.6, 3.6)	7.1 (6.9, 8.2)
HR (95%CI)	0.79 (0.70, 0.89)		HR (95%CI)	1.66 (1.40, 1.95)	
mDoR, mo (95%CI)	8.5 (7.7, 10.2)	6.9 (5.8, 7.2)	mDoR, mo (95%CI)	13.8 (9.4, 17.7)	6.8 (5.6, 7.2)

## LBA7: Nivolumab (NIVO) plus chemotherapy (chemo) or ipilimumab (IPI) vs chemo as first-line (1L) treatment for advanced gastric cancer/gastroesophageal junction cancer/esophageal adenocarcinoma (GC/GEJC/EAC): CheckMate 649 study – Janjigian YY, et al

### Key results (cont.)

Grade 3/4 TRAEs, n (%)	Nivolumab + chemotherapy (n=782)	Chemotherapy (n=767)	Nivolumab + ipilimumab (n=403)	Chemotherapy (n=389)
Any	471 (60)	344 (45)	155 (38)	180 (46)
Serious	133 (17)	77 (10)	93 (23)	45 (12)
Led to discontinuation	141 (18)	70 (9)	68 (17)	37 (10)
Led to death	16 (2)	4 (<1)	10 (2)	3 (<1)

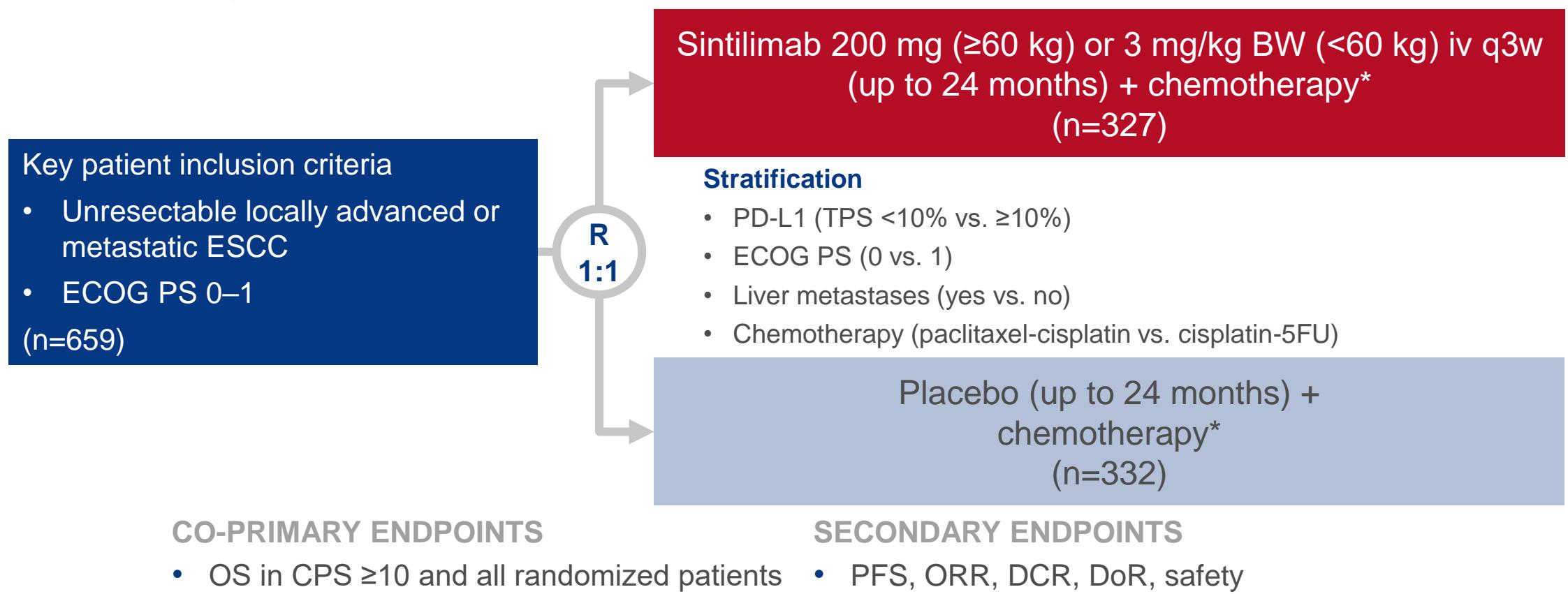
### Conclusions

- In patients advanced gastric or GEJ adenocarcinoma, 1L nivolumab + chemotherapy continued to provide improvements in survival and other outcomes compared with chemotherapy alone and no new safety signals were reported

# LBA52: Sintilimab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced or metastatic esophageal squamous cell cancer: first results of the phase 3 ORIENT-15 study – Shen L, et al

## Study objective

- To evaluate the efficacy and safety of 1L sintilimab + chemotherapy in patients with advanced or metastatic ESCC in the ORIENT-15 study

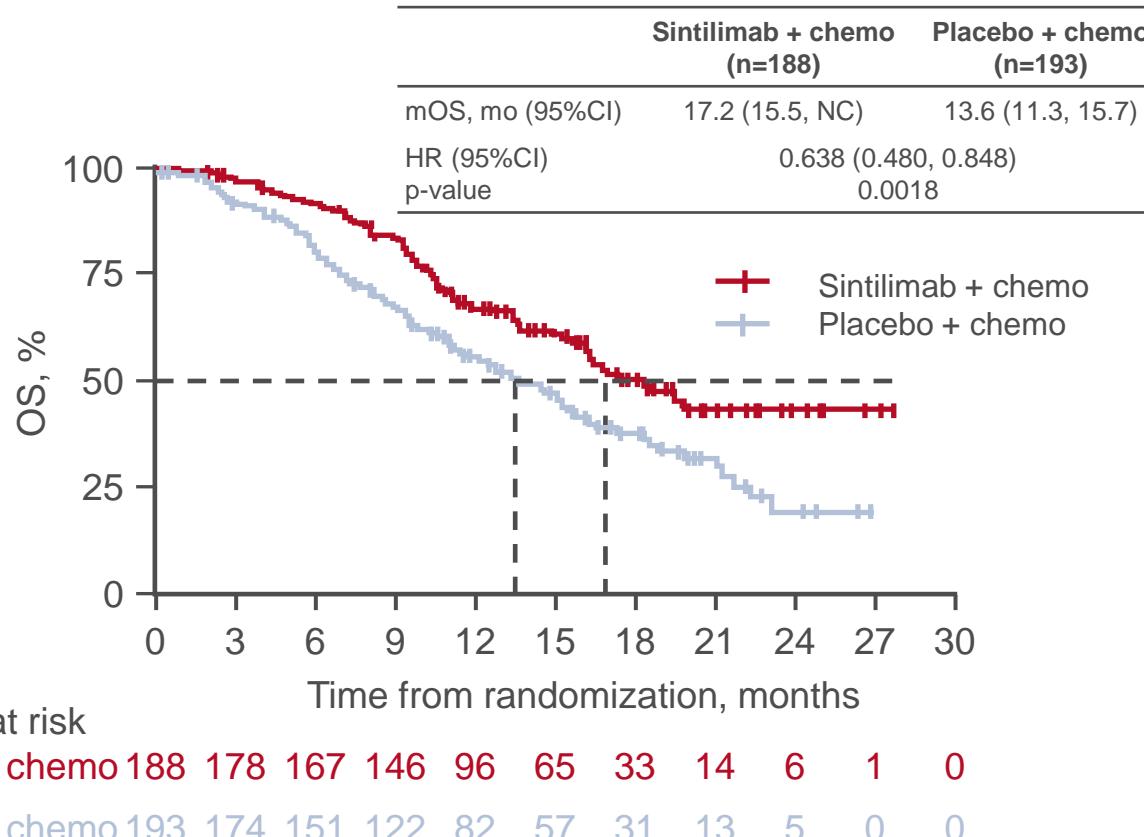


\*Paclitaxel 175 mg/m<sup>2</sup> + cisplatin 75 mg/m<sup>2</sup> or cisplatin 75 mg/m<sup>2</sup> + 5FU 800 mg/m<sup>2</sup> D1–5  
for a maximum of 6 cycles

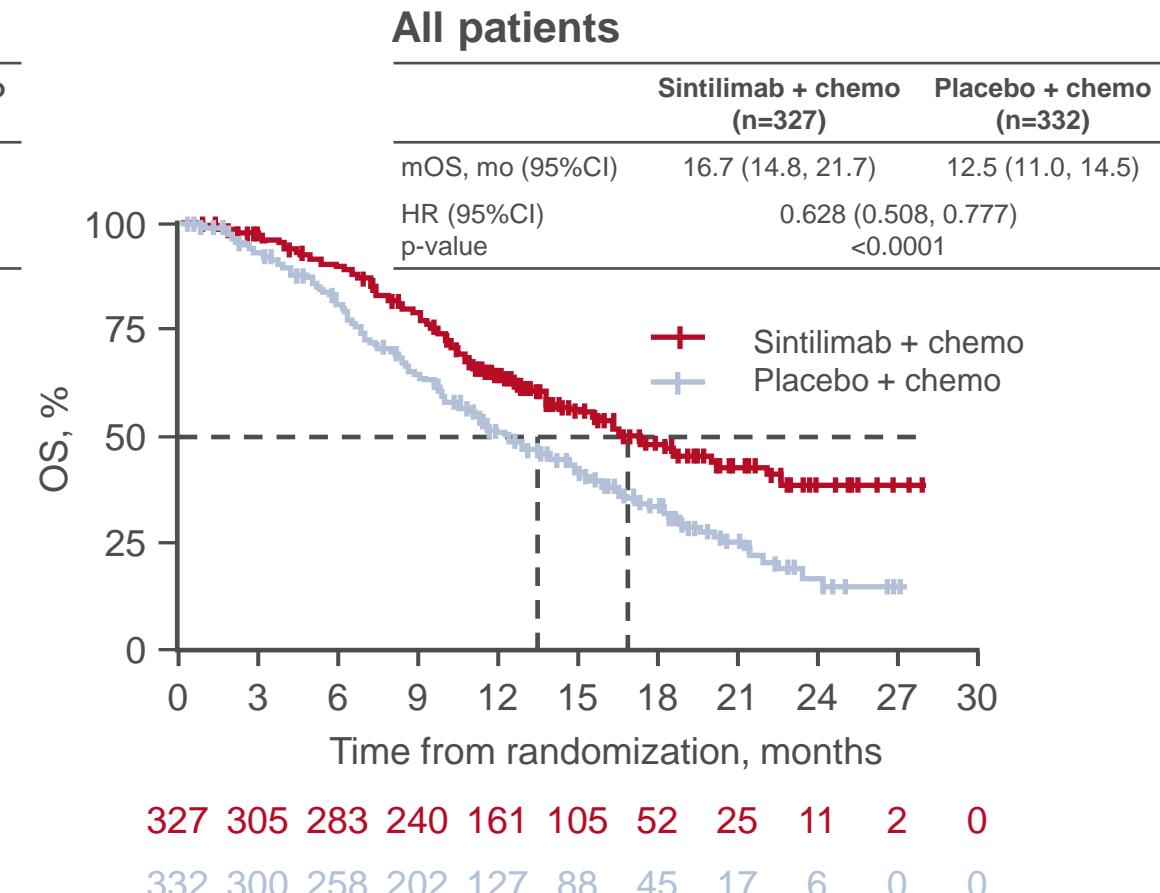
# LBA52: Sintilimab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced or metastatic esophageal squamous cell cancer: first results of the phase 3 ORIENT-15 study – Shen L, et al

## Key results

### Overall survival PD-L1 CPS $\geq 10$



### All patients



# LBA52: Sintilimab plus chemotherapy versus chemotherapy as first-line therapy in patients with advanced or metastatic esophageal squamous cell cancer: first results of the phase 3 ORIENT-15 study – Shen L, et al

## Key results (cont.)

	Sintilimab + chemo	Placebo + chemo
PD-L1 CPS ≥10, n	188	193
mPFS, mo (95%CI)	8.3 (6.9, 12.4)	6.4 (5.5, 6.9)
HR (95%CI); p-value	0.580 (0.449, 0.749); <0.0001	
All patients, n	327	332
mPFS, mo (95%CI)	7.2 (7.0, 9.6)	5.7 (5.5, 6.8)
HR (95%CI); p-value	0.558 (0.461, 0.676); <0.0001	
ORR, n/N (%)	216/327 (66.1)	151/332 (45.5)
Difference (95%CI); p-value	20.2 (12.9, 27.6); <0.0001	
Response, n	216	151
mDoR, mo (95%CI)	9.7 (7.1, 13.7)	6.9 (5.6, 7.2)
HR (95%CI)	0.616 (0.473, 0.803)	

TRAEs, n (%)	Sintilimab + chemo (n=327)	Placebo + chemo (n=332)
Any	321 (98.2)	326 (98.2)
Grade ≥3	196 (59.9)	181 (54.5)
Serious	90 (27.5)	68 (20.5)
Led to discontinuation	68 (20.8)	41 (12.3)
Led to death	9 (2.8)	6 (1.8)

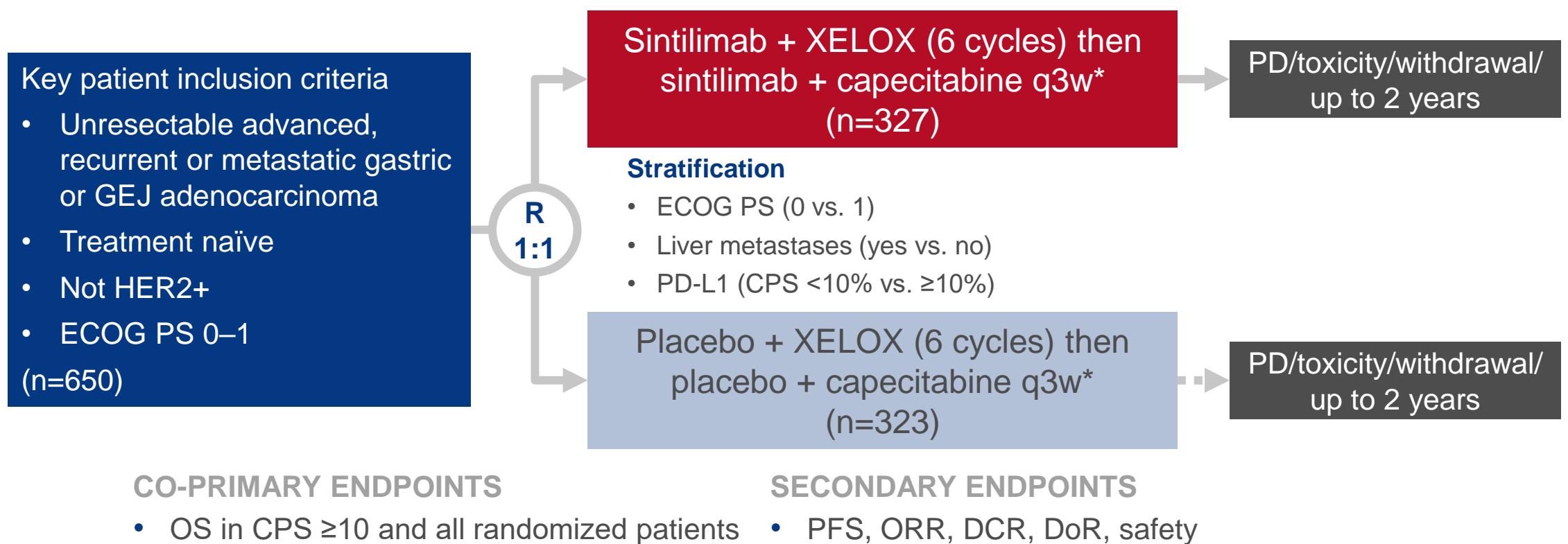
## Conclusions

- In patients with advanced or metastatic ESCC, 1L sintilimab + chemotherapy demonstrated significant survival benefit over chemotherapy alone regardless of PD-L1 expression level and no new safety signals were observed

# LBA53: Sintilimab plus chemotherapy (chemo) versus chemo as first-line treatment for advanced gastric or gastroesophageal junction (G/GEJ) adenocarcinoma (ORIENT-16): first results of a randomized, double-blind, phase 3 study – Xu J, et al

## Study objective

- To evaluate the efficacy and safety of 1L sintilimab + chemotherapy in patients with gastric or GEJ adenocarcinoma in the ORIENT-16 study

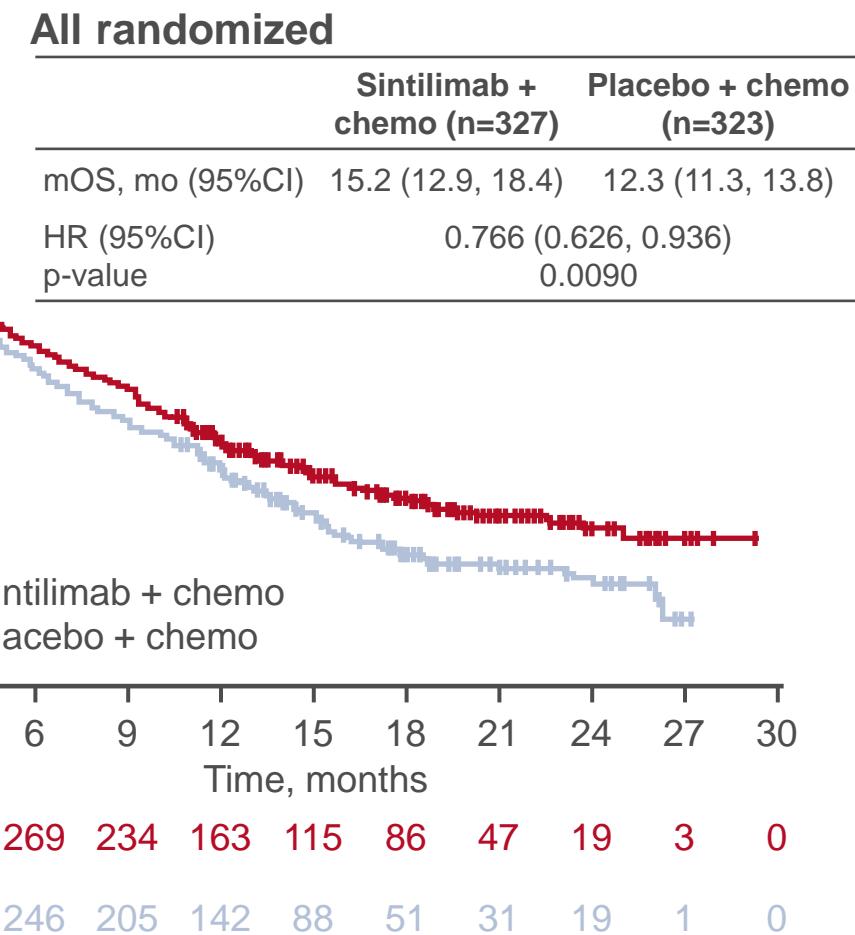
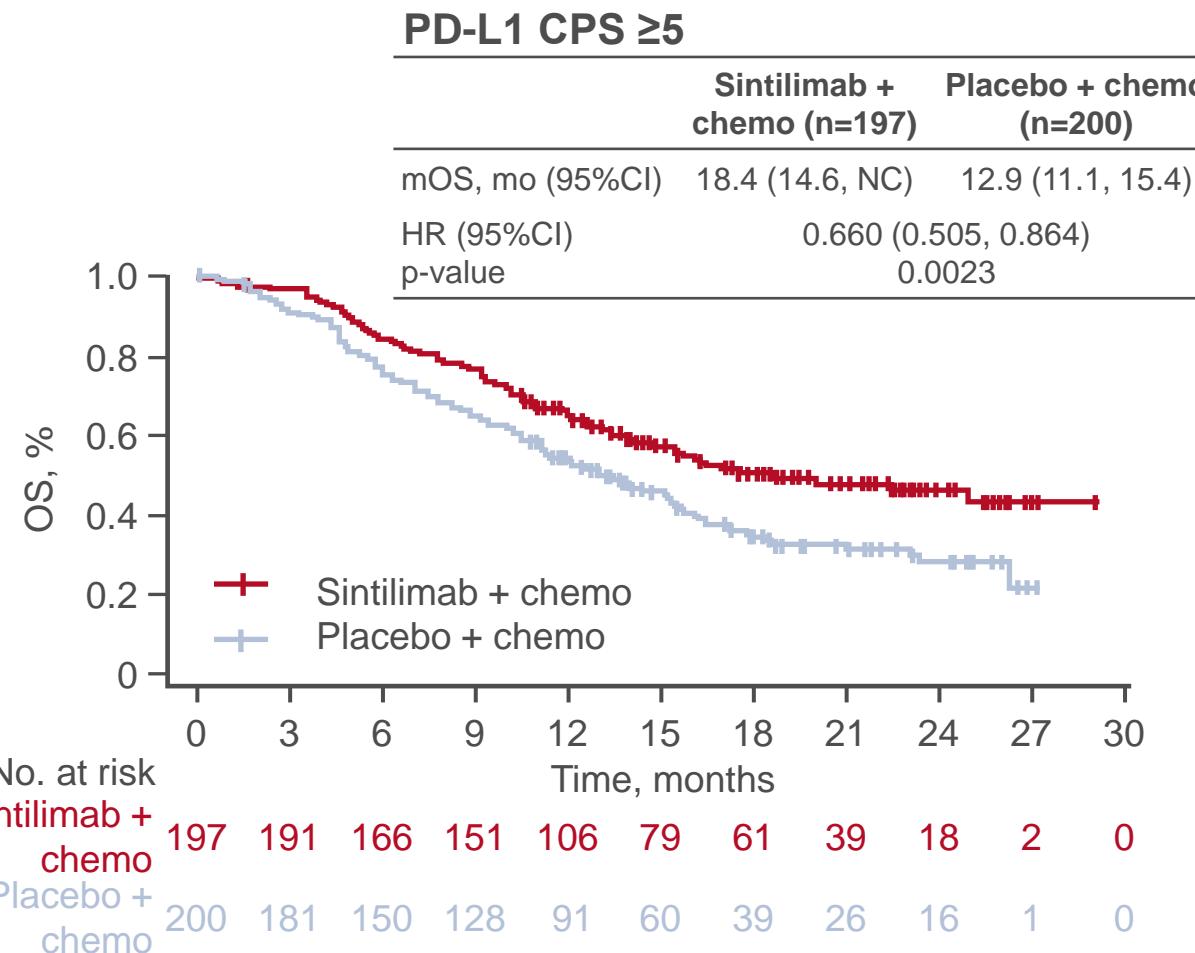


\*Sintilimab 3 mg/kg BW <60 kg or 200 mg ≥60 kg; oxaliplatin 130 mg/m<sup>2</sup>; capecitabine 1000 mg/m<sup>2</sup> bid D1–14

# LBA53: Sintilimab plus chemotherapy (chemo) versus chemo as first-line treatment for advanced gastric or gastroesophageal junction (G/GEJ) adenocarcinoma (ORIENT-16): first results of a randomized, double-blind, phase 3 study – Xu J, et al

## Key results

### Overall survival



# LBA53: Sintilimab plus chemotherapy (chemo) versus chemo as first-line treatment for advanced gastric or gastroesophageal junction (G/GEJ) adenocarcinoma (ORIENT-16): first results of a randomized, double-blind, phase 3 study – Xu J, et al

## Key results (cont.)

	Sintilimab + chemo	Placebo + chemo
PD-L1 CPS ≥10, n	197	200
mPFS, mo (95%CI)	7.7 (6.9, 9.7)	5.8 (5.5, 6.9)
HR (95%CI); p-value	0.628 (0.489, 0.805); 0.0002	
All patients, n	327	323
mPFS, mo (95%CI)	7.1 (6.9, 8.5)	5.7 (5.5, 6.9)
HR (95%CI); p-value	0.636 (0.525, 0.771); <0.0001	
ORR, % (95%CI)	58.2 (52.3, 64.2)	48.4 (42.3, 54.6)
Response, n	152	123
Events, n (%)	75 (49.3)	93 (75.6)
mDoR, mo (95%CI)	9.8 (8.3, 17.4)	7.0 (5.5, 8.3)

TRAEs, n (%)	Sintilimab + chemo (n=328)	Placebo + chemo (n=320)
Any	319 (97.3)	308 (96.3)
Grade ≥3	196 (59.8)	168 (52.5)
Serious	86 (26.2)	70 (21.9)
Led to discontinuation	38 (11.6)	25 (7.8)
Led to interruption	245 (74.7)	223 (69.7)
Led to death	6 (1.8)	2 (0.6)

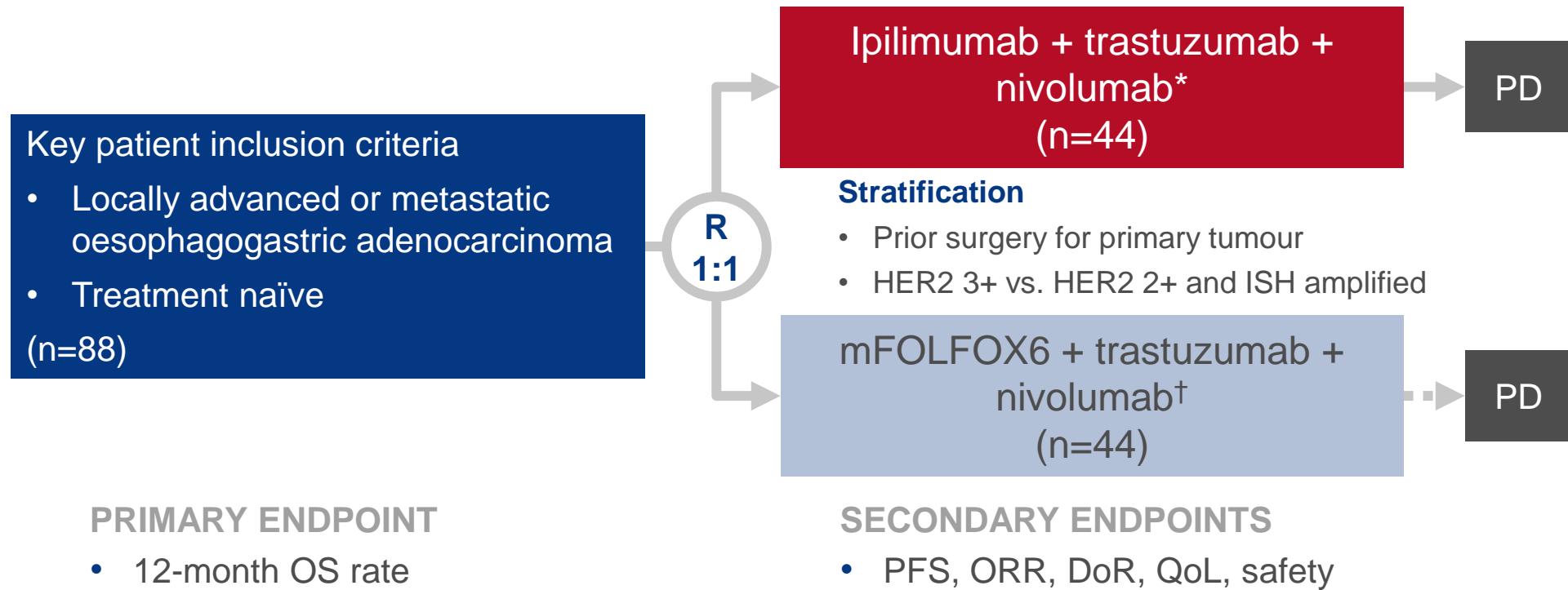
## Conclusions

- In patients with advanced gastric or GEJ adenocarcinoma, 1L sintilimab + chemotherapy demonstrated significant survival benefit over chemotherapy alone and had a manageable safety profile

# LBA54: Ipilimumab or FOLFOX in combination with nivolumab and trastuzumab in previously untreated HER2 positive locally advanced or metastatic esophagogastric adenocarcinoma (EGA) – results of the randomized phase 2 INTEGA trial (AIO STO 0217) – Stein A, et al

## Study objective

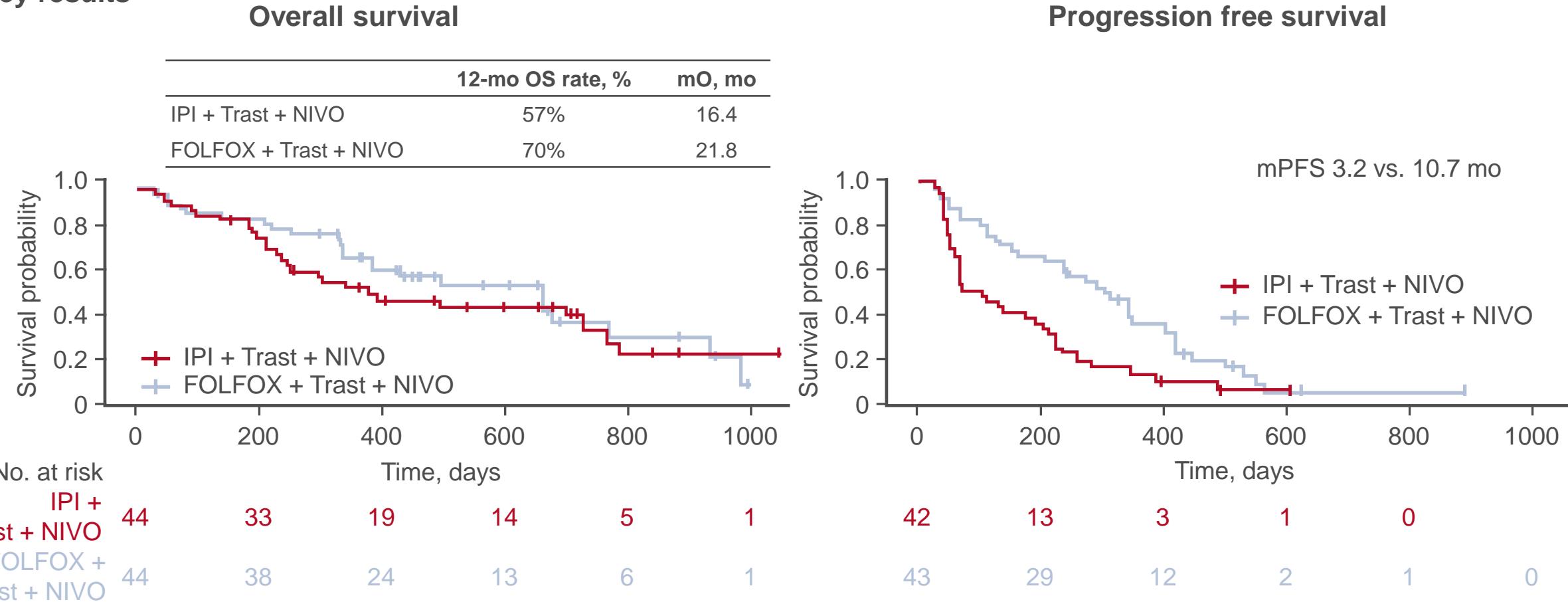
- To evaluate the efficacy and safety of 1L ipilimumab or mFOLFOX6 combined with trastuzumab + nivolumab in patients with HER2+ locally advanced or metastatic oesophagogastric adenocarcinoma in the INTEGA study



\*Ipilimumab 3 mg/kg + trastuzumab 6 mg/kg (loading dose 8 mg/kg) + nivolumab 1 mg/kg q3w (weeks 1–12) then trastuzumab 4 mg/kg + nivolumab 240 mg q2w; †oxaliplatin 85 mg/m<sup>2</sup> + 5FU 400 mg/m<sup>2</sup> iv bolus + folinic acid 400 mg/m<sup>2</sup> + 5FU 2400 mg/m<sup>2</sup> 46 h iv + trastuzumab 4 mg/kg (loading dose 6 mg/kg) + nivolumab 240 mg q2w

**LBA54: Ipilimumab or FOLFOX in combination with nivolumab and trastuzumab in previously untreated HER2 positive locally advanced or metastatic esophagogastric adenocarcinoma (EGA) – results of the randomized phase 2 INTEGA trial (AIO STO 0217)**  
**– Stein A, et al**

**Key results**



# LBA54: Ipilimumab or FOLFOX in combination with nivolumab and trastuzumab in previously untreated HER2 positive locally advanced or metastatic esophagogastric adenocarcinoma (EGA) – results of the randomized phase 2 INTEGA trial (AIO STO 0217) – Stein A, et al

## Key results (cont.)

	ITT		CPS ≥1		CPS ≥5		HER2+ central		Grade ≥3 TRAEs occurring in ≥10%, n (%)	Ipilimumab + Trast + NIVO (n=44)	FOLFOX + Trast + NIVO (n=43)
	IPI (n=44)	FOLFOX (n=44)	IPI (n=31)	FOLFOX (n=28)	IPI (n=24)	FOLFOX (n=22)	IPI (n=40)	FOLFOX (n=36)			
ORR, %	32	56	36	63	33	67	35	63	Any	20 (46)	29 (67)
mPFS, mo	3.2	10.7	2.2	10.7	2.2	11.0	3.4	10.7	Diarrhoea	6 (14)	2 (5)
12-mo PFS rate, %	15	37	14	33	7	38	17	36	Anaemia	5 (11)	3 (7)
mDoR, mo	5.8	9.2	-	-	-	-	-	-	Infection	5 (11)	7 (16)
mOS, mo	16.4	21.8	16.4	21.6	12.5	21.6	16.4	22.4	Fatigue	3 (7)	6 (14)
12-mo OS rate, %	57	70	54	71	53	72	58	74	Leukopenia	2 (5)	10 (23)
									Neuropathy	0	5 (11)

## Conclusions

- In patients with HER2+ locally advanced or metastatic oesophagogastric adenocarcinoma, both 1L ipilimumab or FOLFOX combined with trastuzumab + nivolumab were feasible, although the FOLFOX arm demonstrated a higher 12-month OS rate than the ipilimumab arm

# LBA55: Primary analysis of a phase 2 single-arm trial of trastuzumab deruxtecan (T-DXd) in Western patients (pts) with HER2-positive (HER2+) unresectable or metastatic gastric or gastroesophageal junction (GEJ) cancer who progressed on or after a trastuzumab-containing regimen – Van Cutsem E, et al

## Study objective

- To evaluate the efficacy and safety of trastuzumab deruxtecan in patients with HER2+ unresectable or metastatic gastric or GEJ cancer who had progressed on or after a trastuzumab-containing regimen in the DESTINY-Gastric02 study

### Key patient inclusion criteria

- Unresectable or metastatic gastric or GEJ cancer
- HER2+ (IHC3+ or IHC2+/ISH+)  
after progression on 1L  
trastuzumab-containing regimen
- ECOG PS 0–1  
(n=79)

T-DXd 6.4 mg/kg q3w

### PRIMARY ENDPOINT

- ORR (ICR)

### SECONDARY ENDPOINTS

- PFS, OS, DoR, safety

# LBA55: Primary analysis of a phase 2 single-arm trial of trastuzumab deruxtecan (T-DXd) in Western patients (pts) with HER2-positive (HER2+) unresectable or metastatic gastric or gastroesophageal junction (GEJ) cancer who progressed on or after a trastuzumab-containing regimen – Van Cutsem E, et al

## Key results

	n=79		n=79
ORR, n (%) [95%CI]	30 (38) [27.3, 49.6]	TRAEs, n (%)	
BOR, n (%)		Any	74 (93.7)
CR	3 (3.8)	Grade ≥3	21 (26.6)
PR	27 (34.2)	Serious	8 (10.1)
SD	34 (43.0)	Led to discontinuation	7 (8.9)
PD	13 (16.5)	Led to dose reduction	15 (19.0)
NE	2 (2.5)	Led to death	1 (1.3)
mDoR, mo (95%CI)	8.1 (4.1, NE)		
DCR, n (%) [95%CI]	64 (81.0) [70.6, 89.0]		
mTTR, mo (95%CI)	1.4 (1.4, 2.6)		
mPFS, mo (95%CI)	5.5 (4.2, 7.3)		
Median follow-up, mo (range)	5.7 (0.7–15.2)		

## Conclusions

- In patients with HER2+ unresectable or metastatic gastric or GEJ cancer, 2L trastuzumab deruxtecan demonstrated encouraging activity with durable responses and a safety profile comparable with previous findings

# O-15: Randomized, phase 3 study of second-line tislelizumab vs chemotherapy in advanced or metastatic esophageal squamous cell carcinoma (RATIONALE 302) in the overall population and Europe/North America subgroup – Ajani J, et al

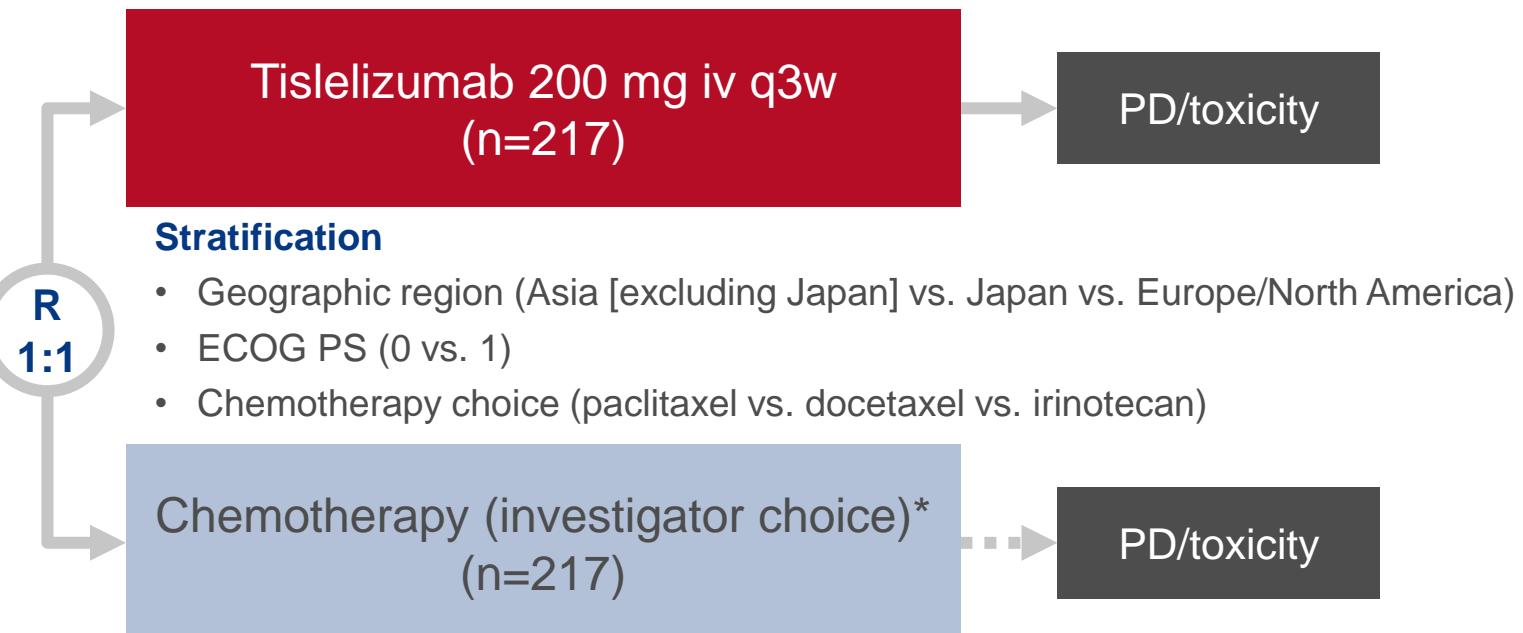
## Study objective

- To evaluate the efficacy and safety of 2L tislelizumab, an anti-PD-1, in patients with advanced or metastatic oesophageal squamous cell carcinoma in the RATIONALE 302 study

**Key patient inclusion criteria**

- Advanced or metastatic ESCC
- Progressed on or after 1L systemic therapy
- ECOG PS 0–1

(n=512)



## PRIMARY ENDPOINT

- OS

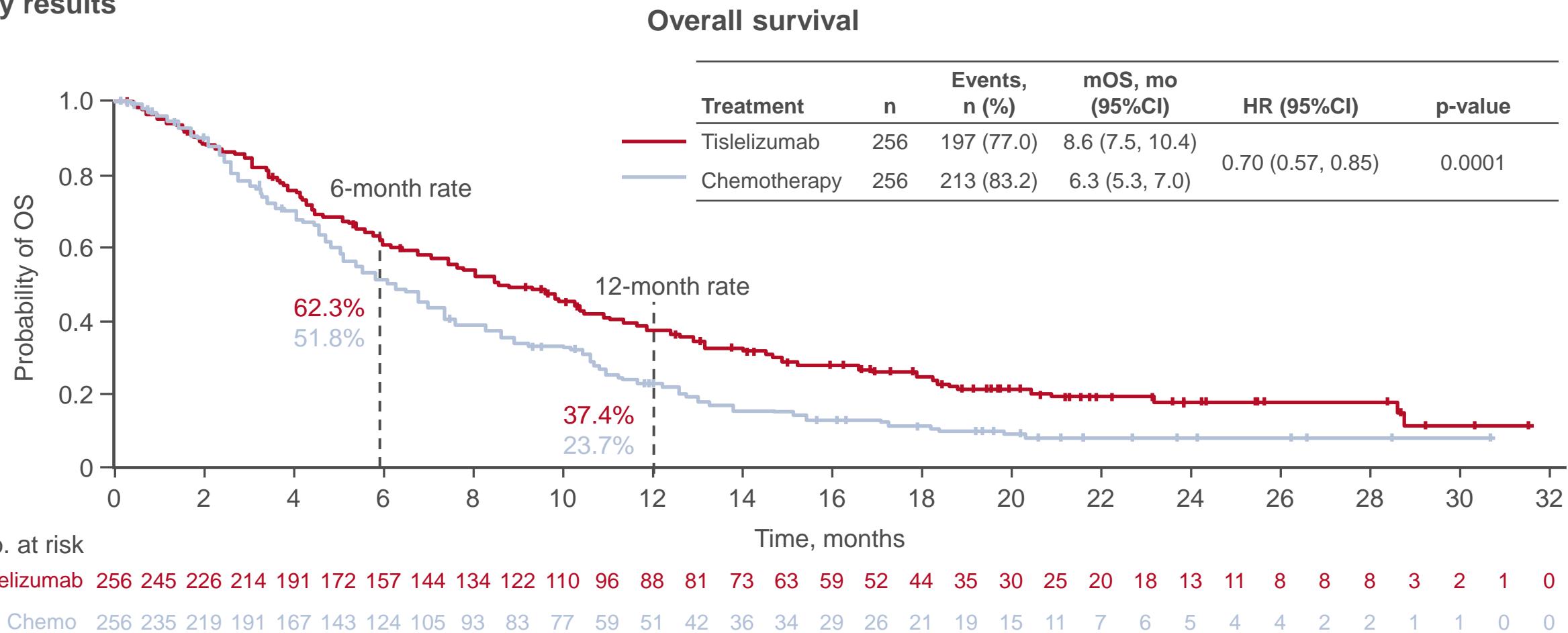
## SECONDARY ENDPOINTS

- PFS, ORR, DoR, HRQoL, safety

\*Paclitaxel 135–175 mg/m<sup>2</sup> iv q3w or 80–100 mg/m<sup>2</sup> iv qw; docetaxel 75 mg/m<sup>2</sup> iv q3w; irinotecan 125 mg/m<sup>2</sup> D1, 8 q3w

# O-15: Randomized, phase 3 study of second-line tislelizumab vs chemotherapy in advanced or metastatic esophageal squamous cell carcinoma (RATIONALE 302) in the overall population and Europe/North America subgroup – Ajani J, et al

## Key results



# O-15: Randomized, phase 3 study of second-line tislelizumab vs chemotherapy in advanced or metastatic esophageal squamous cell carcinoma (RATIONALE 302) in the overall population and Europe/North America subgroup – Ajani J, et al

## Key results (cont.)

	Overall population		EU/N American population		AEs, n (%)	Overall population	
	Tislelizumab (n=256)	Chemotherapy (n=256)	Tislelizumab (n=55)	Chemotherapy (n=53)		Tislelizumab (n=255)	Chemotherapy (n=240)
mOS, mo (95%CI)	8.6 (7.5, 10.4)	6. (5.3, 7.0)	11.2 (5.9, 14.8)	6.3 (4.6, 7.7)	≥1 TEAE	244 (95.7)	236 (98.3)
HR (95%CI)		0.70 (0.57, 0.85)		0.55 (0.35, 0.87)	Grade 3–5	118 (46.3)	163 (67.9)
mPFS, mo (95%CI)	1.6 (1.4, 2.7)	2.1 (1.5, 1.7)	-	-	Serious	105 (41.2)	105 (43.8)
HR (95%CI)		0.83 (0.67, 1.01)		0.97 (0.64, 1.47)	Led to discontinuation	49 (19.2)	64 (26.7)
ORR, n (%) [95%CI]	52 (20.3) [15.6, 25.8]	25 (9.8) [6.4, 14.1]	11 (20) [10.4, 33.0]	6 (11.3) [4.3, 23.0]	Led to death	14 (5.5)	14 (5.8)
OR (95%CI)		2.4 (1.4, 4.0)		2 (0.7, 5.8)	TRAEs occurring in ≥20%		
BOR, n (%)					Anaemia	28 (11.0)	83 (34.6)
CR	5 (2.0)	1 (0.4)	2 (3.6)	0	Appetite decreased	16 (6.3)	75 (31.3)
PR	47 (18.4)	24 (9.4)	9 (16.4)	6 (11.3)	Diarrhoea	14 (5.5)	66 (27.5)
SD	68 (26.6)	82 (32.0)	17 (30.9)	20 (37.7)	Nausea	7 (2.7)	66 (27.5)
PD	116 (45.3)	86 (33.6)	23 (41.8)	16 (30.2)	WBC count decreased	5 (2.0)	98 (40.8)
mDoR, mo (95%CI)	7.1 (4.1, 11.3)	4.0 (2.1, 8.2)	5.1 (1.6, NE)	2.1 (1.3, 6.3)	Neutrophil count decreased	3 (1.2)	94 (39.2)

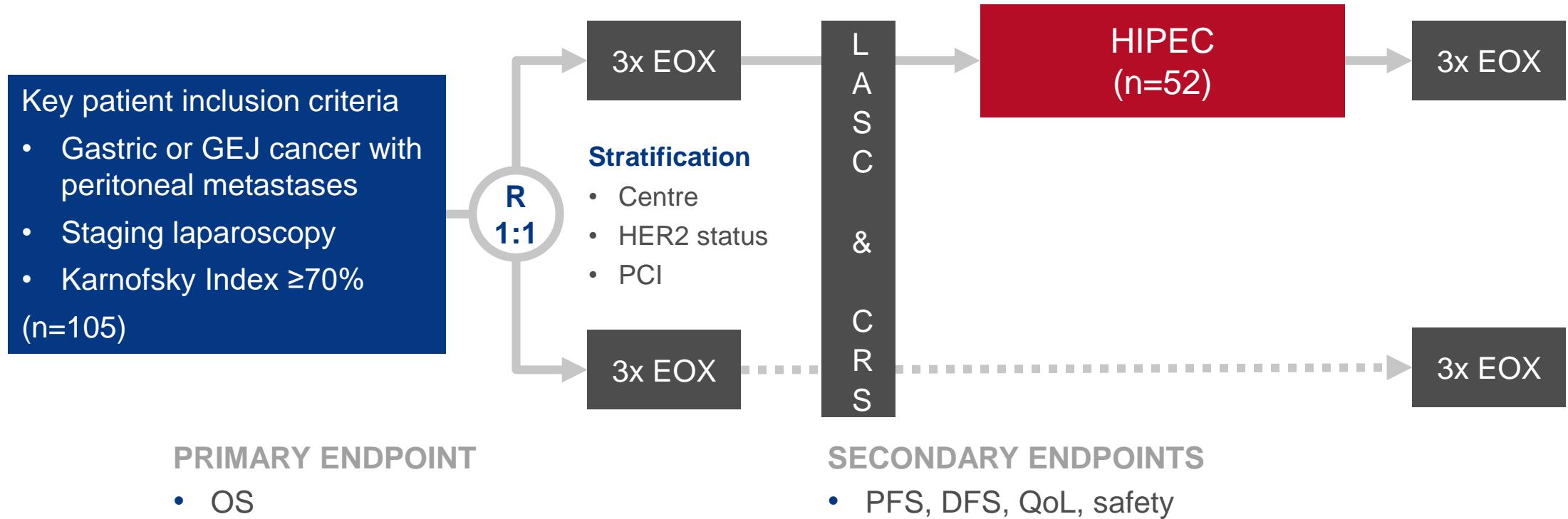
## Conclusions

- In patients with advanced or metastatic ESCC, 2L tislelizumab demonstrated significant improvement in OS compared with chemotherapy in the overall and EU/North American populations with a manageable safety profile

# 1376O: The effect of hyperthermic intraperitoneal chemotherapy (HIPEC) upon cytoreductive surgery (CRS) in gastric cancer (GC) with synchronous peritoneal metastasis (PM): a randomized multicentre phase III trial (GASTRIPEC-I-trial) – Rau B, et al

## Study objective

- To evaluate the impact of HIPEC upon CRS in patients with gastric cancer and synchronous peritoneal metastases in the GASTRIPEC-I study\*



HER2-, epirubicin 50 mg/m<sup>2</sup> + oxaliplatin 130 mg/m<sup>2</sup> + capecitabine 635 mg/m<sup>2</sup> q3w  
HER2+, cisplatin 80 mgm<sup>2</sup> + capecitabine 1000 mg/m<sup>2</sup> + trastuzumab 8, 6, 6 mg/kg (3 cycles) q3w  
HIPEC, cisplatin 75 mg/m<sup>2</sup> ip + mitomycin 15 mg/m<sup>2</sup> ip, 60 min  $>41^{\circ}\text{C}$

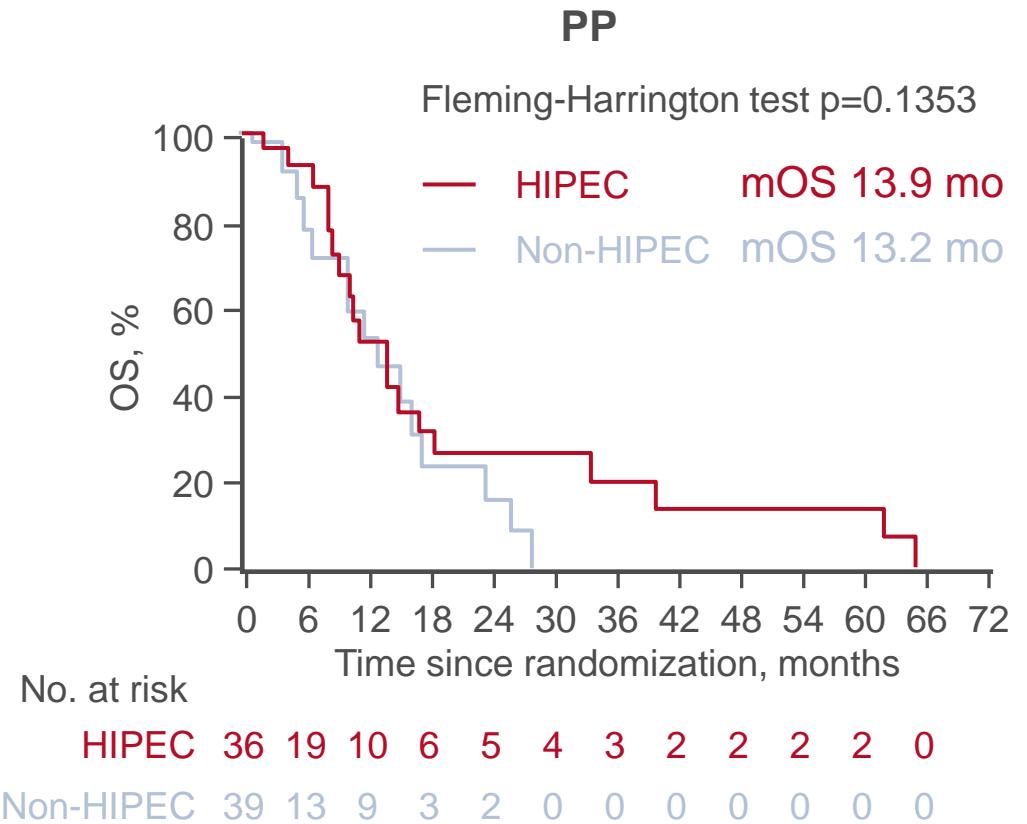
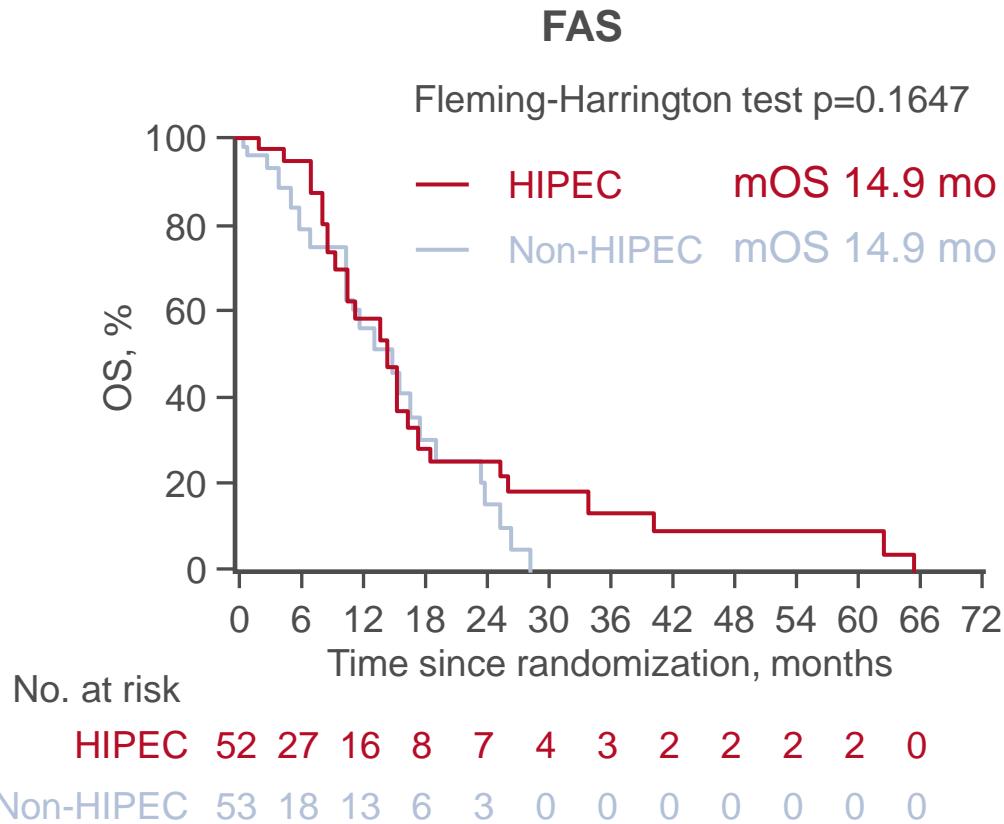
\*Study was terminated early due to slow accrual

Rau B, et al. Ann Oncol 2021;32(suppl):abstr 1376O

# 1376O: The effect of hyperthermic intraperitoneal chemotherapy (HIPEC) upon cytoreductive surgery (CRS) in gastric cancer (GC) with synchronous peritoneal metastasis (PM): a randomized multicentre phase III trial (GASTRIPEC-I-trial) – Rau B, et al

## Key results

### Overall survival



# 1376O: The effect of hyperthermic intraperitoneal chemotherapy (HIPEC) upon cytoreductive surgery (CRS) in gastric cancer (GC) with synchronous peritoneal metastasis (PM): a randomized multicentre phase III trial (GASTRIPEC-I-trial) – Rau B, et al

## Key results (cont.)

Resectability, n (%)	HIPEC (n=41)	Non-HIPEC (n=35)
Non-resectable	11 (26.8)	13 (37.1)
CCR 0	20 (48.8)	16 (45.7)
CCR 1	10 (24.3)	4 (11.4)
CCR ≥2	0	2 (5.7)
	HIPEC	Non-HIPEC
mOS, mo		
CCR 0	15.4	16.6
CCR ≥1	14.8	6.5
mPFS, mo		
FAS	7.1	3.5
PP	7.1	3.5

Post-operative complications		HIPEC (CRS+HIPEC n=28; HIPEX n=13)	Non-HIPEC (CRS n=22)
Hospitalization	Mean, days (range)	13.5 (7.0–29.1)	15.1 (8.4–26.4)
Grade 3/4 complication, n/N (%)	Anastomotic insufficiency Fistula Re-operation SSI with intervention Bleeding requiring transfusion	3/28 (10.7) 2/39 (5.1) 2/41 (5.1) 1/39 (2.6) 1/39 (2.6)	1/19 (5.3) 1/19 (5.3) 3/21 (15.8) 2/19 (10.5) 0
Death, n (%)		1 (2.6)	0
Grade 3/4 AEs, n/N (%)	HIPEC	Non-HIPEC	p-value
Pre-op chemo	23/50 (46.0)	31/50 (62.0)	0.454
Due to surgery	17/39 (43.6)	8/21 (38.1)	0.786
Post-op chemo	10/23 (43.5)	10/13 (76.9)	0.083

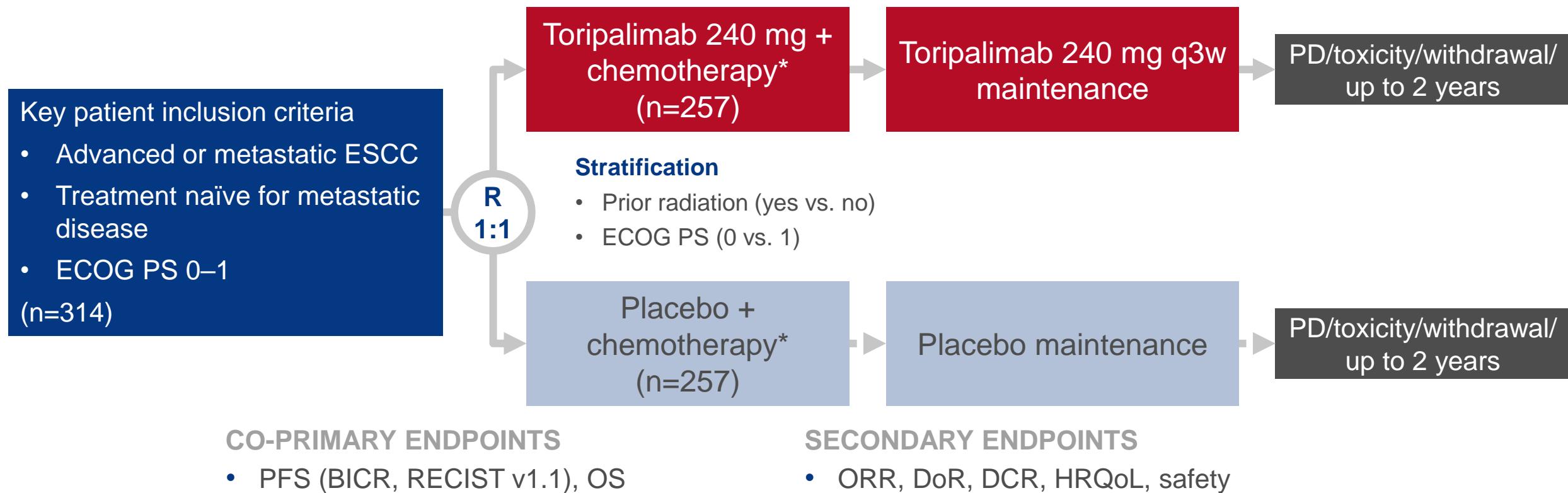
## Conclusions

- In patients with gastric cancer and peritoneal metastases, HIPEC demonstrated a significant improvement in PFS with no impact on morbidity or mortality, but only provided a significant improvement in OS for those who had complete CRS

# 1373MO: JUPITER-06: a randomized, double-blind, phase 3 study of toripalimab versus placebo in combination with first-line chemotherapy for treatment naïve advanced or metastatic esophageal squamous cell carcinoma (ESCC) – Xu RH, et al

## Study objective

- To evaluate the efficacy and safety of 1L toripalimab + chemotherapy in patients with advanced or metastatic ESCC in the JUPITER-06 study



\*Paclitaxel 175 mg/m<sup>2</sup> + cisplatin 75 mg/m<sup>2</sup> q3w up to 6 cycles

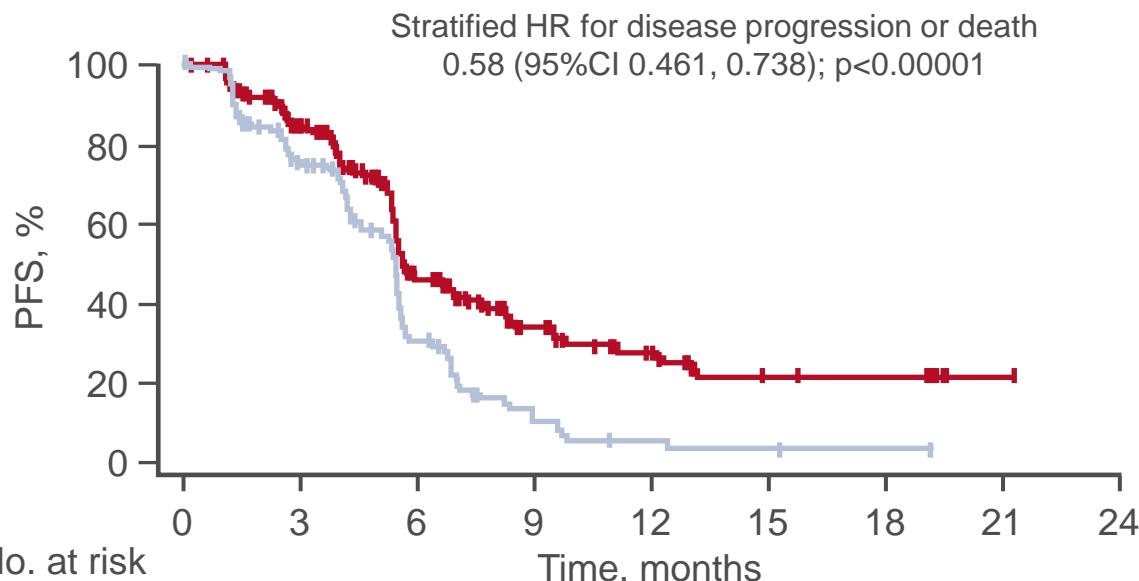
Xu RH, et al. Ann Oncol 2021;32(suppl):abstr 1373MO

# 1373MO: JUPITER-06: a randomized, double-blind, phase 3 study of toripalimab versus placebo in combination with first-line chemotherapy for treatment naïve advanced or metastatic esophageal squamous cell carcinoma (ESCC) – Xu RH, et al

## Key results

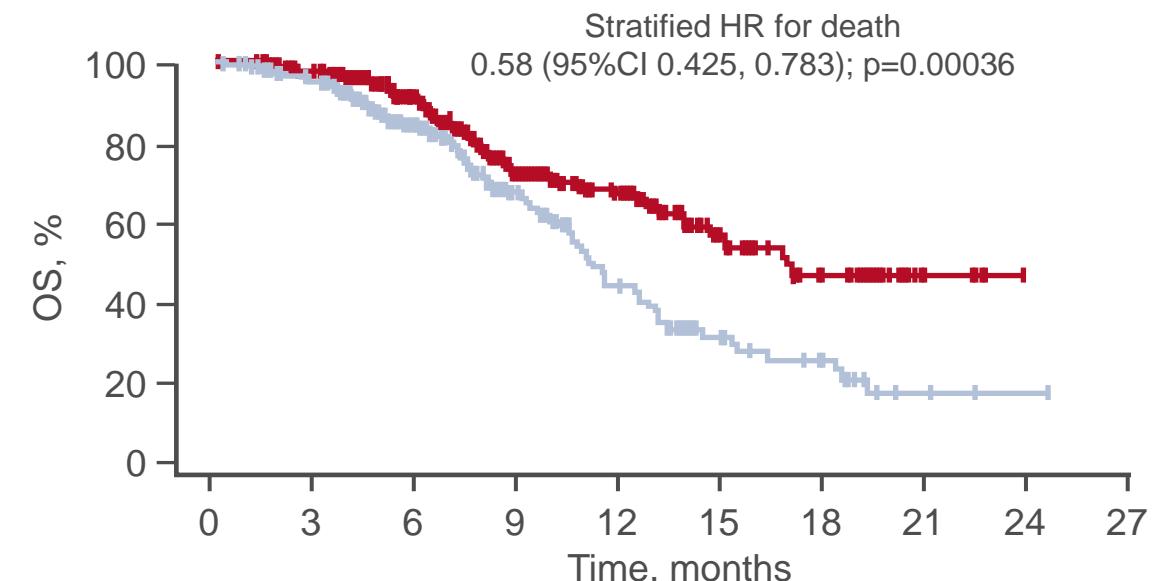
### Progression-free survival

	Events, n/ pts, n	mPFS, mo (95%CI)	1-yr PFS rate, % (95%CI)
+	Toripalimab + chemo	132/257	5.7 (5.6, 7.0)
+	Placebo + chemo	164/257	5.5 (5.2, 5.6)



### Overall survival

	Events, n/ pts, n	mOS, mo (95%CI)	1-yr OS rate, % (95%CI)	2-yr OS rate, % (95%CI)
+	Toripalimab + chemo	70/257	17.0 (14.0, NE)	66.0 (57.5, 73.2)
+	Placebo + chemo	103/257	11.0 (10.4, 12.6)	43.7 (34.4, 52.6)



# 1373MO: JUPITER-06: a randomized, double-blind, phase 3 study of toripalimab versus placebo in combination with first-line chemotherapy for treatment naive advanced or metastatic esophageal squamous cell carcinoma (ESCC) – Xu RH, et al

## Key results (cont.)

PD-L1 expression	Toripalimab + chemotherapy	Placebo + chemotherapy	HR (95%CI)
mPFS, mo			
CPS ≥1	5.7	5.5	0.58 (0.444, 0.751)
CPS <1	5.7	5.6	0.66 (0.370, 1.189)
mOS, mo			
CPS ≥1	15.2	10.9	0.61 (0.435, 0.870)
CPS <1	NE	11.6	0.61 (0.297, 1.247)

Grade ≥3 TRAEs, n (%)	Toripalimab + chemotherapy (n=257)	Placebo + chemotherapy (n=257)
Any	166 (64.6)	144 (56.0)
irAEs	18 (7.0)	4 (1.6)
Infusion reactions	2 (0.8)	0
Led to discontinuation	7 (2.7)	1 (0.4)
Led to death	1 (0.4)	3 (1.2)

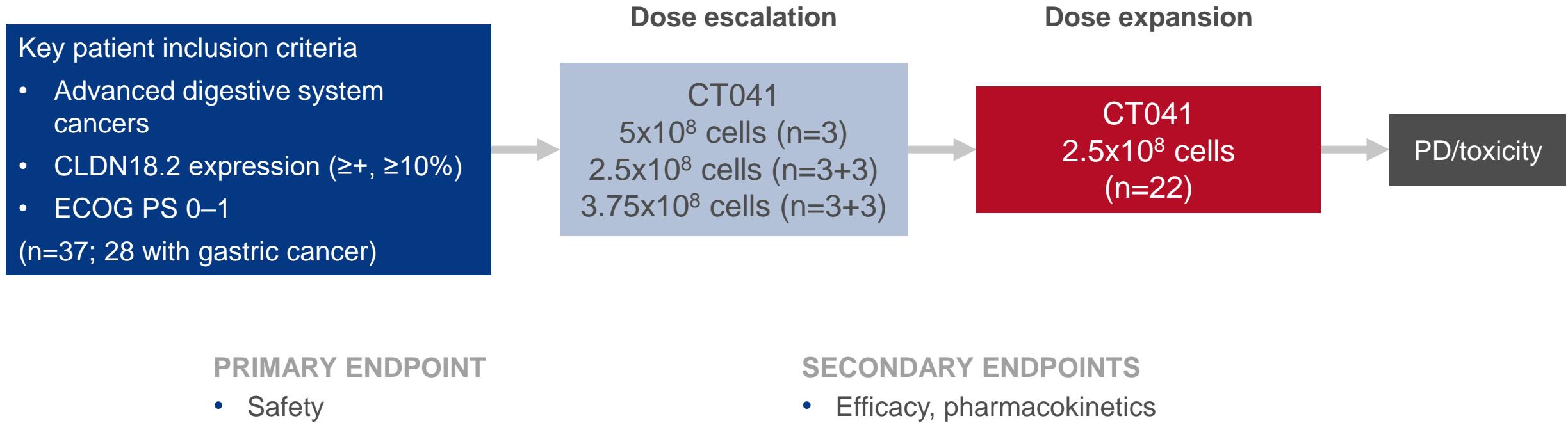
## Conclusions

- In patients with advanced or metastatic ESCC, 1L toripalimab + chemotherapy demonstrated significant improvement in survival over chemotherapy alone and no new safety signals were observed

# 1372O: CLDN 18.2-targeted CAR-T cell therapy in patients with cancers of the digestive system – Qi C, et al

## Study objective

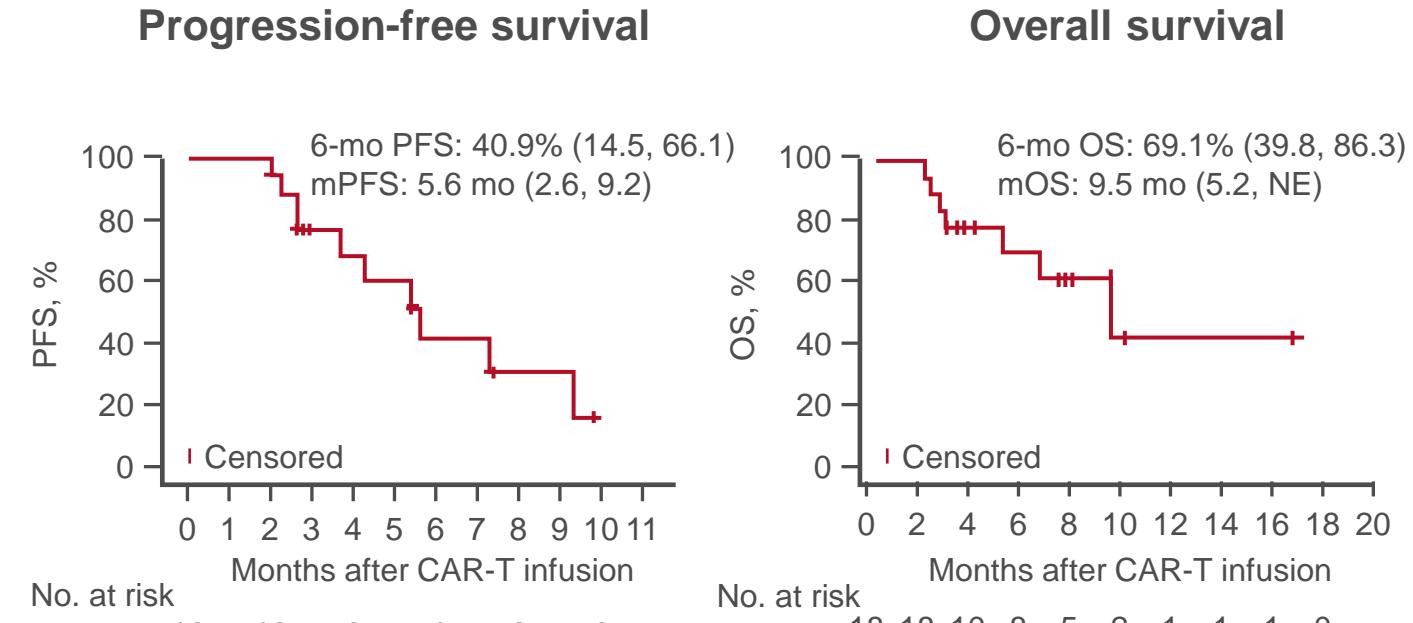
- To evaluate the efficacy and safety of CT041, a Claudin18.2 redirected CAR-T cell therapy, in patients with digestive system cancers including gastric cancer



# 1372O: CLDN 18.2-targeted CAR-T cell therapy in patients with cancers of the digestive system – Qi C, et al

## Key results

Patients with gastric cancer ≥2L with $2.5 \times 10^8$ cells		n=18
BOR, n (%)		0
CR		11 (61.1)
PR		4 (22.2)
SD		3 (16.7)
ORR, n (%) [95%CI]	11 (61.1)	[35.75, 82.70]
DCR, n (%) [95%CI]	15 (83.3)	[58.58, 96.42]
mPFS, mo (95%CI)	5.6	(2.6, 9.2)
mOS, mo (95%CI)	9.5	(5.2, NE)
mDoR, mo (95%CI)	6.4	(2.7, NE)



## 1372O: CLDN 18.2-targeted CAR-T cell therapy in patients with cancers of the digestive system – Qi C, et al

### Key results (cont.)

AEs, n (%)	Dose escalation			Dose expansion	
	2.5x10 <sup>8</sup> (n=6)	3.75x10 <sup>8</sup> (n=6)	5x10 <sup>8</sup> (n=3)	2.5x10 <sup>8</sup> (n=22)	Total (n=37)
Any	6 (100)	6 (100)	3 (100)	22 (100)	37 (100)
Dose-limiting toxicity	0	0	1 (33.3)	0	1 (2.7)
Led to discontinuation	0	0	1 (33.3)	0	1 (2.7)
Treatment-related SAEs	0	0	1 (33.3)	2 (9.1)	3 (8.1)
TRAEs	6 (100)	6 (100)	3 (100)	22 (100)	37 (100)

### Conclusions

- In previously treated patients with CLDN18.2-positive gastric or GEJ cancer, CT041 demonstrated encouraging activity and was generally well-tolerated

# **CANCERS OF THE PANCREAS, SMALL BOWEL AND HEPATOBILIARY TRACT**

Cancers of the pancreas, small bowel and hepatobiliary tract

# PANCREATIC CANCER

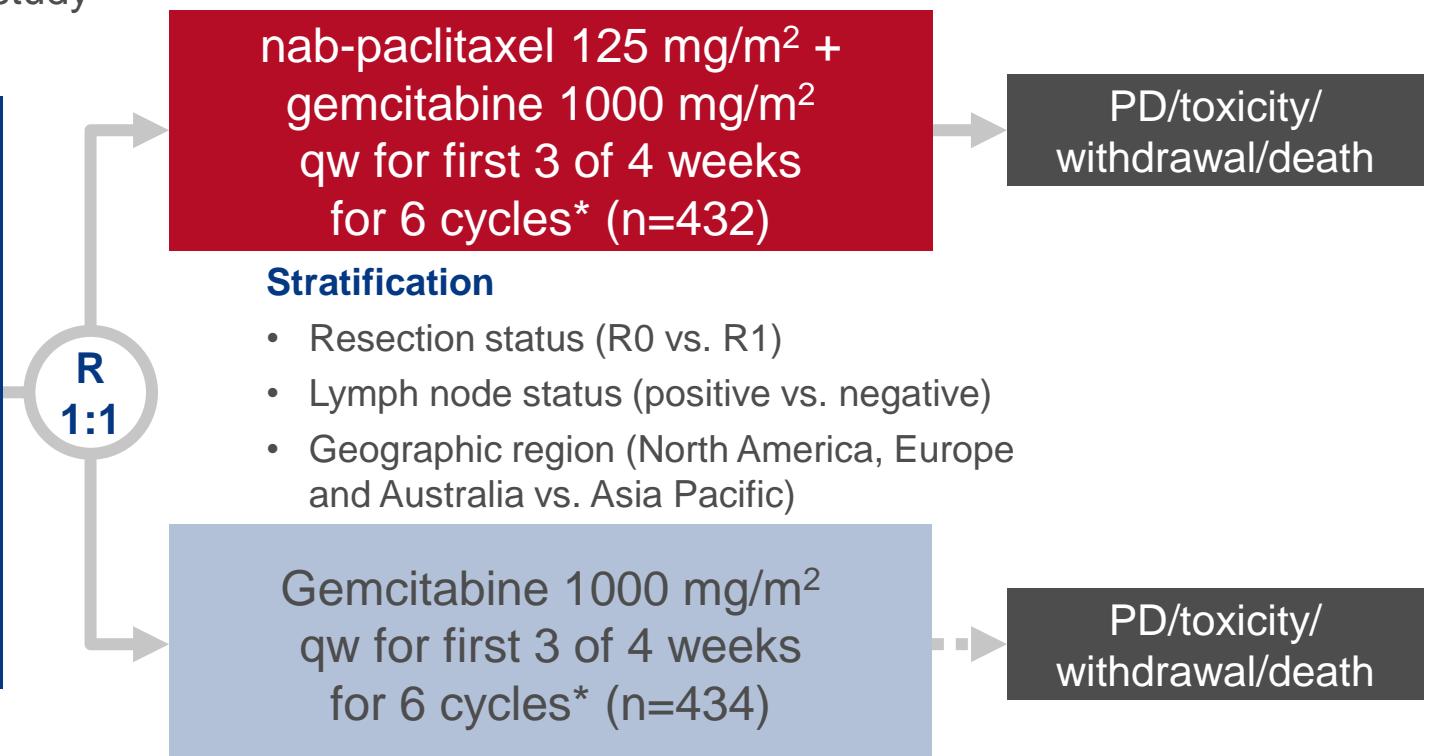
# LBA-1: Phase 3 APACT trial of adjuvant nab-paclitaxel plus gemcitabine (nab-P + Gem) vs gemcitabine (Gem) alone in patients with resected pancreatic cancer (PC): updated 5-year overall survival – Tempero MA, et al

## Study objective

- To present the 5-year OS data of nab-paclitaxel + gemcitabine compared with gemcitabine in patients with surgically resected pancreatic cancer in the APACT study

### Key patient inclusion criteria

- Pancreatic ductal adenocarcinoma (T1–3, N0–1, M0)
  - Macroscopic complete resection
  - CT: no evidence of disease
  - Treatment naïve
  - CA19-9 <100 U/mL
  - ECOG PS 0–1
- (n=866)



## PRIMARY ENDPOINT

- DFS (ICR)

## SECONDARY ENDPOINTS

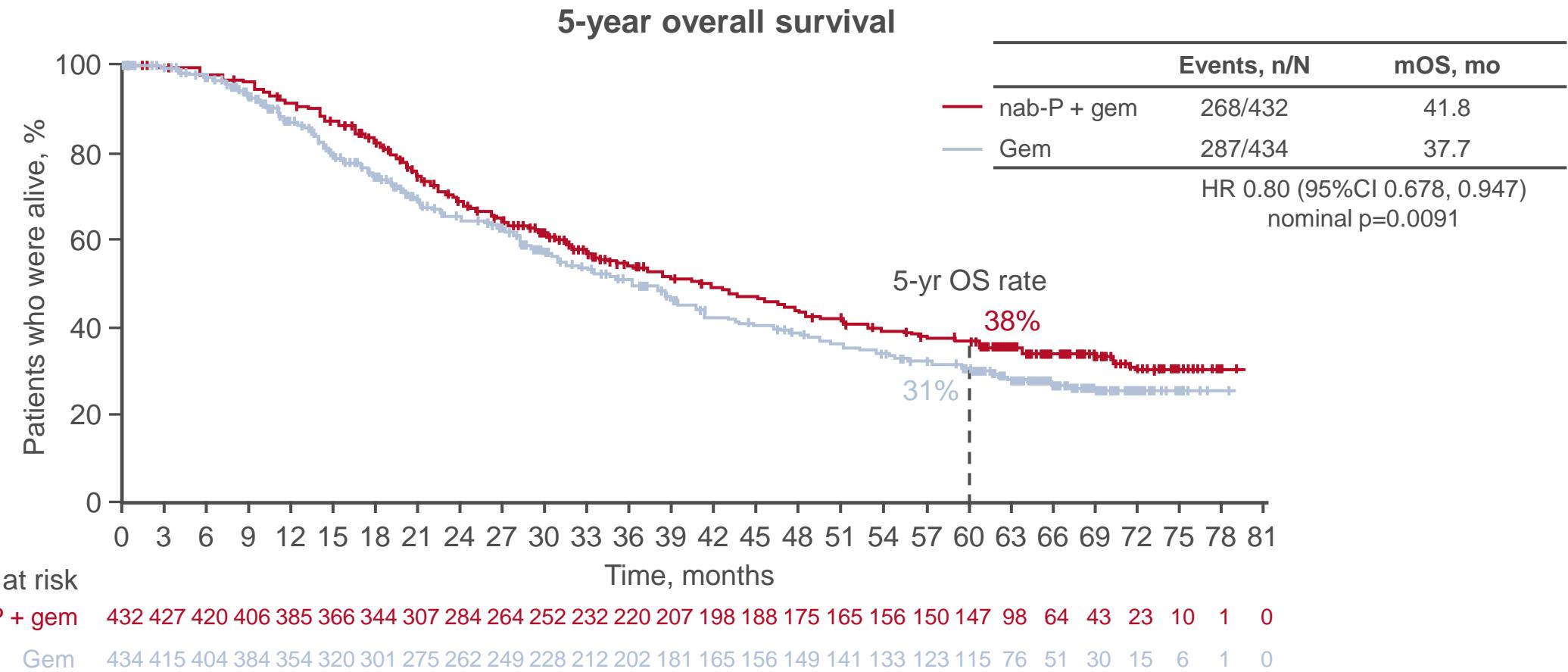
- OS, safety

\*Treatment initiated ≤12 weeks post-surgery

Tempero MA, et al. Ann Oncol 2021;32(suppl):abstr LBA-1

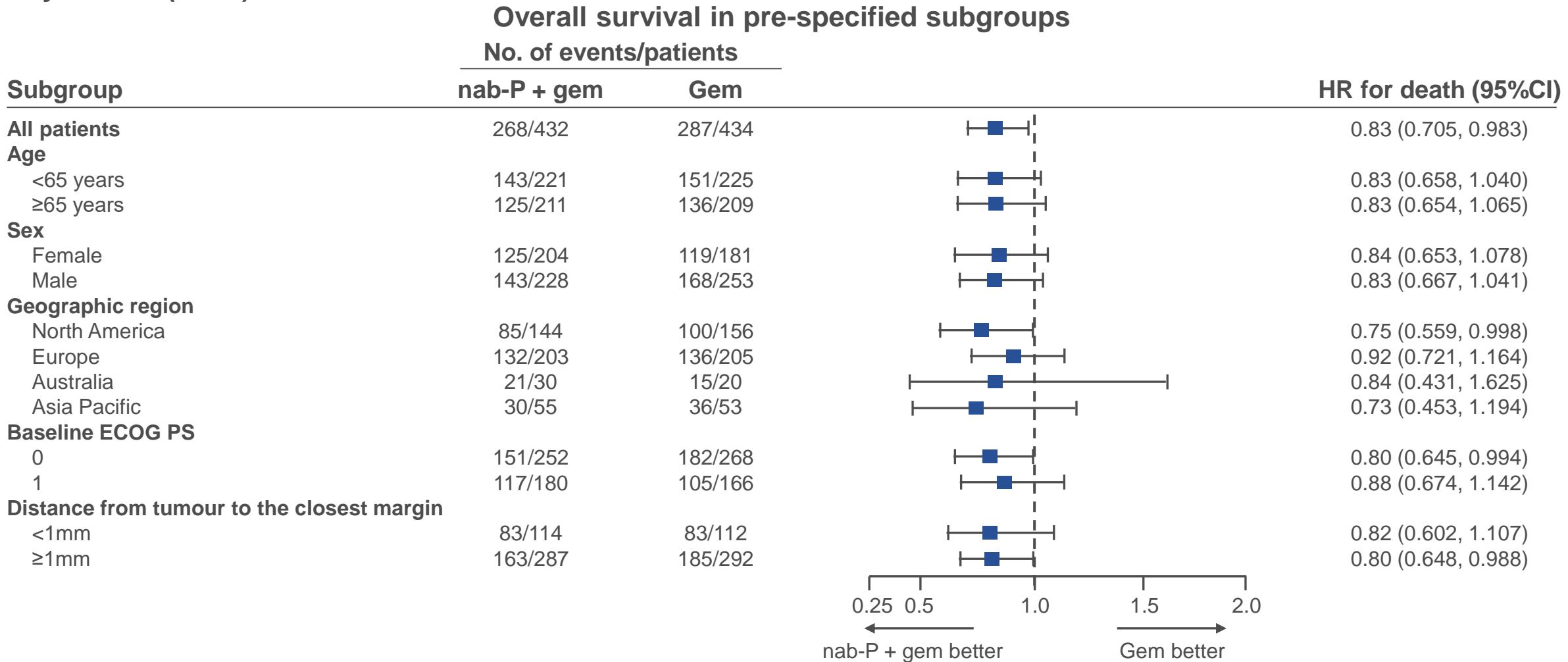
# LBA-1: Phase 3 APACT trial of adjuvant nab-paclitaxel plus gemcitabine (nab-P + Gem) vs gemcitabine (Gem) alone in patients with resected pancreatic cancer (PC): updated 5-year overall survival – Tempero MA, et al

## Key results



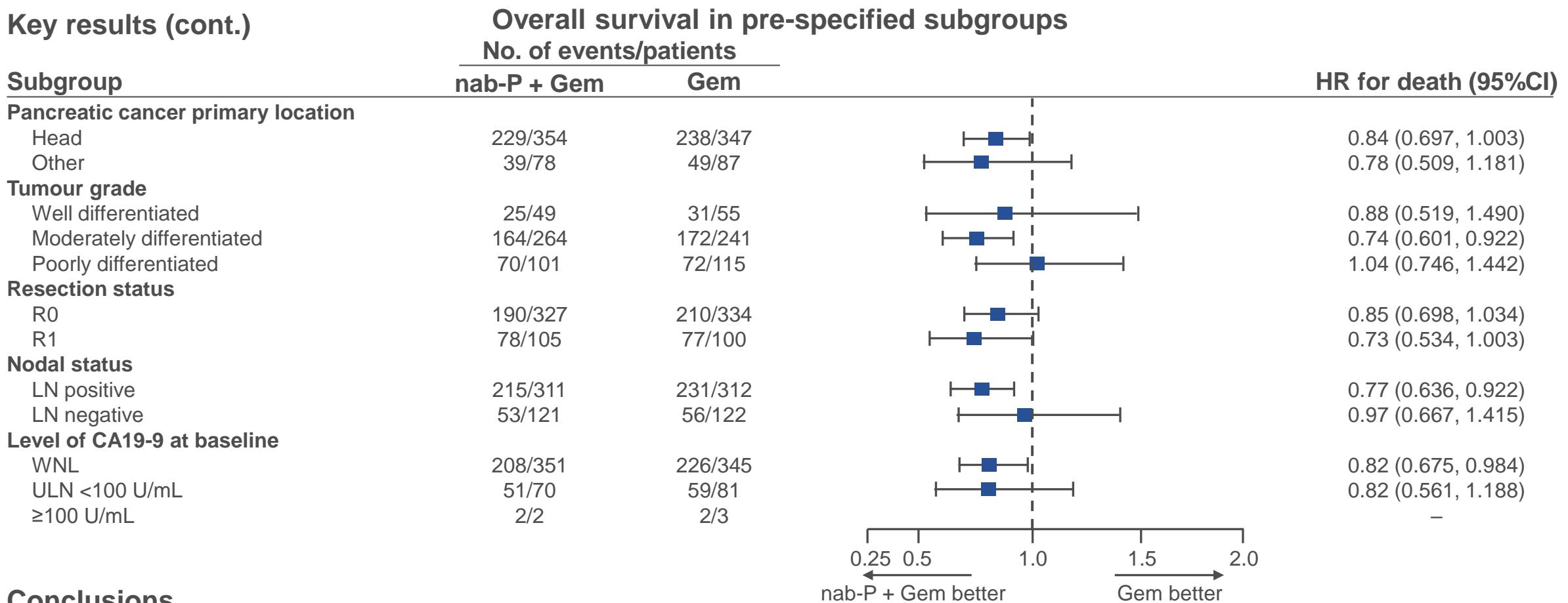
# LBA-1: Phase 3 APACT trial of adjuvant nab-paclitaxel plus gemcitabine (nab-P + Gem) vs gemcitabine (Gem) alone in patients with resected pancreatic cancer (PC): updated 5-year overall survival – Tempero MA, et al

## Key results (cont.)



# LBA-1: Phase 3 APACT trial of adjuvant nab-paclitaxel plus gemcitabine (nab-P + Gem) vs gemcitabine (Gem) alone in patients with resected pancreatic cancer (PC): updated 5-year overall survival – Tempero MA, et al

## Key results (cont.)



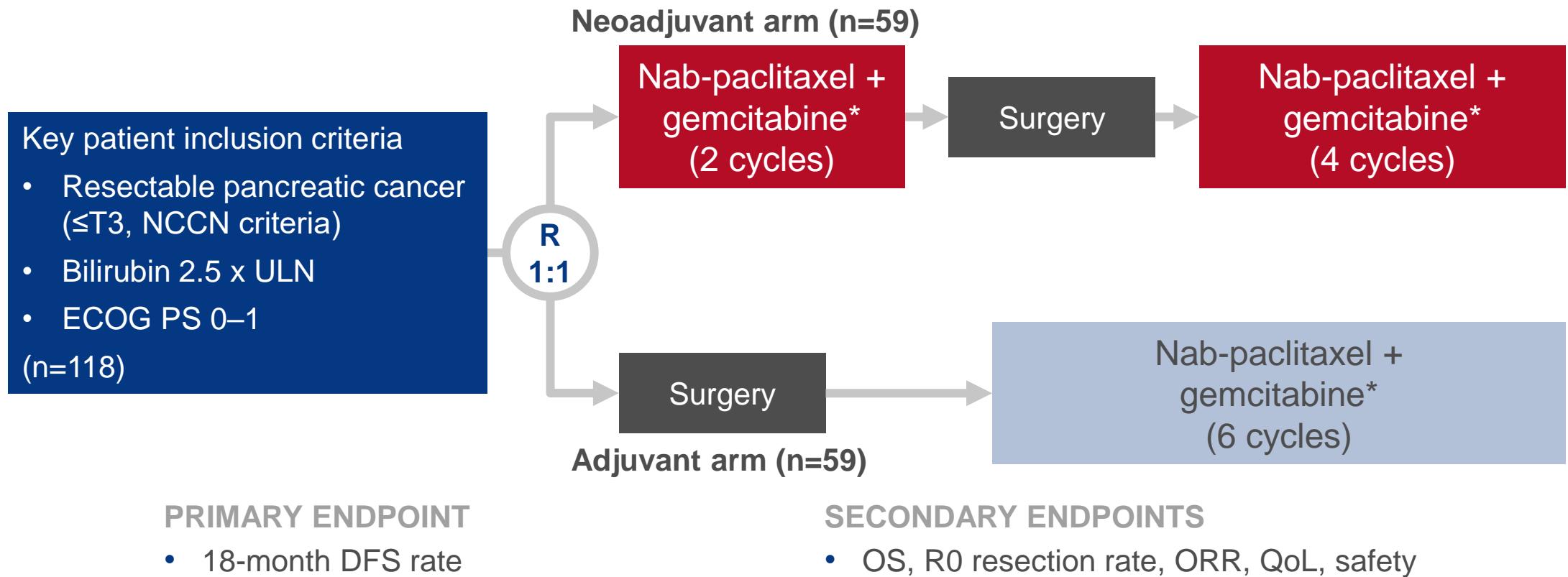
## Conclusions

- In patients with resected pancreatic cancer, this long-term follow-up of the APACT trial showed consistently longer OS with nab-paclitaxel + gemcitabine compared with gemcitabine alone across the majority of pre-specified subgroups

# LBA56: Perioperative or only adjuvant nab-paclitaxel plus gemcitabine for resectable pancreatic cancer - results of the NEONAX trial, a randomized phase II AIO study – Seufferlein T, et al

## Study objective

- To evaluate the efficacy and safety of perioperative or adjuvant nab-paclitaxel + gemcitabine in patients with resectable pancreatic cancer in the NEONAX study

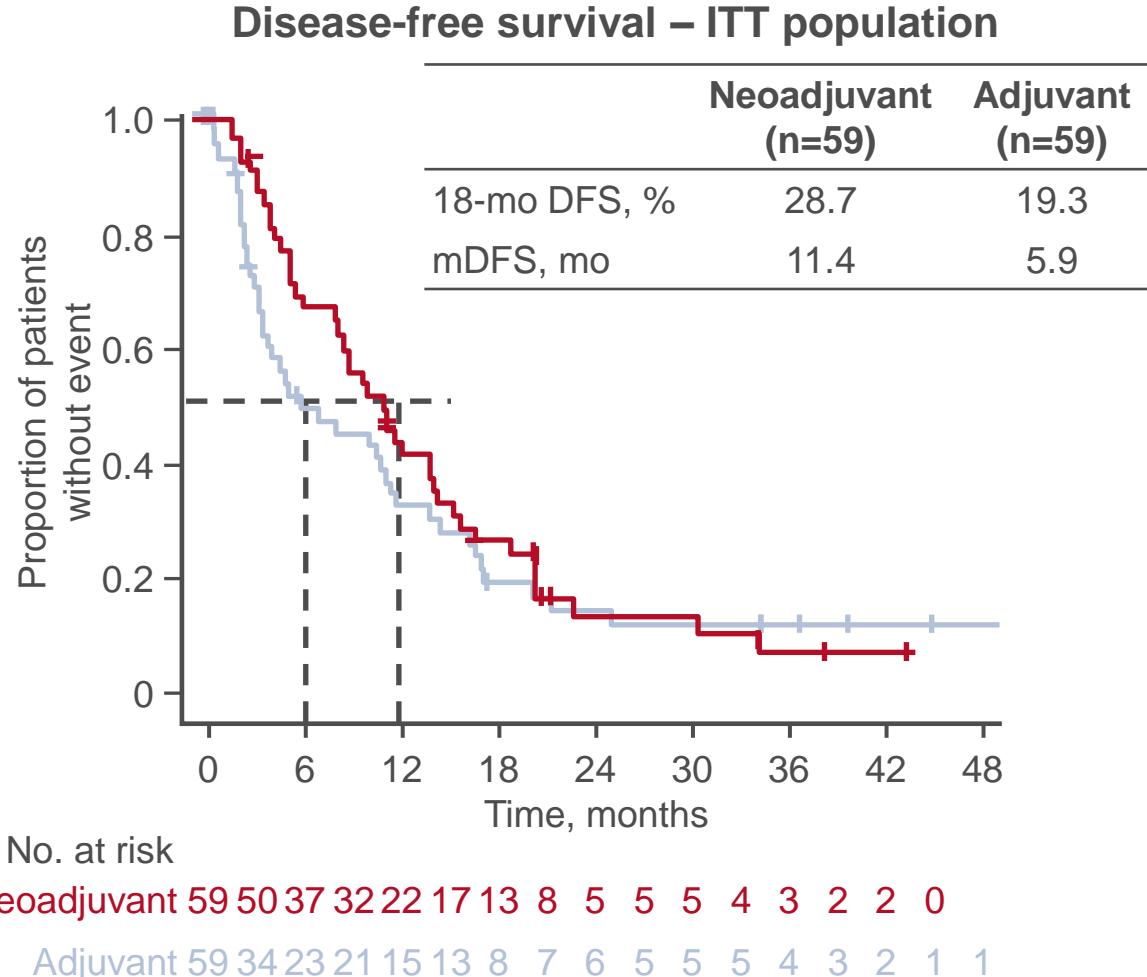


\*Nab-paclitaxel 125 mg/m<sup>2</sup> iv qw + gemcitabine 1000 mg/m<sup>2</sup> iv qw 3/4 weeks

Seufferlein T, et al. Ann Oncol 2021;32(suppl):abstr LBA56

# LBA56: Perioperative or only adjuvant nab-paclitaxel plus gemcitabine for resectable pancreatic cancer - results of the NEONAX trial, a randomized phase II AIO study – Seufferlein T, et al

## Key results



Response, n (%)	Neoadjuvant (n=45)	Adjuvant (n=59)
DCR	42 (93.3)	-
ORR	13 (28.9)	-
BOR		
CR	0	
PR	13 (28.9)	-
SD	29 (64.4)	
PD	3 (6.7)	
Resection rate	41 (69.5)	46 (78.0)
R0	36 (87.8)	31 (67.4)
R1	3 (7.3)	13 (28.3)
R2	2 (4.9)	2 (4.3)
mITT population, n	39	25
18-month DFS rate, %	32.2	41.4
mDFS, mo	14.1	17.0

## LBA56: Perioperative or only adjuvant nab-paclitaxel plus gemcitabine for resectable pancreatic cancer - results of the NEONAX trial, a randomized phase II AIO study – Seufferlein T, et al

### Conclusions

- In patients with resectable pancreatic cancer, neither perioperative nor adjuvant nab-paclitaxel + gemcitabine demonstrated the prespecified improvement in 18-month DFS rate, although the median DFS was higher in those who received chemotherapy prior to surgery

## **SO-3: Treatment sequences and prognostic factors in metastatic pancreatic ductal adenocarcinoma: univariate and multivariate analyses of a real-world study in Europe – Taieb J, et al**

### **Study objective**

- To evaluate the treatment patterns and impact of treatment sequencing on survival outcomes as well as identifying prognostic factors in patients with metastatic PDAC in a real-world setting across 5 European countries

### **Methods**

- Data from online patient reports (n=6000) were reviewed from 5 European countries (France, Germany, Italy, Spain and the UK) to find patients diagnosed with metastatic PDAC (n=3432) between January and October 2016 who had received 1L or 2L treatment (n=1218)
- Data were collected from date of diagnosis until 5 years or death
- Cox regression was used to determine prognostic factors from patients with 1L and 2L treatment data (n=915)

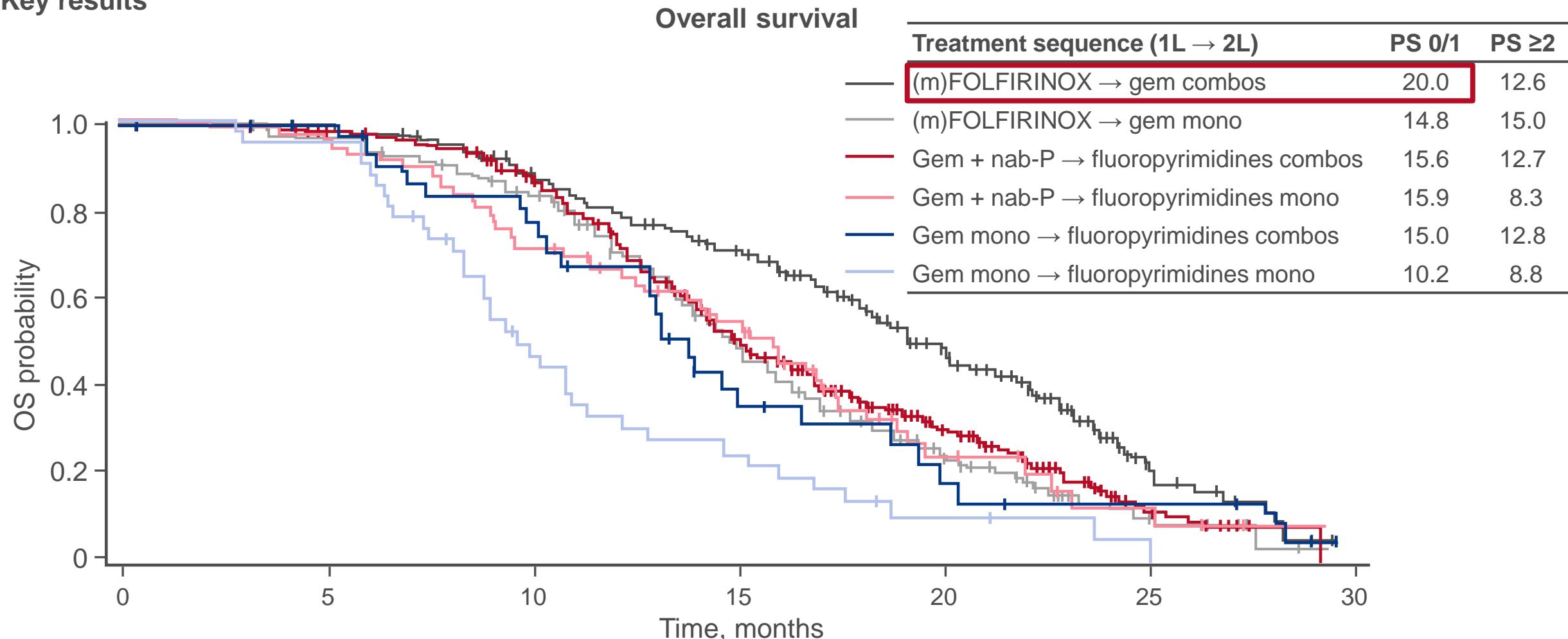
### **Key results**

<b>Most common 1L treatments, n (%)</b>	
(m)FOLFIRINOX	974 (28.4)
Gem + nab-P	961 (28.0)
Gem mono	790 (23.0)
Other gem-based	369 (10.8)
Fluoropyrimidines + oxaliplatin	188 (5.5)
Other	150 (4.3)

<b>Most common treatment sequences (1L → 2L), n (%)</b>	
Gem + nab-P → fluoropyrimidines	286 (24)
(m)FOLFIRINOX → gem combos	263 (22)
(m)FOLFIRINOX → gem mono	228 (19)
Gem + nab-P → fluoropyrimidines mono	65 (5)
Gem mono → fluoropyrimidines mono	41 (3)
Gem mono → fluoropyrimidines combos	32 (3)

# SO-3: Treatment sequences and prognostic factors in metastatic pancreatic ductal adenocarcinoma: univariate and multivariate analyses of a real-world study in Europe – Taieb J, et al

## Key results



## SO-3: Treatment sequences and prognostic factors in metastatic pancreatic ductal adenocarcinoma: univariate and multivariate analyses of a real-world study in Europe – Taieb J, et al

### Key results (cont.)

Prognostic factors for survival	HR	p-value	Treatments prognostic for survival (vs. gem mono → fluoropyrimidine mono)	HR (95%CI)	p-value
No liver metastases	0.397	<0.0001	(m)FOLFIRINOX → gem combos	0.424 (0.293, 0.615)	<0.0001
ECOG PS 0–1	0.448	<0.0001	Gem + nab-P → fluoropyrimidines combos	0.601 (0.418, 0.865)	<0.0001
CA19-9 <400 U/mL	0.747	0.0004	Gem + nab-P → fluoropyrimidines mono	0.645 (0.413, 1.007)	<0.0001
No lung metastases	0.789	0.0049	(m)FOLFIRINOX → gem mono	0.665 (0.461, 0.958)	<0.0001
Male	0.828	0.0228	Gem mono → fluoropyrimidines combos	0.787 (0.465, 1.332)	<0.0001

### Conclusions

- In patients with metastatic PDAC, liver metastases, treatment type, ECOG PS, CA19-9 level and lung metastases were all found to be independent prognostic factors of OS and patients who received (m)FOLFIRINOX followed by gemcitabine combinations demonstrated the longest OS

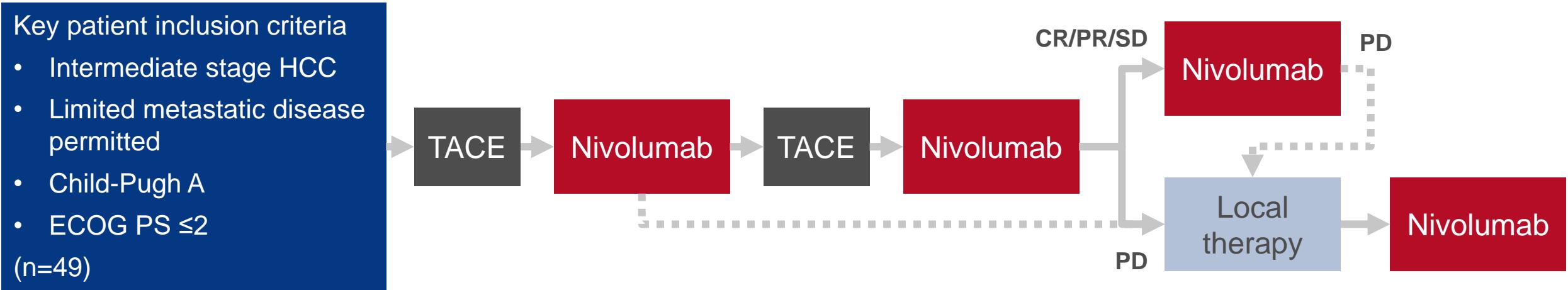
Cancers of the pancreas, small bowel and hepatobiliary tract

# **HEPATOCELLULAR CARCINOMA**

# LBA37: IMMUTACE: A biomarker-orientated, multi center phase II AIO study of transarterial chemoembolization (TACE) in combination with nivolumab performed for intermediate stage hepatocellular carcinoma (HCC) – Vogel A, et al

## Study objective

- To evaluate the efficacy and safety of TACE combined with nivolumab in patients with intermediate stage HCC in the IMMUTACE study



## PRIMARY ENDPOINT

- ORR

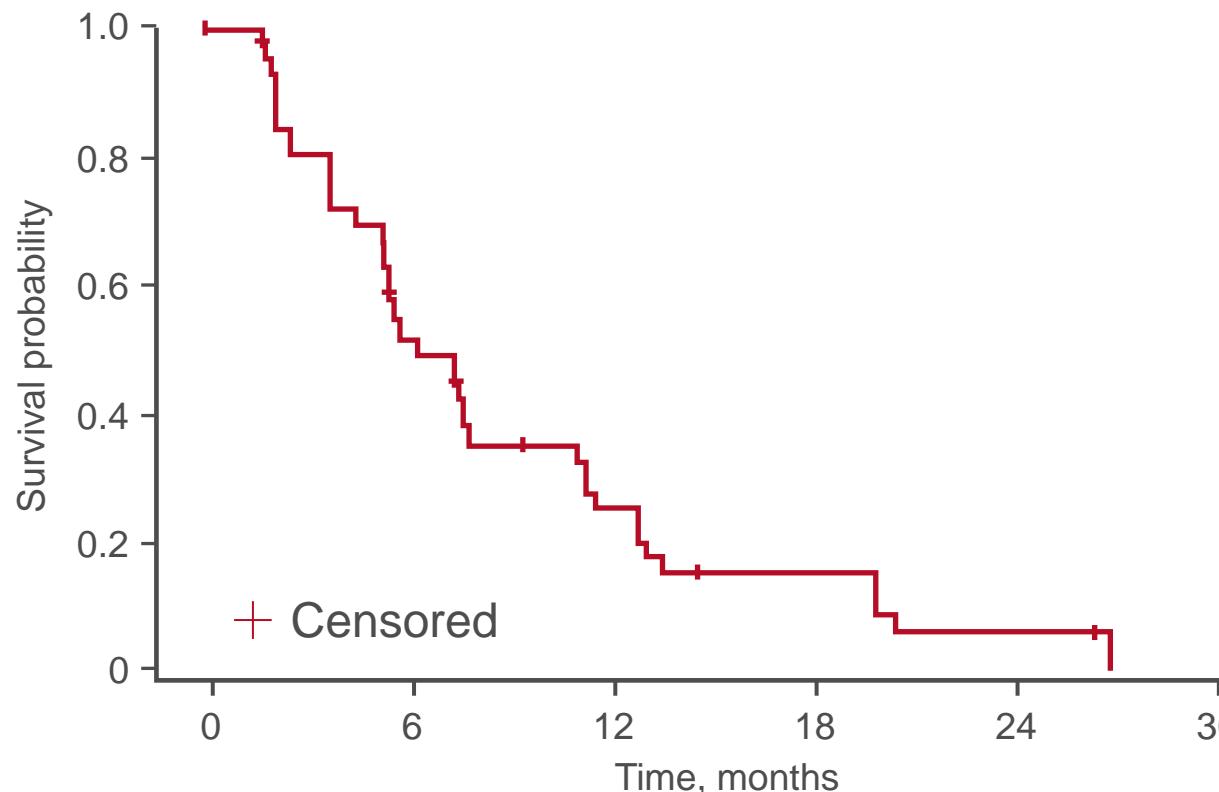
## SECONDARY ENDPOINTS

- PFS, OS, QoL, safety

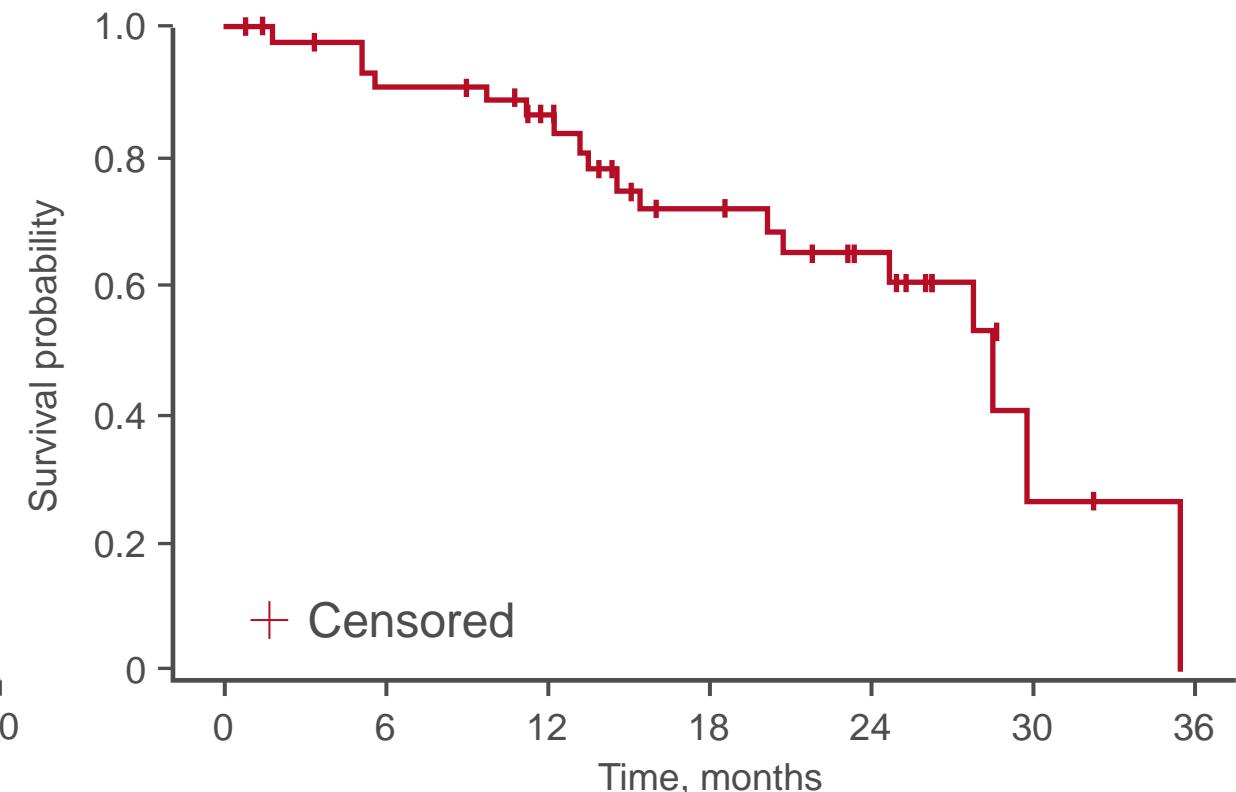
# LBA37: IMMUTACE: A biomarker-orientated, multi center phase II AIO study of transarterial chemoembolization (TACE) in combination with nivolumab performed for intermediate stage hepatocellular carcinoma (HCC) – Vogel A, et al

## Key results

Progression-free survival



Overall survival



## LBA37: IMMUTACE: A biomarker-orientated, multi center phase II AIO study of transarterial chemoembolization (TACE) in combination with nivolumab performed for intermediate stage hepatocellular carcinoma (HCC) – Vogel A, et al

### Key results (cont.)

n=49	
ORR, % (95%CI)	71.4 (56.8, 83.4)
BOR, n (%)	
CR	8 (16.3)
PR	27 (55.1)
SD	2 (4.1)
PD	7 (14.3)
NE	5 (10.2)
Grade ≥3 AEs, n (%)	
AST increased	7 (14.3)
GGT increased	5 (10.2)
ALT increased	4 (8.2)
Pain	3 (6.1)
Fever	1 (2.0)
Pruritus	1 (2.0)
Thrombotic thrombocytopenic purpura	1 (2.0)

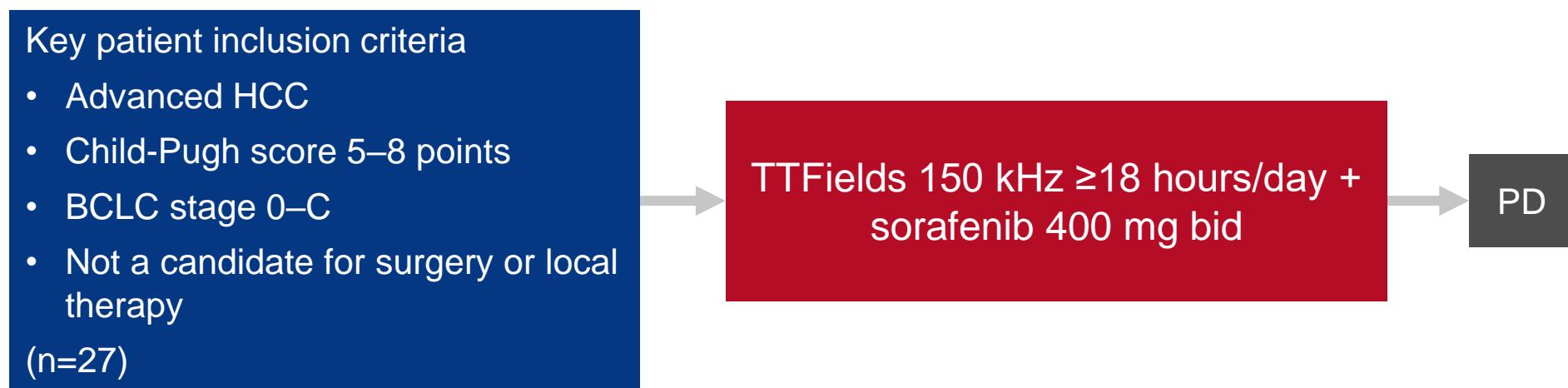
### Conclusions

- In patients with intermediate stage HCC, TACE combined with nivolumab demonstrated promising activity with no new safety signals reported

## O-16: HEPANOVA: final efficacy and safety results from a phase 2 study of Tumor Treating Fields (TTFields, 150 kHz) concomitant with sorafenib in advanced hepatocellular carcinoma (HCC) – Grosu AL, et al

### Study objective

- To evaluate the efficacy and safety of TTFields concomitant with sorafenib in patients with advanced HCC in the HEPANOVA study



#### PRIMARY ENDPOINT

- ORR (RECIST v1.1, investigator-assessed)

#### SECONDARY ENDPOINTS

- PFS, OS, DMFS, safety

## O-16: HEPANOVA: final efficacy and safety results from a phase 2 study of Tumor Treating Fields (TTFields, 150 kHz) concomitant with sorafenib in advanced hepatocellular carcinoma (HCC) – Grosu AL, et al

### Key results

	TTFields ≥12 weeks + sorafenib (n=11)	TTFields + sorafenib (n=11)	TTFields + sorafenib (n=27)
ORR, %	18	9.5 (p=0.24)	
BOR, %			
CR	0	0	
PR	18	9.5	
SD	73	66.5	
DCR, %	91	76	
1-year in-field control rate, %		9.5	
mPFS, mo (95%CI)		5.8 (3.0, 8.9)	
mTTP, mo (95%CI)		8.9 (3.1, NR)	
1-year PFS rate, % (95%CI)		23 (7, 45)	
1-year OS rate, % (95%CI)		30 (11, 52)	
1-year DMFS rate, % (95%CI)		26 (8, 49)	

## O-16: HEPANOVA: final efficacy and safety results from a phase 2 study of Tumor Treating Fields (TTFields, 150 kHz) concomitant with sorafenib in advanced hepatocellular carcinoma (HCC) – Grosu AL, et al

### Key results (cont.)

Grade 3/4 AEs occurring in ≥10%, n (%)	TTFields + sorafenib (n=27)
Gastrointestinal	7 (26)
Metabolism	5 (19)
General disorders/administration site	4 (15)
Laboratory investigations	4 (15)
Respiratory	4 (15)
Musculoskeletal	3 (11)
Vascular	3 (11)

### Conclusions

- In patients with advanced HCC, TTFields concomitant with sorafenib demonstrated promising activity and was generally well-tolerated

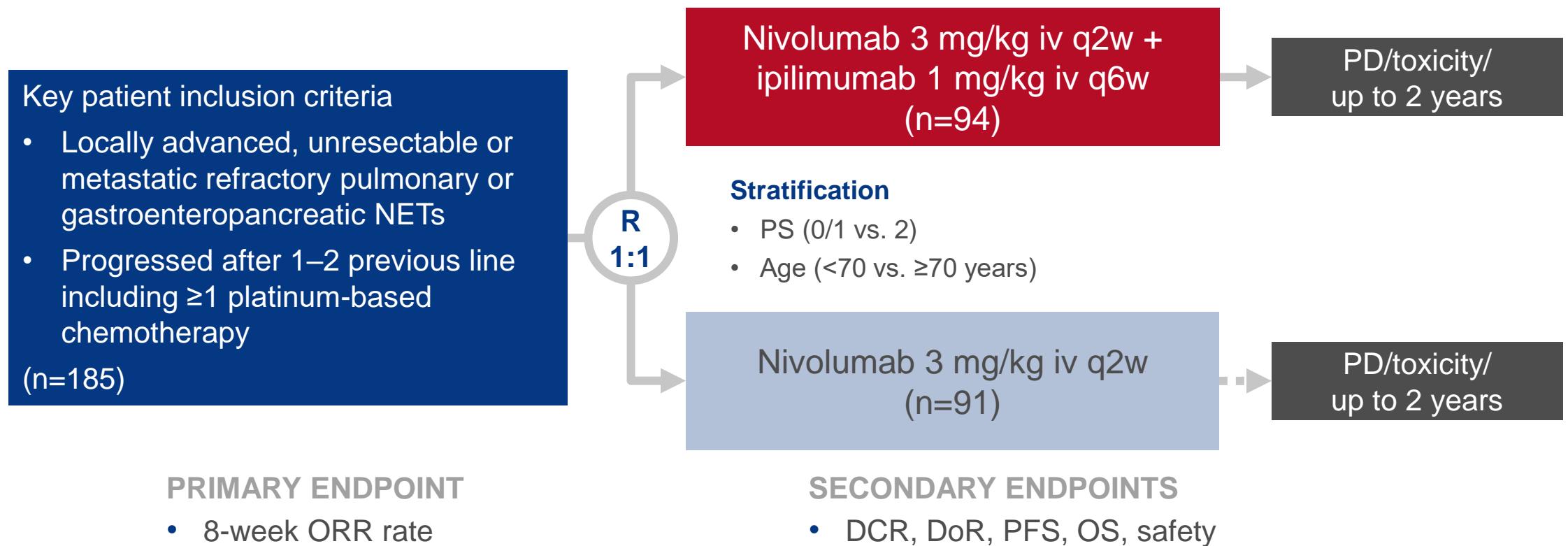
Cancers of the pancreas, small bowel and hepatobiliary tract

# **NEUROENDOCRINE TUMOUR**

# LBA41: Nivolumab (nivo) ± ipilimumab (ipi) in pre-treated patients with advanced, refractory pulmonary or gastroenteropancreatic poorly differentiated neuroendocrine tumors (NECs) (GCO-001 NIPINEC) – Girard N, et al

## Study objective

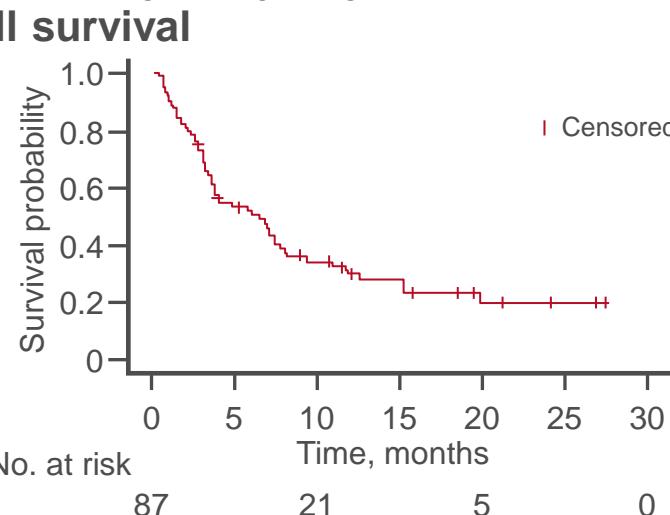
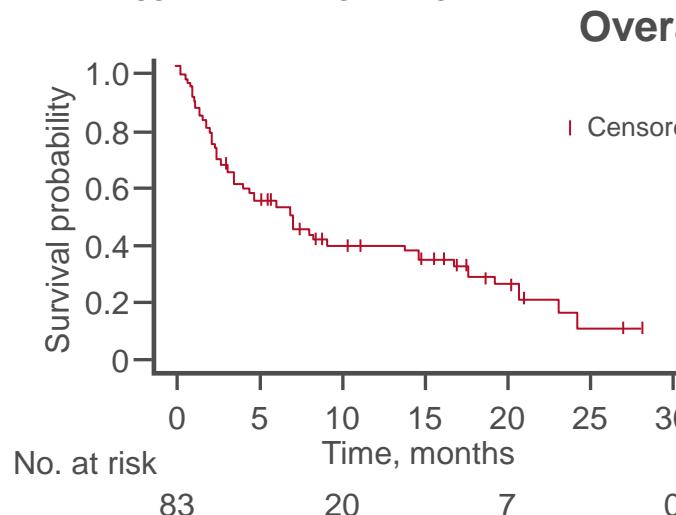
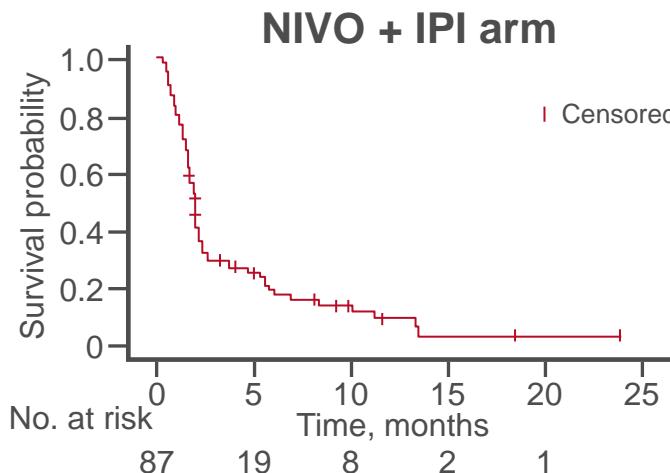
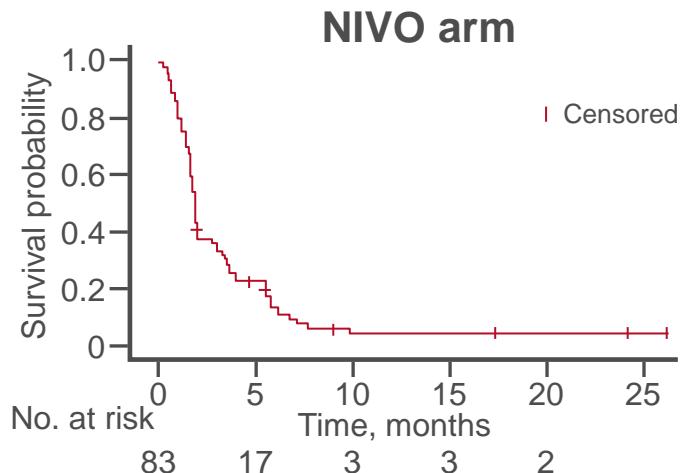
- To evaluate the efficacy and safety of nivolumab with or without ipilimumab in previously treated patients with advanced, refractory pulmonary or gastroenteropancreatic poorly differentiated NETs in the NIPINEC study



# LBA41: Nivolumab (nivo) ± ipilimumab (ipi) in pre-treated patients with advanced, refractory pulmonary or gastroenteropancreatic poorly differentiated neuroendocrine tumors (NECs) (GCO-001 NIPINEC) – Girard N, et al

## Key results

### Progression-free survival



	NIVO (n=83)	NIVO + IPI (n=87)
Events, n (%)	73 (88.0)	72 (82.8)
mPFS, mo (95%CI)	1.8 (1.7, 2.0)	1.9 (1.6, 2.1)
6-mo PFS, % (95%CI)	15.1 (8.1, 24.2)	20.2 (12.0, 29.9)

	NIVO (n=83)	NIVO + IPI (n=87)
Events, n (%)	54 (65.1)	58 (66.7)
mOS, mo (95%CI)	7.2 (3.7, 14.1)	5.8 (3.4, 7.6)
6-mo OS, % (95%CI)	53.8 (42.2, 64.1)	50.0 (38.6, 60.3)

# LBA41: Nivolumab (nivo) ± ipilimumab (ipi) in pre-treated patients with advanced, refractory pulmonary or gastroenteropancreatic poorly differentiated neuroendocrine tumors (NECs) (GCO-001 NIPINEC) – Girard N, et al

## Key results (cont.)

Gastroenteropancreatic NETs response, n (%) [95%CI]	Nivolumab + ipilimumab (n=43)	Nivolumab (n=42)	Overall TRAEs, n (%)	Nivolumab + ipilimumab (n=90)	Nivolumab (n=91)
ORR	5 (11.6) [3.9, 25.1]	3 (7.1) [1.5, 19.5]	Any	62 (68.9)	55 (60.4)
SD	6 (14.0) [5.3, 27.9]	9 (21.4) [10.3, 36.8]	Grade 3	9 (10.0)	6 (6.6)
Disease control	11 (25.6) [13.5, 41.2]	12 (28.6) [15.7, 44.6]	Grade 4	7 (7.8)	4 (4.4)
PD	23 (53.5) [37.7, 68.8]	25 (59.5) [43.3, 74.4]	Serious	9 (10.0)	7 (7.7)
NE	9 (20.9) [10.0, 36.0]	5 (11.9) [4.0, 25.6]	Led to discontinuation	7 (7.8)	3 (3.4)
			Led to death	0	2 (2.2)*

## Conclusions

- In previously treated patients with advanced, refractory pulmonary or gastroenteropancreatic poorly differentiated NETs, nivolumab + ipilimumab, but not nivolumab alone, met the ORR primary endpoint and the safety profile in both arms was comparable to that previously reported

## O-2: Final overall survival in the phase 3 NETTER-1 study of lutetium-177-DOTATATE in patients with midgut neuroendocrine tumors – Strosberg JR, et al

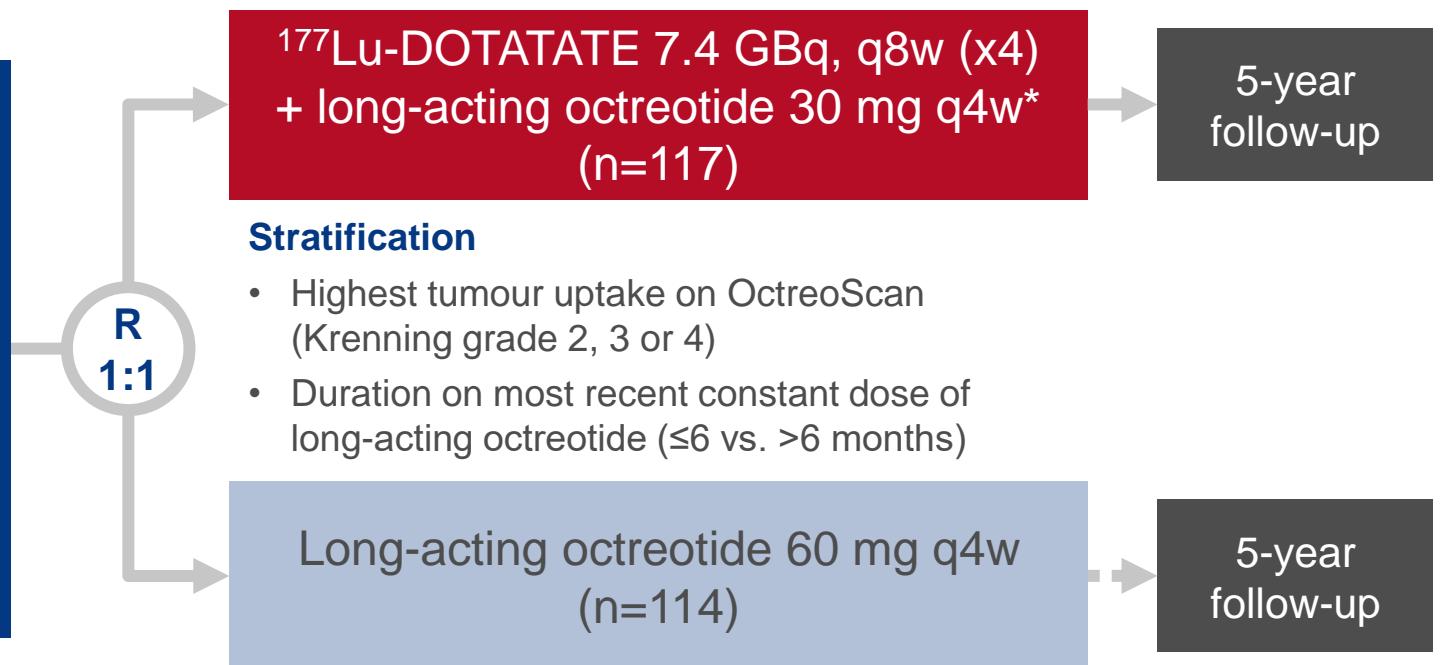
### Study objective

- To present the final OS and safety data of  $^{177}\text{Lu}$ -DOTATATE compared with long-acting octreotide in patients with advanced, progressive somatostatin receptor-positive midgut NETs

**Key patient inclusion criteria**

- Advanced, inoperable, well-differentiated midgut NETs
- Ki67 index  $\leq 20\%$
- PD on long-acting octreotide (20 or 30 mg q3/4w)
- Somatostatin receptor-positive disease
- Karnofsky PS  $\geq 60$

(n=230)



### PRIMARY ENDPOINT

- PFS (RECIST v1.1, BICR)

### SECONDARY ENDPOINTS

- ORR, OS, TTP, QoL, safety

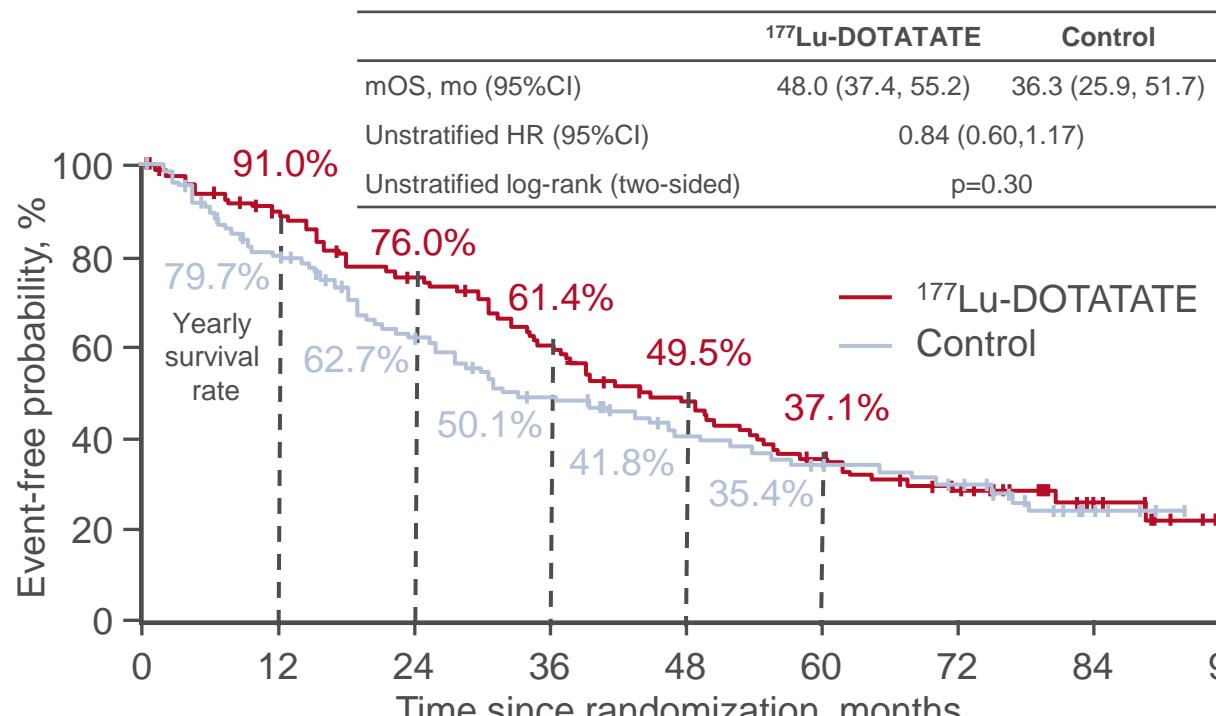
\*Dosed q8w during  $^{177}\text{Lu}$ -DOTATATE

Strosberg JR, et al. Ann Oncol 2021;32(suppl):abstr O-2

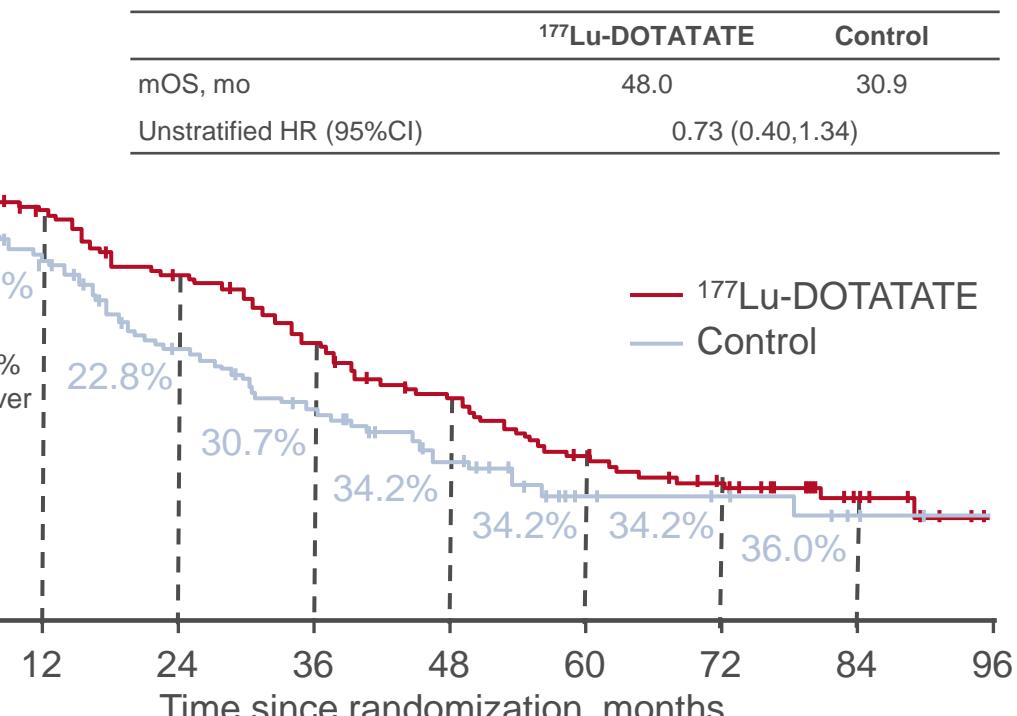
## O-2: Final overall survival in the phase 3 NETTER-1 study of lutetium-177-DOTATATE in patients with midgut neuroendocrine tumors – Strosberg JR, et al

### Key results

#### Overall survival (ITT)



#### Overall survival (accounting for crossover in control arm)



## O-2: Final overall survival in the phase 3 NETTER-1 study of lutetium-177-DOTATATE in patients with midgut neuroendocrine tumors – Strosberg JR, et al

### Key results (cont.)

Subsequent treatment, %	<sup>177</sup> Lu-DOTATATE (n=117)	Control (n=114)	Select AEs, n (%)	<sup>177</sup> Lu-DOTATATE (n=111)	Control (n=112)
Anti-neoplastic agent	21.4	26.3	Myelodysplastic syndrome	2 (1.8)	-
Radioligand therapy	12.0	36.0	Grade ≥3 nephrotoxicity	6 (5.4)	4 (3.6)

### Conclusions

- In patients with midgut NETs, <sup>177</sup>Lu-DOTATATE did not demonstrate a statistically significant improvement in OS possibly because of a number of confounding factors such as crossover from the control arm (36%); there were no new safety signals observed

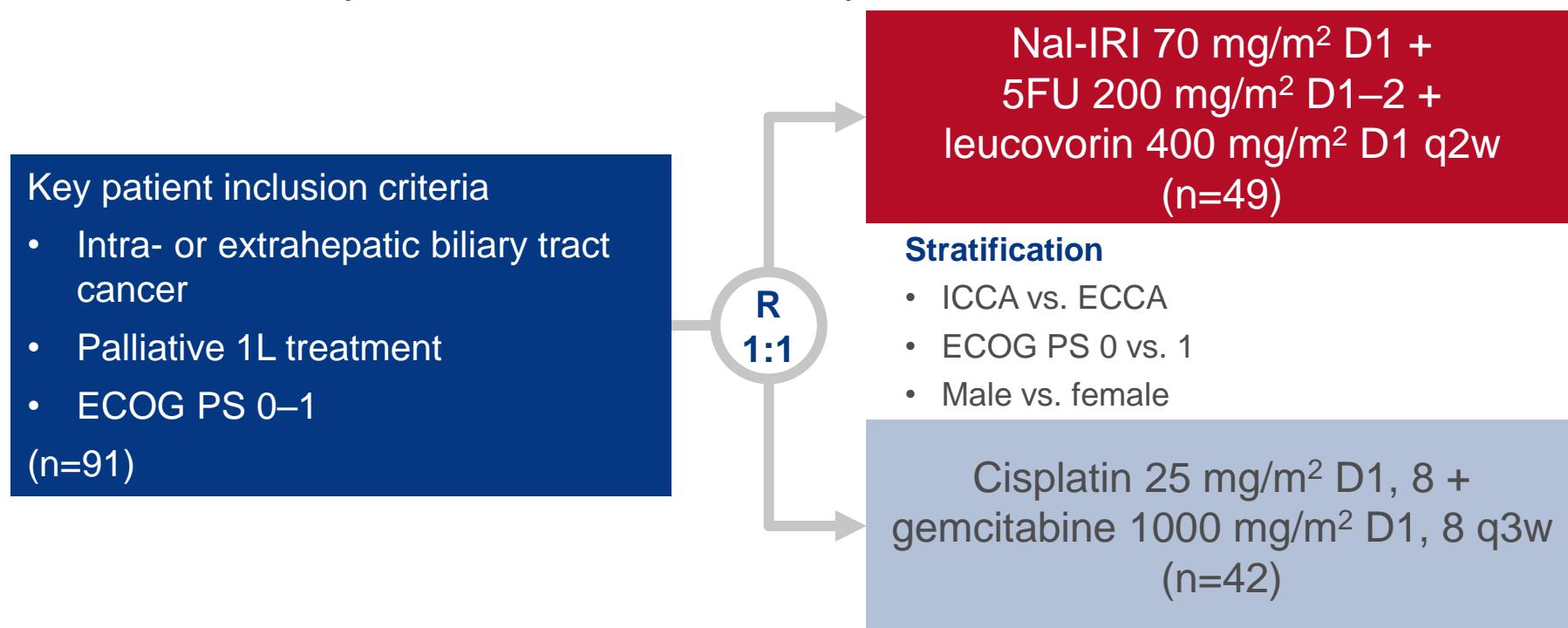
Cancers of the pancreas, small bowel and hepatobiliary tract

# **BILIARY TRACT CANCER**

# LBA10: Nal-IRI with 5-fluorouracil (5-FU) and leucovorin or gemcitabine plus cisplatin in advanced biliary tract cancer – final results of the NIFE-trial (AIO-YMO HEP-0315) - a randomized phase II study of the AIO biliary tract cancer group – Perkhofer L, et al

## Study objective

- To evaluate the efficacy and safety of Nal-IRI combined with 5FU + leucovorin compared with gemcitabine + cisplatin in patients with advanced biliary tract cancer in the NIFE study



## PRIMARY ENDPOINT

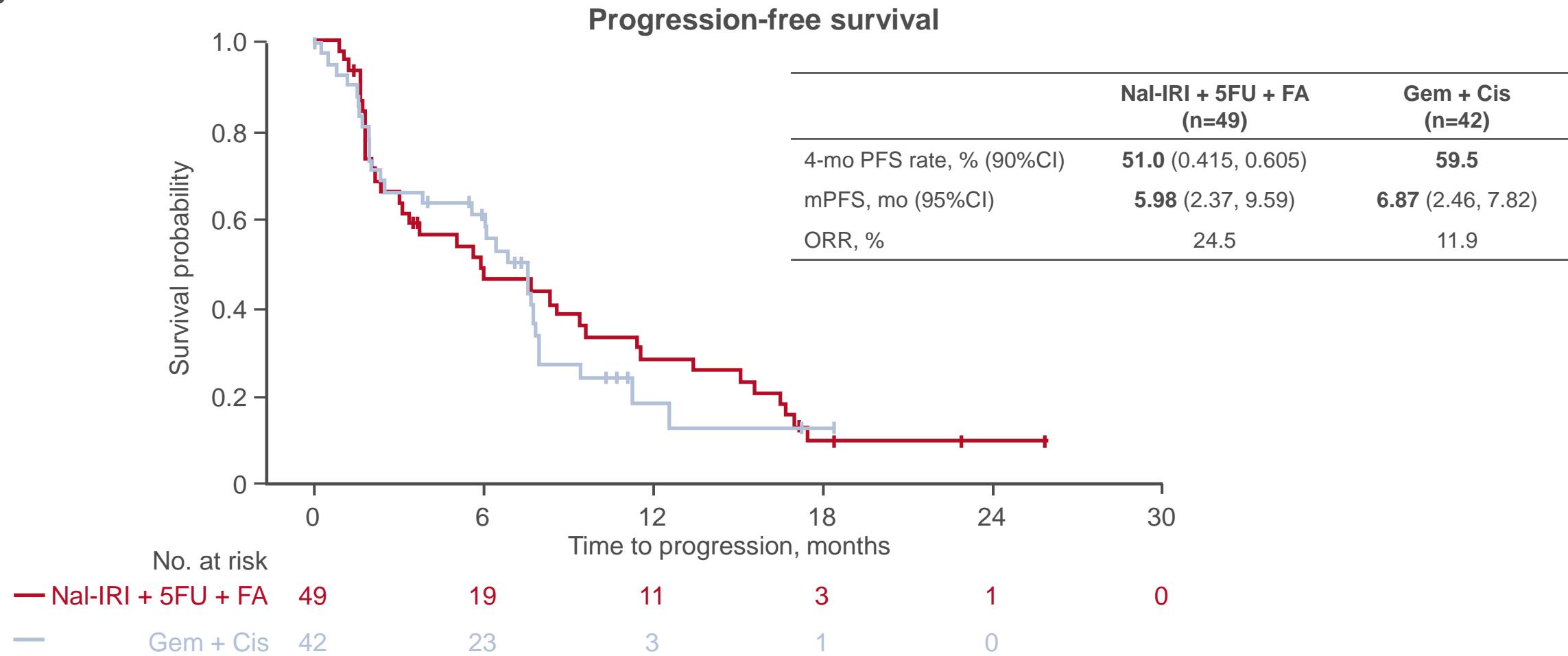
- 4-month PFS rate

## SECONDARY ENDPOINTS

- PFS, OS, ORR, PROs, safety

# LBA10: Nal-IRI with 5-fluorouracil (5-FU) and leucovorin or gemcitabine plus cisplatin in advanced biliary tract cancer – final results of the NIFE-trial (AIO-YMO HEP-0315) - a randomized phase II study of the AIO biliary tract cancer group – Perkhofer L, et al

## Key results



# LBA10: Nal-IRI with 5-fluorouracil (5-FU) and leucovorin or gemcitabine plus cisplatin in advanced biliary tract cancer – final results of the NIFE-trial (AIO-YMO HEP-0315) - a randomized phase II study of the AIO biliary tract cancer group – Perkhofer L, et al

## Key results (cont.)

	Nal-IRI + 5FU + LV	Gem + Cis
ICCA, n	34	32
mPFS, mo (95%CI)	3.45 (2.10, 6.05)	7.72 (6.05, 9.46)
mOS, mo (95%CI)	14.19 (7.69, 21.85)	16.36 (7.46, 19.91)
ECCA, n	15	10
mPFS, mo (95%CI)	9.59 (1.94, 15.67)	1.76 (0.16, 6.87)
mOS, mo (95%CI)	18.23 (8.67, 30.95)	6.34 (0.16, NE)

Grade 3/4 AEs, %	Nal-IRI + 5FU + LV (n=49)	Gem + Cis (n=42)
Diarrhea	22.4	2.4
Nausea	12.2	0
Neutropenia	10.2	21.4
Anemia	4.1	26.2
Fatigue	4.1	2.4
Thrombocytopenia	2.0	9.5
Mucositis	2.0	0

## Conclusions

- In patients with advanced biliary tract cancer, Nal-IRI + 5FU + leucovorin demonstrated encouraging clinical activity meeting the primary endpoint and with a safety profile similar to previous findings

# **CANCERS OF THE COLON, RECTUM AND ANUS**

## LBA-3: Integrated analysis of cell free DNA (cfDNA) BRAF mutant allele fraction (MAF) and whole exome sequencing in BRAFV600E metastatic colorectal cancer (mCRC) treated with BRAF-antiEGFR +/- MEK inhibitors – Elez E, et al

### Study objective

- To evaluate the prognostic value of BRAF MAF and identify potential predictive biomarkers in patients with BRAF V600E mCRC

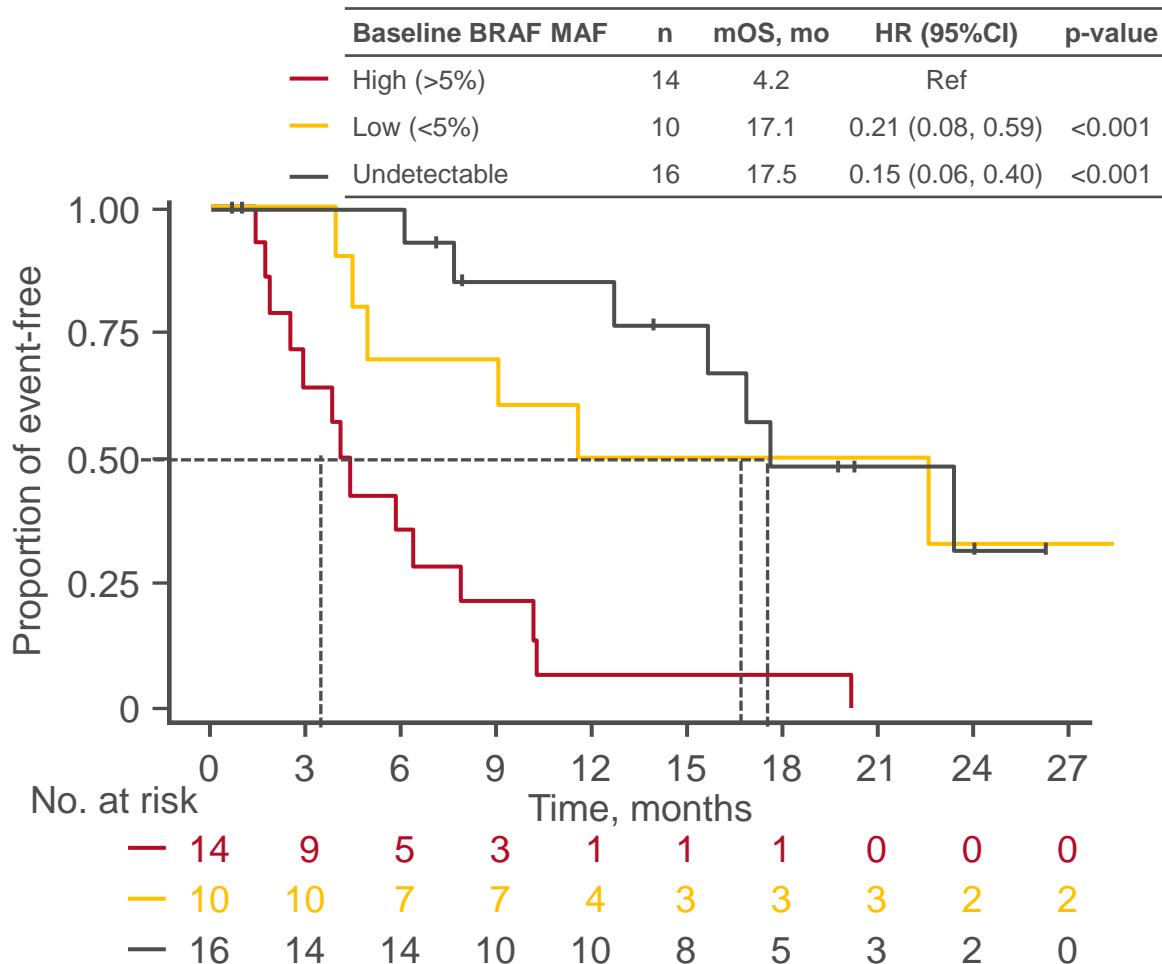
### Methods

- Data from 282 patients with BRAF V600E mCRC were assessed, of whom 86 had received targeted treatment with a BRAF/EGFR inhibitor with or without MEK inhibitor (encorafenib-cetuximab ± binimetinib), 74 had full clinical/pathological data available and 23 had FFPE/plasma samples available
- ddPCR was used to determine the baseline BRAF MAF and stratified as high ( $\geq 5\%$ ; n=14) or low ( $< 5\%$ ; n=10) and wild-type (n=16)
- Univariate and multivariate Cox models were used to correlate BRAF MAF with OS
- Somatic mutations and copy number alterations were assessed using whole-exome sequencing (20,000 genes) and ctDNA quantification and copy number alterations were assessed using shallow whole-genome sequencing

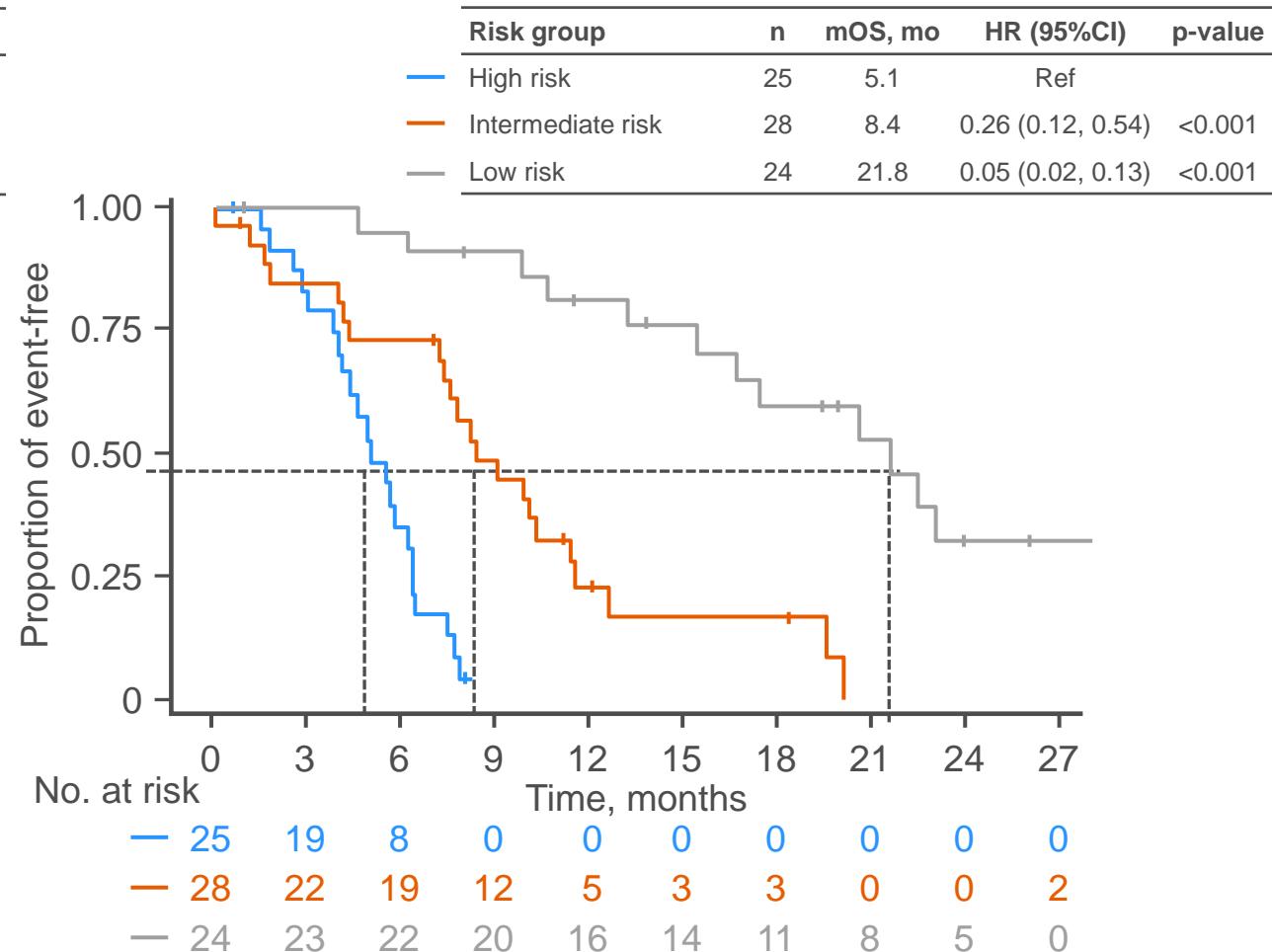
# LBA-3: Integrated analysis of cell free DNA (cfDNA) BRAF mutant allele fraction (MAF) and whole exome sequencing in BRAFV600E metastatic colorectal cancer (mCRC) treated with BRAF-antiEGFR +/- MEK inhibitors – Elez E, et al

## Key results

### OS by baseline MAF BRAF (univariate analysis)



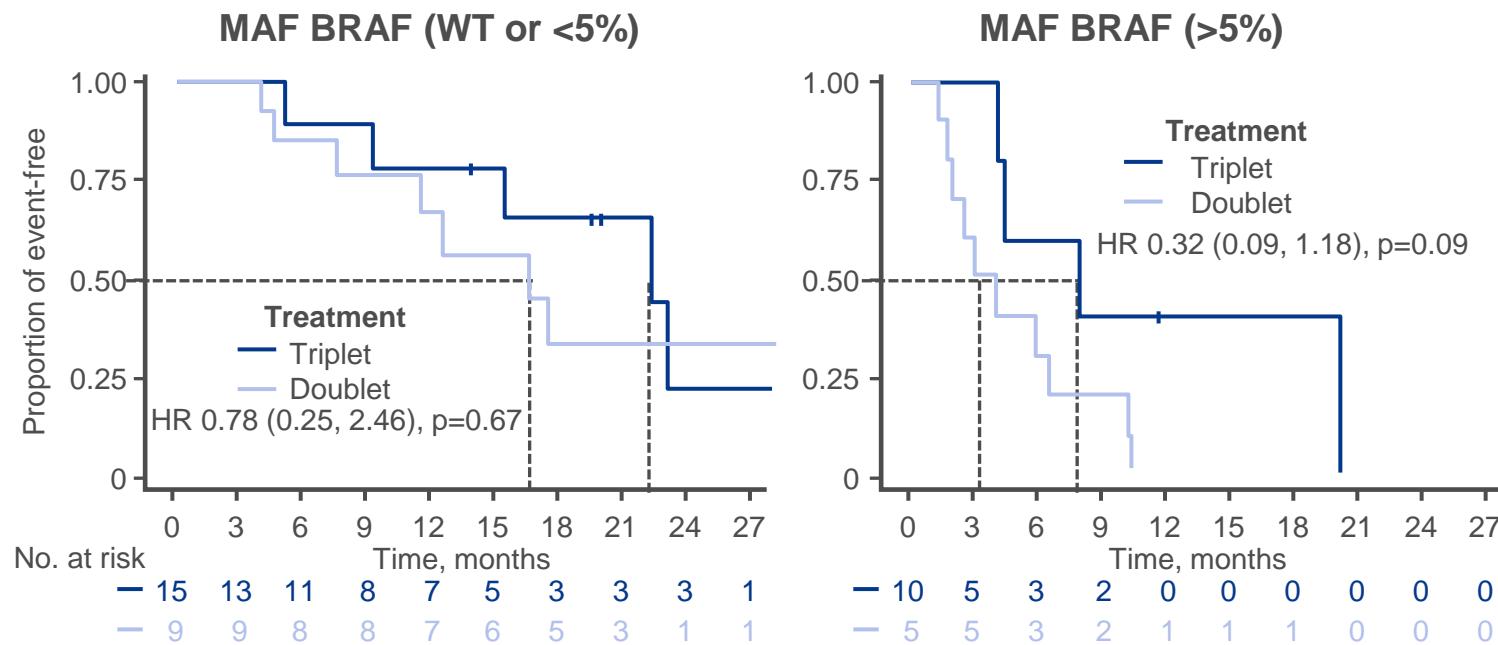
### OS by risk group (multivariate model)



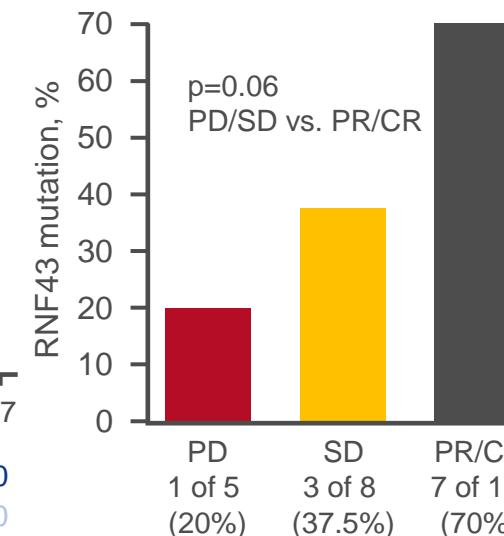
# LBA-3: Integrated analysis of cell free DNA (cfDNA) BRAF mutant allele fraction (MAF) and whole exome sequencing in BRAFV600E metastatic colorectal cancer (mCRC) treated with BRAF-antiEGFR +/- MEK inhibitors – Elez E, et al

## Key results (cont.)

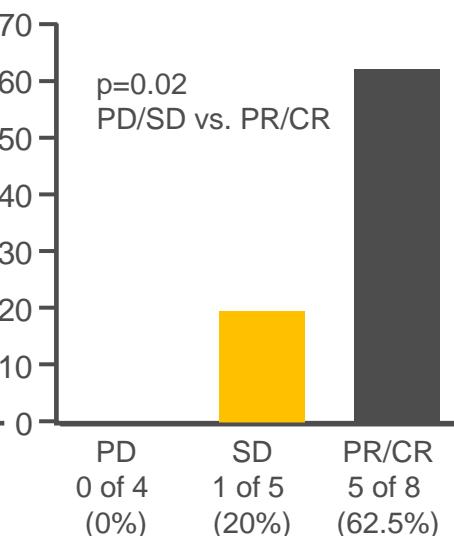
### Overall survival



### MSS + MSI BRAF-mutant CRCs



### MSS BRAF-mutant CRCs



## Conclusions

- In patients with BRAF V600E mCRC, cfDNA BRAF MAF could potentially be an independent prognostic biomarker for OS and RNF43 somatic mutations were enriched in those who responded to BRAF inhibitor combination therapies

# LBA6: KRYSTAL-1: adagrasib (MRTX849) as monotherapy or combined with cetuximab (Cetux) in patients (pts) with colorectal cancer (CRC) harboring a KRASG12C mutation – Weiss J, et al

## Study objective

- To evaluate the efficacy and safety of adagrasib alone or combined with cetuximab in the cohort of patients with CRC and harbouring a KRAS G12C mutation in the KRYSTAL-1 study

Key patient inclusion criteria

- Unresectable or mCRC
- KRAS G12C mutation
- No available treatment with curative intent or SoC

(n=565)

### Phase 1 Dose escalation

Adagrasib  
150, 300,  
600, 1200 mg/day

### Phase 1b Dose expansion + combination

Adagrasib 600 mg/day  
(n=2)

Adagrasib 600 mg/day +  
cetuximab  
(n=32)

### Phase 2

Adagrasib  
600 mg/day  
(n=44)

#### PRIMARY ENDPOINT

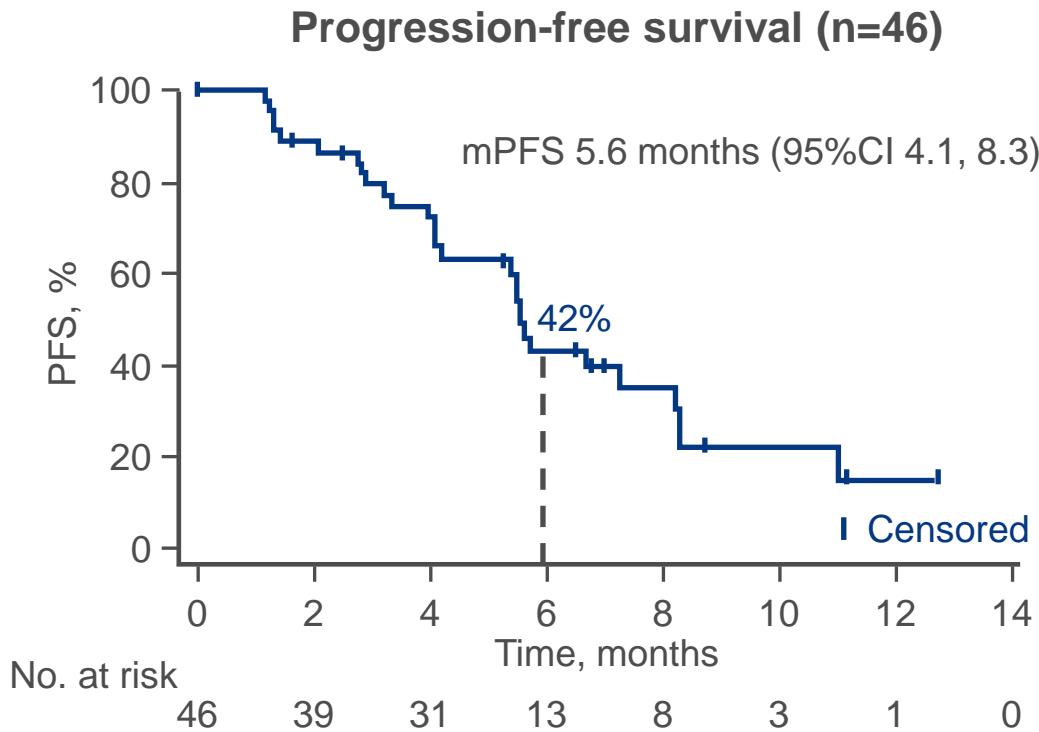
- Phase 1: RP2D, safety
- Phase 2: ORR (RECIST v1.1)

#### SECONDARY ENDPOINTS

- Phase 1: ORR, DoR, PFS, OS
- Phase 2: safety

# LBA6: KRYSTAL-1: adagrasib (MRTX849) as monotherapy or combined with cetuximab (Cetux) in patients (pts) with colorectal cancer (CRC) harboring a KRASG12C mutation – Weiss J, et al

## Key results



	Adagrasib (n=45)	Adagrasib + cetuximab (n=28)
Response rate, n (%)	10 (22)	12 (43)
SD, n (%)	29 (64)	16 (57)
DCR, n (%)	39 (87)	28 (100)
DoR, mo	4.2	-
Median time to response, mo	1.4	1.3

## LBA6: KRYSTAL-1: adagrasib (MRTX849) as monotherapy or combined with cetuximab (Cetux) in patients (pts) with colorectal cancer (CRC) harboring a KRASG12C mutation – Weiss J, et al

### Key results (cont.)

Grade 3/4 TRAEs, %	Adagrasib (n=46)	Grade 3/4 TRAEs, %	Adagrasib + cetuximab (n=32)
Any	30	Any	16
Diarrhoea	7	Diarrhoea	3
Fatigue	4	Dermatitis acneiform	3
AST increased	4	Infusion-related reaction	3
ALT increased	4	QT prolongation	3
QT prolongation	2	Stomatitis	3
Anaemia	2		

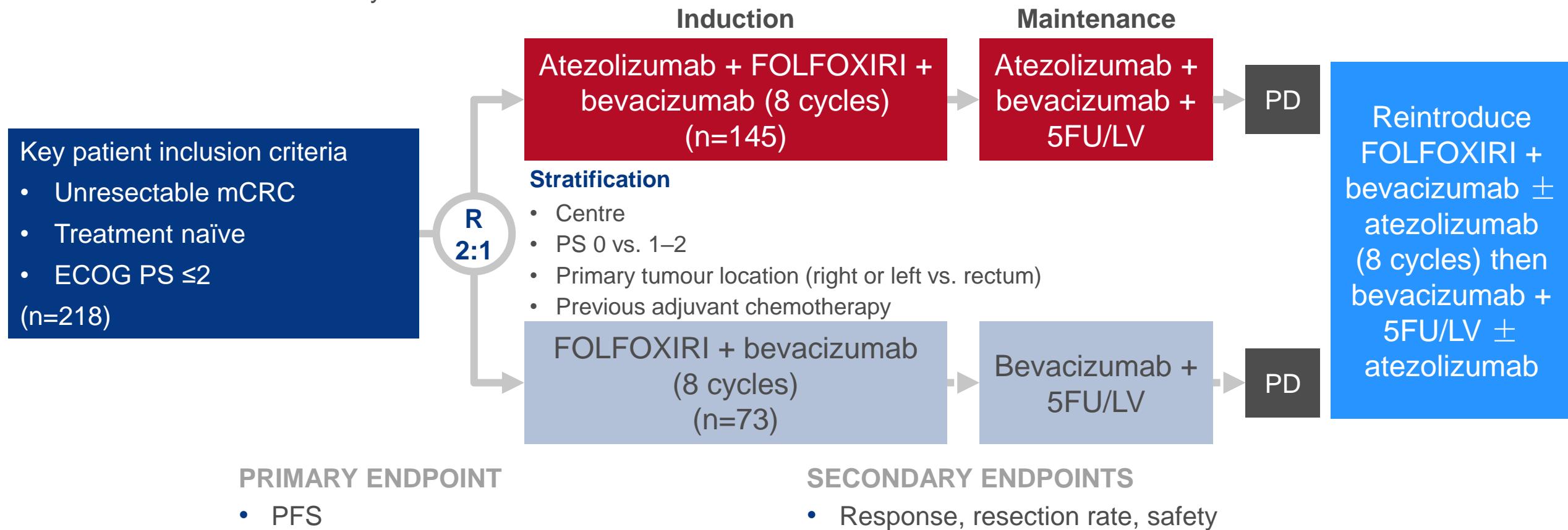
### Conclusions

- In previously treated patients with CRC harbouring a KRAS G12C mutation, adagrasib alone or combined with cetuximab demonstrated promising clinical activity and had a manageable safety profile

# LBA20: FOLFOXIRI plus bevacizumab (bev) plus atezolizumab (atezo) versus FOLFOXIRI plus bev as first-line treatment of unresectable metastatic colorectal cancer (mCRC) patients: results of the phase II randomized AtezoTRIBE study by GONO – Cremolini C, et al

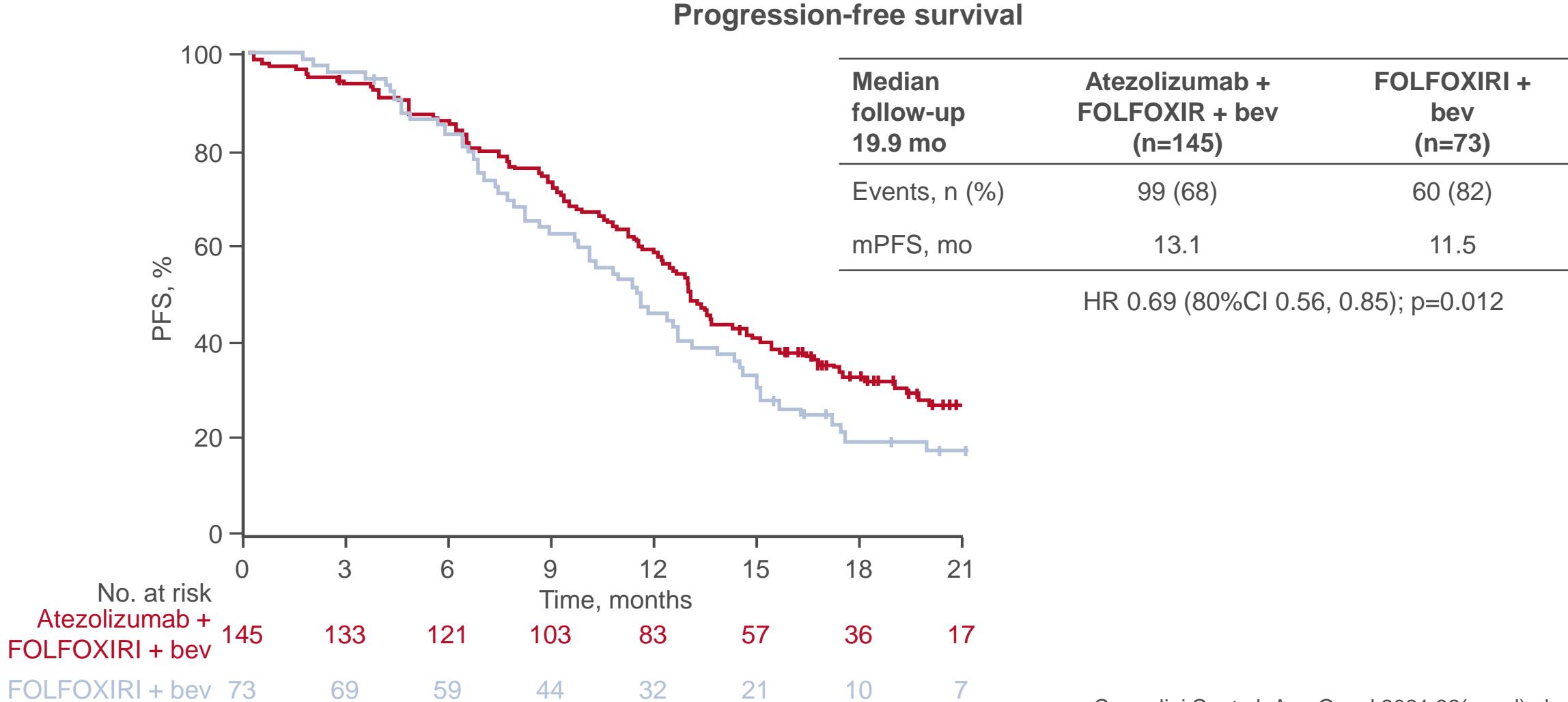
## Study objective

- To evaluate the efficacy and safety of 1L atezolizumab + FOLFOXIRI + bevacizumab in patients with unresectable mCRC in the AtezoTRIBE study



# LBA20: FOLFOXIRI plus bevacizumab (bev) plus atezolizumab (atezo) versus FOLFOXIRI plus bev as first-line treatment of unresectable metastatic colorectal cancer (mCRC) patients: results of the phase II randomized AtezoTRIBE study by GONO – Cremolini C, et al

## Key results



# LBA20: FOLFOXIRI plus bevacizumab (bev) plus atezolizumab (atezo) versus FOLFOXIRI plus bev as first-line treatment of unresectable metastatic colorectal cancer (mCRC) patients: results of the phase II randomized AtezoTRIBE study by GONO – Cremolini C, et al

## Key results (cont.)

	Atezolizumab + FOLFOXIRI + bevacizumab (n=145)	FOLFOXIRI + bevacizumab (n=73)
Response rate, %	59	64
OR (80%CI); p-value	0.78 (0.54, 1.15); 0.412	
BOR, %		
CR	6	6
PR	53	59
SD	33	29
PD	3	4
NA	6	3
R0 resection rate, %	26	37
p-value		0.175

Grade 3/4 AEs occurring in ≥5%, %	Atezolizumab + FOLFOXIRI + bevacizumab (n=145)	FOLFOXIRI + bevacizumab (n=73)
Neutropenia	41	36
Diarrhoea	15	12
Febrile neutropenia	10	10
Asthenia	5	6
Stomatitis	4	8
Venous thromboembolism	4	6

## Conclusions

- In patients with unresectable mCRC, 1L atezolizumab + FOLFOXIRI + bevacizumab demonstrated a significant improvement in PFS over FOLFOXIRI + bevacizumab and was generally well-tolerated

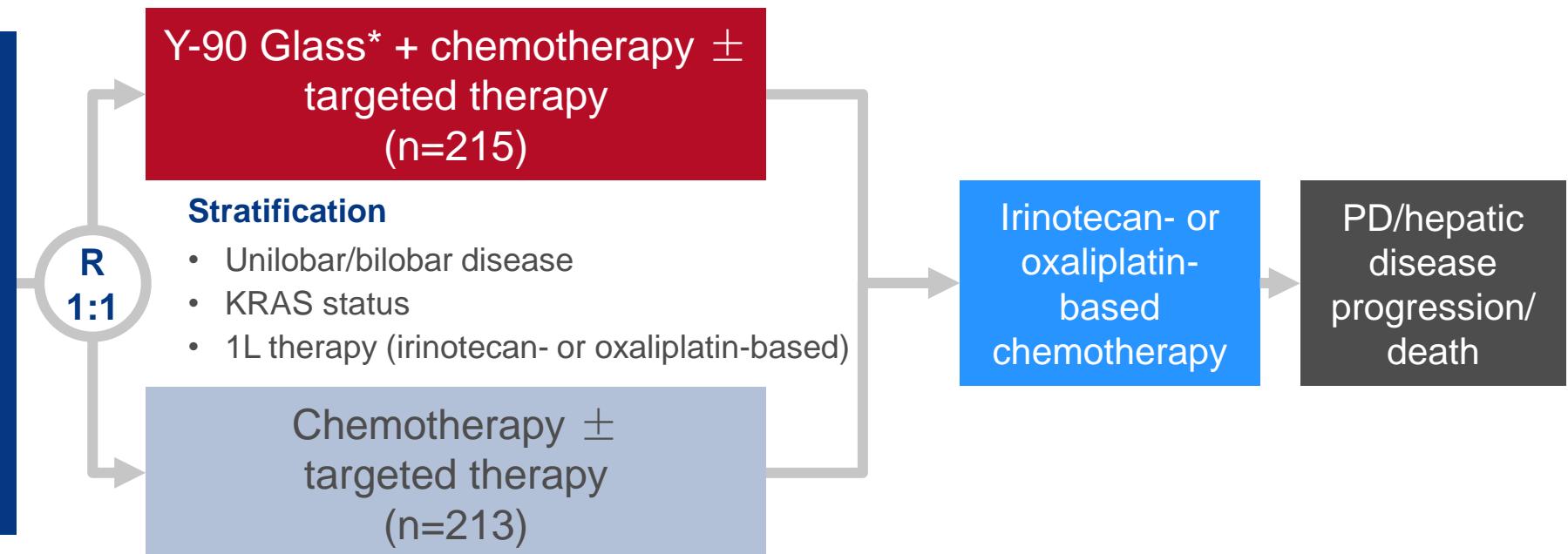
# LBA21: Radioembolization with chemotherapy for colorectal liver metastases: a randomized, open-label, international, multicenter, phase 3 trial (EPOCH study) – Mulcahy MF, et al

## Study objective

- To evaluate the efficacy and safety of radioembolization + chemotherapy in patients with colorectal liver metastases in the EPOCH study

### Key patient inclusion criteria

- Unresectable unilobar or bilobar colorectal liver metastases
  - Eligible for 2L irinotecan- or oxaliplatin-based chemotherapy
  - Bilirubin  $\leq$ 1.2 ULN
  - Albumin  $\geq$ 3.0 g/dL
  - ECOG PS 0–1
- (n=428)



### PRIMARY ENDPOINTS

- PFS, hepatic PFS (BICR)

### SECONDARY ENDPOINTS

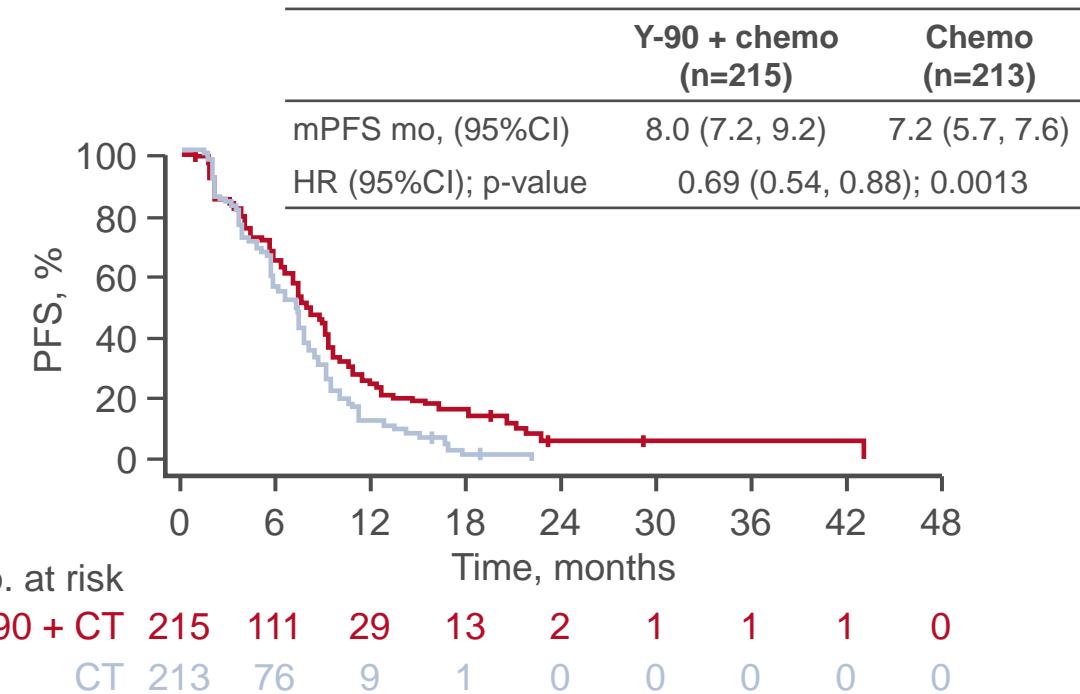
- OS, ORR, DCR, QoL, safety

\*TARE with Y<sup>90</sup> glass microspheres – cycle 1, chemotherapy; cycle 2, Y-90 TARE; cycle 3, chemotherapy ± targeted therapy

# LBA21: Radioembolization with chemotherapy for colorectal liver metastases: a randomized, open-label, international, multicenter, phase 3 trial (EPOCH study) – Mulcahy MF, et al

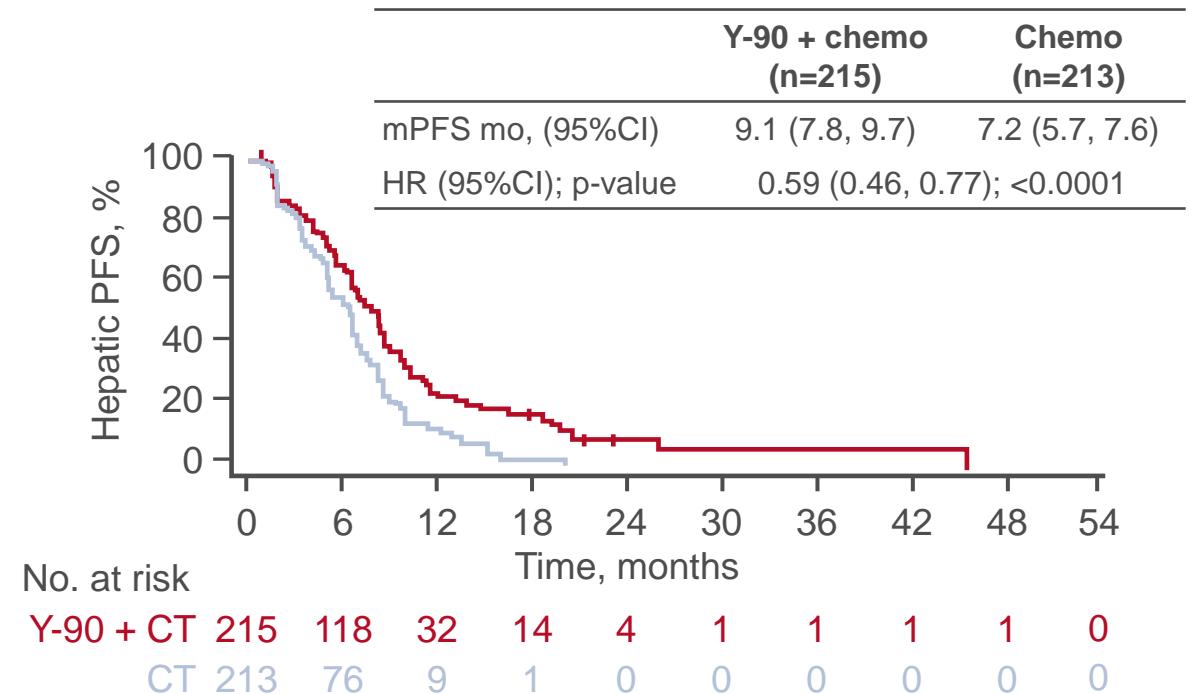
## Key results

### Progression-free survival



PFS rate, % (95%CI)	6 mo	12 mo	18 mo
Y-90 + chemo (n=215)	65.2 (58.0, 71.5)	25.8 (18.9, 33.1)	16.7 (10.6, 23.9)
Chemo (n=213)	55.4 (47.2, 62.8)	13.2 (7.5, 20.5)	1.8 (0.2, 8.1)

### Hepatic progression-free survival



Hepatic PFS rate, % (95%CI)	6 mo	12 mo	18 mo
Y-90 + chemo (n=215)	70.7 (63.6, 76.6)	29.8 (22.4, 37.6)	19.8 (13.0, 27.6)
Chemo (n=213)	55.2 (47.1, 62.7)	13.5 (7.7, 20.9)	1.9 (0.2, 8.3)

## LBA21: Radioembolization with chemotherapy for colorectal liver metastases: a randomized, open-label, international, multicenter, phase 3 trial (EPOCH study) – Mulcahy MF, et al

### Key results (cont.)

	Y-90 + chemotherapy (n=215)	Chemotherapy (n=213)	TEAEs, n (%)	Y-90 + chemotherapy (n=187)	Chemotherapy (n=207)
mOS, mo (95%CI)	14.0	14.4	Any	181 (96.8)	194 (93.7)
HR (95%CI); p-value	1.07 (0.86, 1.32); 0.7229		Chemotherapy-related	172 (92.0)	189 (91.3)
12-mo OS, % (95%CI)	56.3 (49.2, 62.8)	62.4 (55.0, 68.9)	Device-related	103 (55.1)	0
ORR, n (%) [95%CI]	73 (34.0) [28.0, 40.5]	45 (21.1) [16.2, 27.1]	Angiographic procedure-related	55 (29.4)	2 (1.0)
BOR, %			Grade ≥3	128 (68.4)	102 (49.3)
CR	2 (0.9)	3 (1.4)	Serious	70 (37.4)	43 (20.8)
PR	71 (33.0)	42 (19.7)	Serious device-related	20 (10.7)	0
SD	98 (45.6)	110 (51.6)	Led to discontinuation	24 (12.8)	25 (12.1)
PD	27 (12.6)	27 (12.7)	Led to death	8 (4.3)	4 (1.9)

### Conclusions

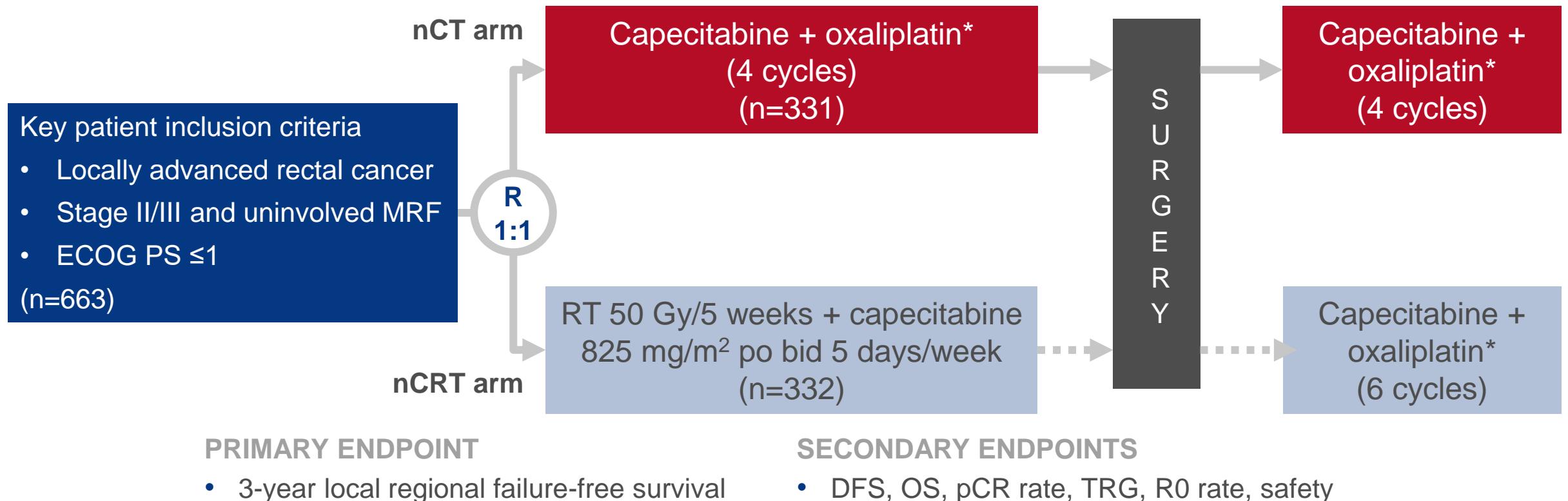
- In patients with colorectal liver metastases, 2L Y-90 TARE + chemotherapy demonstrated significant improvement in PFS and hepatic PFS compared with chemotherapy alone, but did not provide any benefit in OS

# LBA22: Neoadjuvant chemotherapy with oxaliplatin and capecitabine versus chemoradiation with capecitabine for locally advanced rectal cancer with uninvolved mesorectal fascia (CONVERT): initial results of a multicenter randomised, open-label, phase III trial

– Ding PR, et al

## Study objective

- To evaluate the efficacy and safety of neoadjuvant chemotherapy compared with chemoradiation in patients with locally advanced rectal cancer and uninvolved mesorectal fascia in the CONVERT study



\*Oxaliplatin 130 mg/m<sup>2</sup> iv over 2 h D1 + capecitabine 1000 mg/m<sup>2</sup> po bid D1–14 q3w

Ding PR, et al. Ann Oncol 2021;32(suppl):abstr LBA22

**LBA22: Neoadjuvant chemotherapy with oxaliplatin and capecitabine versus chemoradiation with capecitabine for locally advanced rectal cancer with uninvolving mesorectal fascia (CONVERT): initial results of a multicenter randomised, open-label, phase III trial**  
 – Ding PR, et al

**Key results**

All patients, n/N (%)	nCT	nCRT	p-value
pCR rate	30/272 (11.0)	36/261 (13.8)	0.333
cCR rate	2/300 (0.7)	5/289 (1.7)	0.278
ypstage 0–1 rate	111/272 (40.8)	119/261 (45.6)	0.265
Perioperative distant mets	2/300 (0.7)	9/289 (3.1)	0.034

All patients, n (%)	nCT (n=272)	nCRT (n=261)	p-value
pT4	41 (15.1)	28 (10.7)	0.135
pN0	200 (73.5)	214 (82.0)	0.019
TRG 0–1	63/263 (24.0)	96/249 (38.6)	<0.001
R0 resection	271 (99.6)	260 (99.6)	0.999
Spincter preservation	258 (94.9)	246 (94.3)	0.760
Preventive diverting ileostomy	142 (52.2)	166 (63.6)	0.008
Any postop complications	48 (17.7)	63 (24.1)	0.065
Anastomotic leak	17 (6.3)	16 (6.1)	0.954
Postop mortality (≤60 days)	0	1 (0.4)	0.490

Low LARC, n/N (%)	nCT	nCRT	p-value
pCR rate	11/108 (10.2)	15/105 (14.3)	0.361
cCR rate	2/124 (1.6)	3/118 (2.6)	0.677
ypstage 0–1 rate	50/108 (46.3)	50/105 (47.6)	0.847
Perioperative distant mets	1/124 (0.8)	3/118 (2.6)	0.369

Within 5 cm from anal verge, n (%)	nCT (n=108)	nCRT (n=105)	p-value
pT4	4 (3.7)	10 (9.5)	0.103
pN0	74 (68.5)	88 (76.5)	0.180
TRG 0–1	25/105 (23.8)	41/98 (41.8)	<0.001
R0 resection	107 (99.6)	104 (99.6)	0.999
Spincter preservation	95 (88.0)	93 (86.6)	0.890
Preventive diverting ileostomy	77 (71.3)	76 (72.4)	0.860
Any postop complications	26 (24.1)	29 (27.6)	0.555
Anastomotic leak	6 (5.6)	6 (5.7)	0.960
Postop mortality (≤60 days)	0	0	-

## LBA22: Neoadjuvant chemotherapy with oxaliplatin and capecitabine versus chemoradiation with capecitabine for locally advanced rectal cancer with unininvolved mesorectal fascia (CONVERT): initial results of a multicenter randomised, open-label, phase III trial – Ding PR, et al

### Key results (cont.)

AEs, n (%)	Neoadjuvant phase		Adjuvant phase	
	nCT (n=300)	nCRT (n=289)	nCT (n=235)	nCRT (n=222)
Any grade 3/4	37 (12.3)	24 (8.3)	12 (5.1)	20 (9.0)
Grade 3/4 leukopenia	9 (3.0)	14 (4.8)	2 (0.9)	5 (2.3)
Grade 3/4 thrombocytopenia	16 (5.3)	3 (1.0)	3 (1.3)	14 (6.3)
Grade 3/4 diarrhoea	4 (1.3)	1 (0.3)	0	1 (0.5)
Grade 3/4 genitourinary	0	3 (1.0)	0	0
Mortality	2 (0.7)	0	0	0
Received full dose of therapy	259 (86.3)	263 (91.0)	124 (52.8)	98 (44.1)

### Conclusions

- In patients with locally advanced rectal cancer with unininvolved mesorectal fascia, neoadjuvant chemotherapy demonstrated similar rates of pCR, cCR and downstaging as neoadjuvant chemoradiation and both arms had comparable overall safety

## O-3: Characterization of KRAS mutation variants and prevalence of KRAS-G12C in gastrointestinal malignancies – Salem M, et al

### Study objective

- To evaluate the prevalence of KRAS variants and identify potential biomarkers in patients with GI cancers

### Methods

- Samples from 17,009 patients with GI cancers were assessed using Tempus xT or xF NGS
  - Of the samples, 9450 were KRAS wild-type and 7559 were KRAS mutant (325 G12C and 7234 non-G12C)
- Logistic regression analysis was used to determine the association between cancer subtypes and KRAS variants, the association between KRAS variants and immuno-oncology biomarkers and co-mutations between G12C and other oncogenes
- For multiple testing, a false discovery rate-adjusted (FDR) p-value was used with a cut-off of  $p < 0.05$  for significance

## O-3: Characterization of KRAS mutation variants and prevalence of KRAS-G12C in gastrointestinal malignancies – Salem M, et al

### Key results

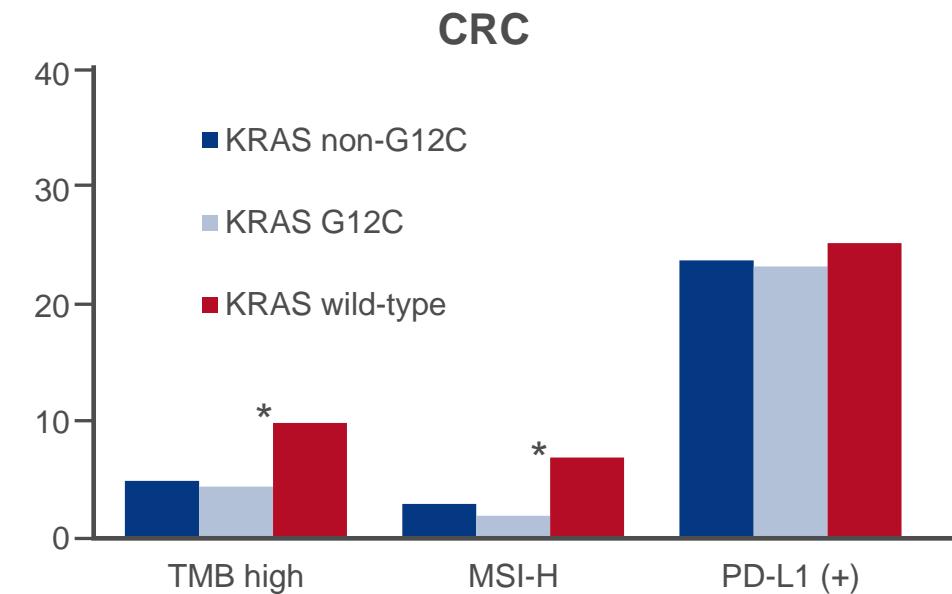
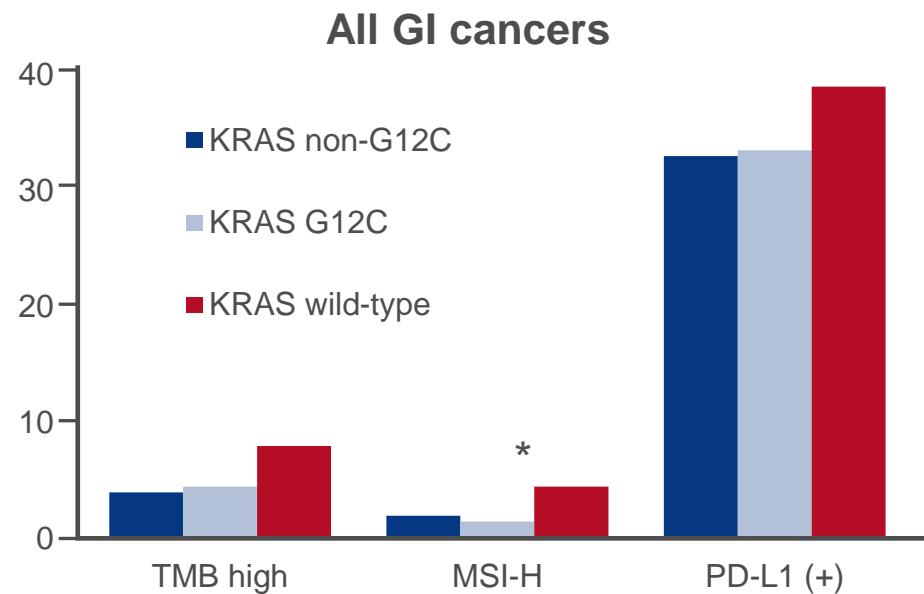
Frequency of KRAS G12C mutations, n (%)	Appendiceal (n=279)	CRC (n=6586)	SBA (n=630)	Pancreatic (n=5029)	Biliary tract (n=1481)	Gastric (n=1401)	Oesophageal (n=941)	HCC (n=467)	Anal (n=195)
KRAS G12C mutation	11 (3.9)	208 (3.1)	9 (1.4)	66 (1.3)	18 (1.2)	9 (0.6)	3 (0.3)	1 (0.2)	0
KRAS non-G12C mutation	125 (44.8)	2763 (42.0)	142 (22.5)	3627 (72.1)	242 (16.3)	168 (12.0)	136 (14.5)	23 (4.9)	8 (4.1)

KRAS variants, n (%)	G12D	G12V	G12C	G13D	G12R	Q61H	Others
All GI cancers	2675 (35.4)	1776 (23.5)	325 (4.3)	603 (8.0)	656 (8.7)	348 (4.6)	177 (20.1)
CRC	889 (29.9)	595 (20.0)	208 (7.0)	469 (15.8)	31 (1.0)	125 (4.2)	654 (22.0)
Appendiceal	69 (50.7)	35 (25.7)	10 (7.4)	10 (7.4)	0	3 (2.2)	9 (6.6)
Pancreatic	1543 (41.8)	1165 (31.6)	66 (1.8)	15 (0.4)	595 (16.1)	175 (4.7)	134 (3.6)

## O-3: Characterization of KRAS mutation variants and prevalence of KRAS-G12C in gastrointestinal malignancies – Salem M, et al

### Key results (cont.)

Immune biomarkers according to KRAS status



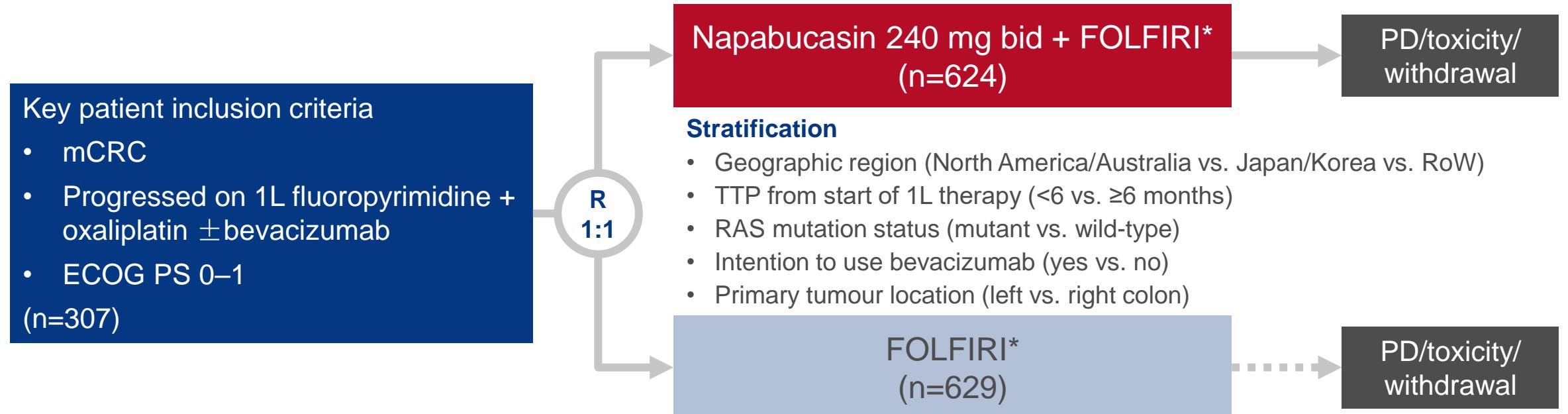
### Conclusions

- In patients with GI malignancies, G12D and G12V were the most common KRAS variants, although there were significant differences in the distribution of variants across cancer types

# O-7: FOLFIRI ± napabucasin in patients with previously treated metastatic colorectal cancer (mCRC): overall survival results from the phase 3 CanStem303C study – Shah M, et al

## Study objective

- To evaluate the efficacy and safety of napabucasin + FOLFIRI in previously treated patients with mCRC in the CanStem303C study



## PRIMARY ENDPOINTS

- OS in overall population and in biomarker-positive subgroup

## SECONDARY ENDPOINTS

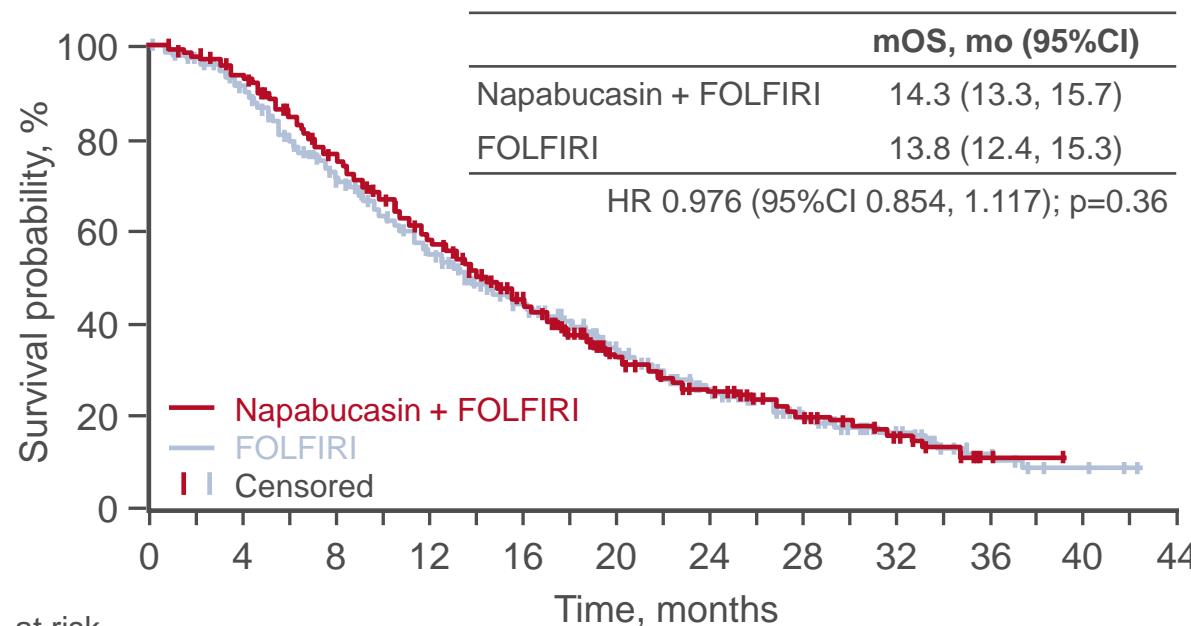
- PFS, DCR, ORR, safety

\*FOLFIRI iv D1 q2w, ≥2 hours after first daily dose of napabucasin and bevacizumab could be added at investigator discretion

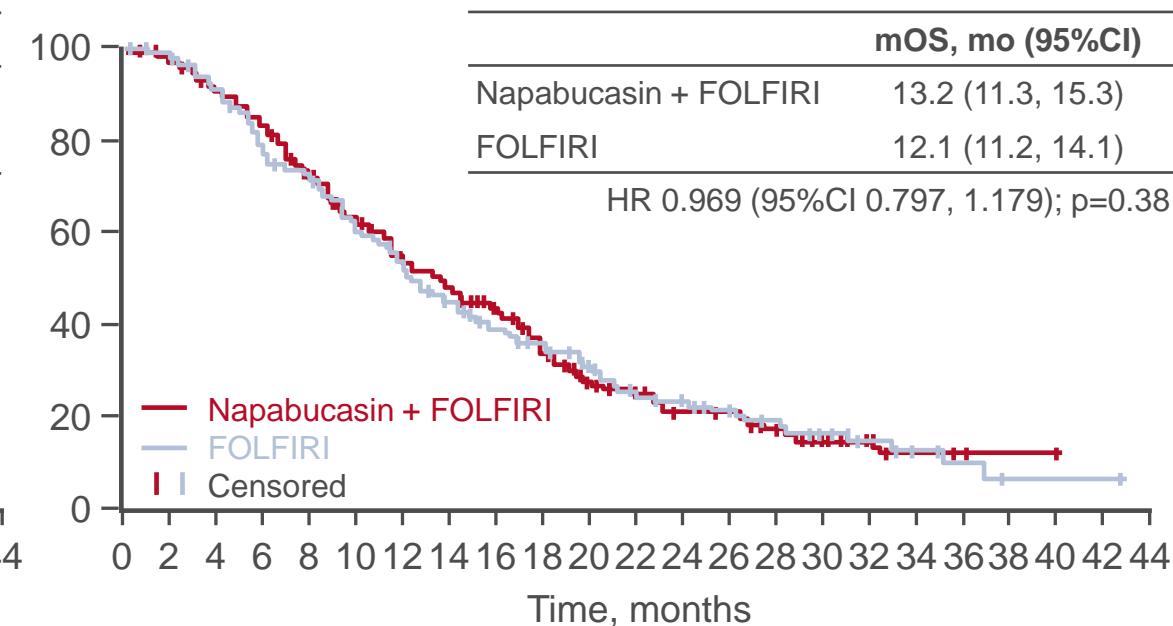
## O-7: FOLFIRI ± napabucasin in patients with previously treated metastatic colorectal cancer (mCRC): overall survival results from the phase 3 CanStem303C study – Shah M, et al

### Key results

Overall survival in overall population



Overall survival in biomarker-positive subgroup



## O-7: FOLFIRI ± napabucasin in patients with previously treated metastatic colorectal cancer (mCRC): overall survival results from the phase 3 CanStem303C study – Shah M, et al

### Key results (cont.)

	Overall population		Biomarker-positive	
	Napabucasin + FOLFIRI (n=624)	FOLFIRI (n=629)	Napabucasin + FOLFIRI (n=275)	FOLFIRI (n=272)
mPFS, mo (95%CI)	5.6 (5.4, 5.8)	5.6 (5.5, 6.3)	5.4 (4.1, 5.6)	5.6 (4.4, 5.9)
HR (95%CI); p-value	1.040 (0.917, 1.180); 0.73		1.064 (0.883, 1.282); 0.74	
	n=593	n=609	n=268	n=266
DCR, n (%)	413 (69.6)	421 (69.1)	180 (67.2)	187 (70.3)
Difference, % (95%CI); p-value	0.1 (-4.9, 5.2); 0.48		-3.1 (-11.0, 4.7); 0.78	
ORR, n (%)	82 (13.8)	89 (14.6)	32 (11.9)	37 (13.9)
Difference, % (95%CI); p-value	-0.9 (-4.8, 3.0); 0.68		-2.0 (-7.7, 3.7); 0.75	

	Overall population		Biomarker-positive	
TEAEs, n (%)	Napabucasin + FOLFIRI (n=622)	FOLFIRI (n=610)	Napabucasin + FOLFIRI (n=275)	FOLFIRI (n=269)
Grade ≥3	459 (73.8)	407 (66.7)	203 (73.8)	191 (71.0)
Diarrhoea	132 (21.2)	43 (7.0)	57 (20.7)	18 (6.7)
Neutrophil count ↓	85 (13.7)	117 (19.2)	32 (11.6)	56 (20.8)
Neutropenia	83 (13.3)	93 (15.2)	33 (12.0)	40 (14.9)
Serious	231 (37.1)	200 (32.8)	106 (38.5)	89 (33.1)
Led to modification	526 (84.6)	478 (78.4)	225 (81.8)	213 (79.2)
Led to discontinuation	87 (14.0)	41 (6.7)	40 (14.5)	15 (5.6)
Led to death	19 (3.1)	32 (5.2)	11 (4.0)	15 (5.6)

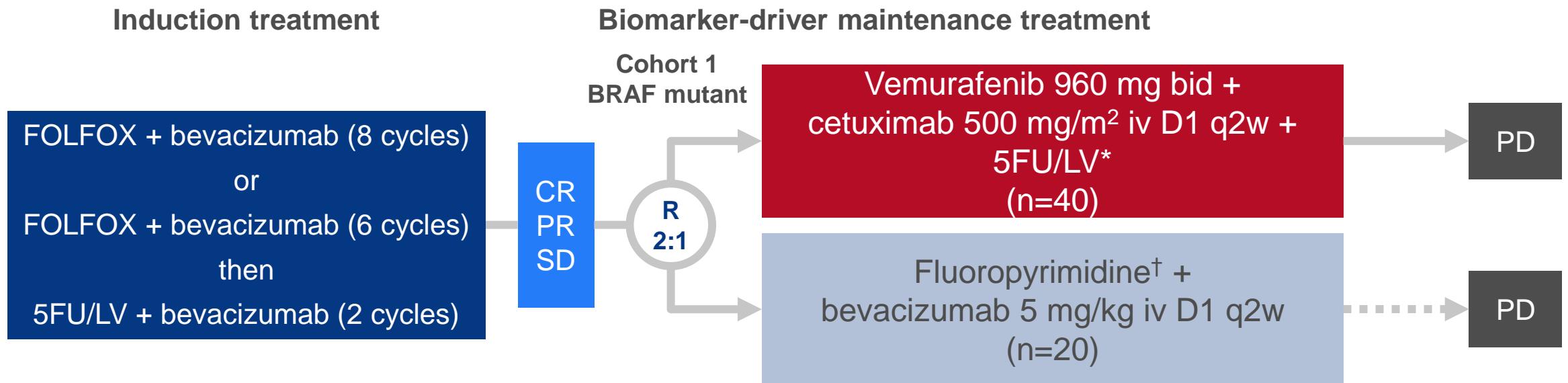
### Conclusions

- In patients with previously treated mCRC, napabucasin combined with FOLFIRI ± bevacizumab did not provide additional efficacy benefit, but demonstrated a manageable safety profile

# O-9: 5-FU/LV + cetuximab + vemurafenib as maintenance therapy for BRAF-mutant (BRAFmut) metastatic colorectal cancer (mCRC): Efficacy, safety, and exploratory biomarker findings from Cohort 1 of the MODUL trial – Ducreux MP, et al

## Study objective

- To evaluate the efficacy and safety of vemurafenib + cetuximab + 5FU/LV as a 1L maintenance treatment in patients with MSS mCRC in Cohort 1 of the MODUL study (Cohort 2, BRAF wild-type; Cohort 3, HER2-positive; and Cohort 4, HER2-negative, BRAF WT)



## PRIMARY ENDPOINT

- PFS (RECIST v1.1)

## SECONDARY ENDPOINTS

- OS, ORR, DCR, TTR, DoR, change in ECOG, safety

\*5FU 1600–2400 mg/m<sup>2</sup> iv 46-hour infusion D1 q2w + LV 400 mg/m<sup>2</sup> 2-hour infusion D1 q2w;

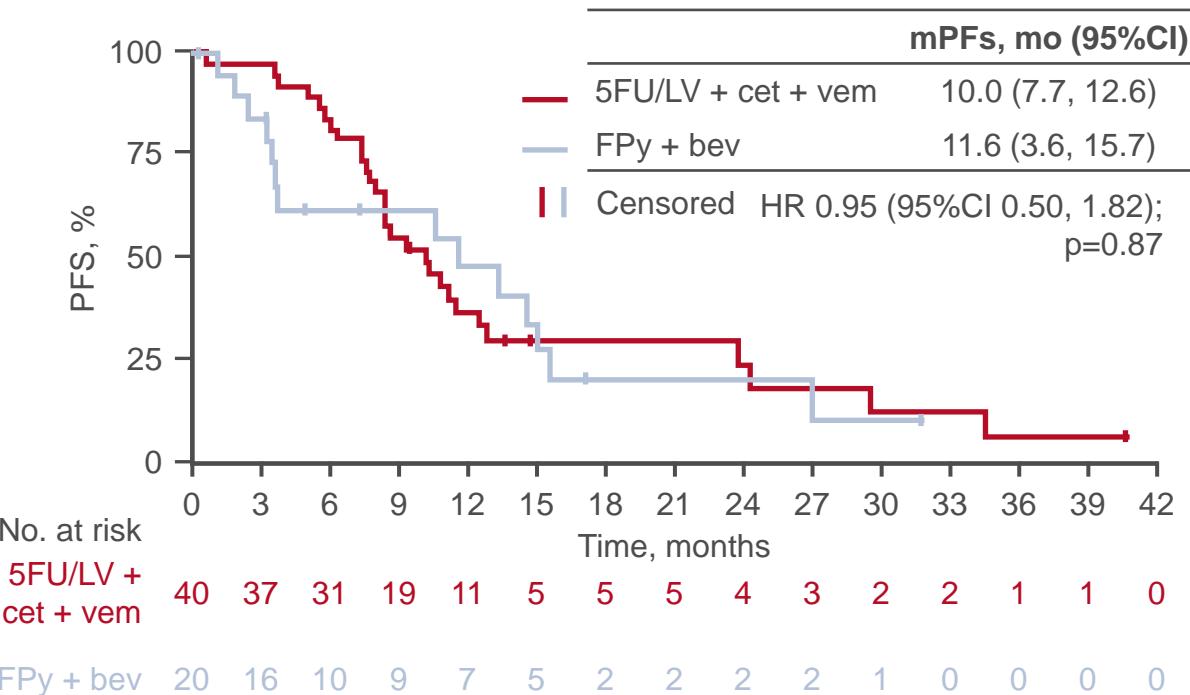
†5FU 1600–2400 mg/m<sup>2</sup> iv 46-hour infusion D1 q2w + LV 400 mg/m<sup>2</sup> 2-hour infusion D1 q2w

or capecitabine 1000 mg/m<sup>2</sup> bid D1–14 q3w

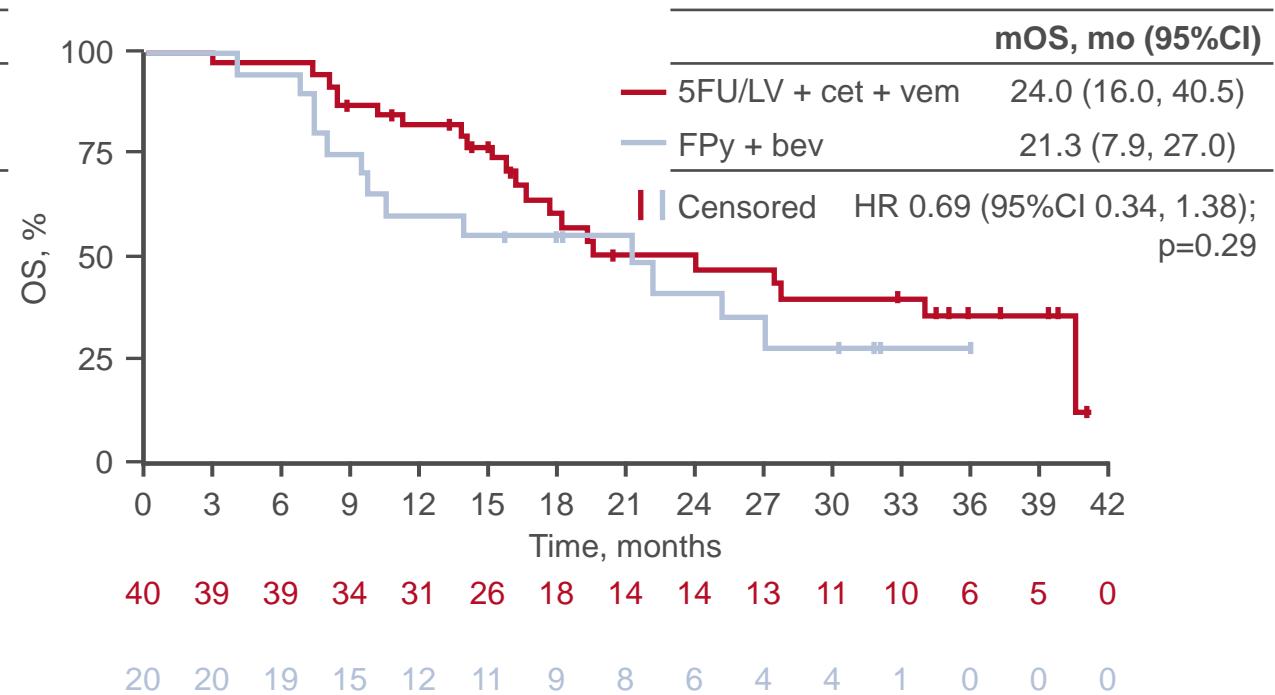
# O-9: 5-FU/LV + cetuximab + vemurafenib as maintenance therapy for BRAF-mutant (BRAFmut) metastatic colorectal cancer (mCRC): Efficacy, safety, and exploratory biomarker findings from Cohort 1 of the MODUL trial – Ducreux MP, et al

## Key results

### Progression-free survival



### Overall survival



## O-9: 5-FU/LV + cetuximab + vemurafenib as maintenance therapy for BRAF-mutant (BRAFmut) metastatic colorectal cancer (mCRC): Efficacy, safety, and exploratory biomarker findings from Cohort 1 of the MODUL trial – Ducreux MP, et al

### Key results (cont.)

- ORR was 50% in the vemurafenib + cetuximab + 5FU/LV arm and 25% in the fluoropyrimidine + bevacizumab arm ( $p=0.06$ )

TRAEs occurring in $\geq 20\%$ , n (%)	Vemurafenib + cetuximab + 5FU/LV (n=40)	Fluoropyrimidine + bevacizumab (n=18)
Any	40 (100)	15 (83.3)
Arthralgia	13 (32.5)	0
Rash	12 (30.0)	0
Diarrhoea	11 (27.5)	5 (27.8)
Nausea	11 (27.5)	0
Dermatitis acneiform	11 (27.5)	0
Dry skin	10 (25.0)	3 (16.7)
Photosensitivity reaction	8 (20.0)	0

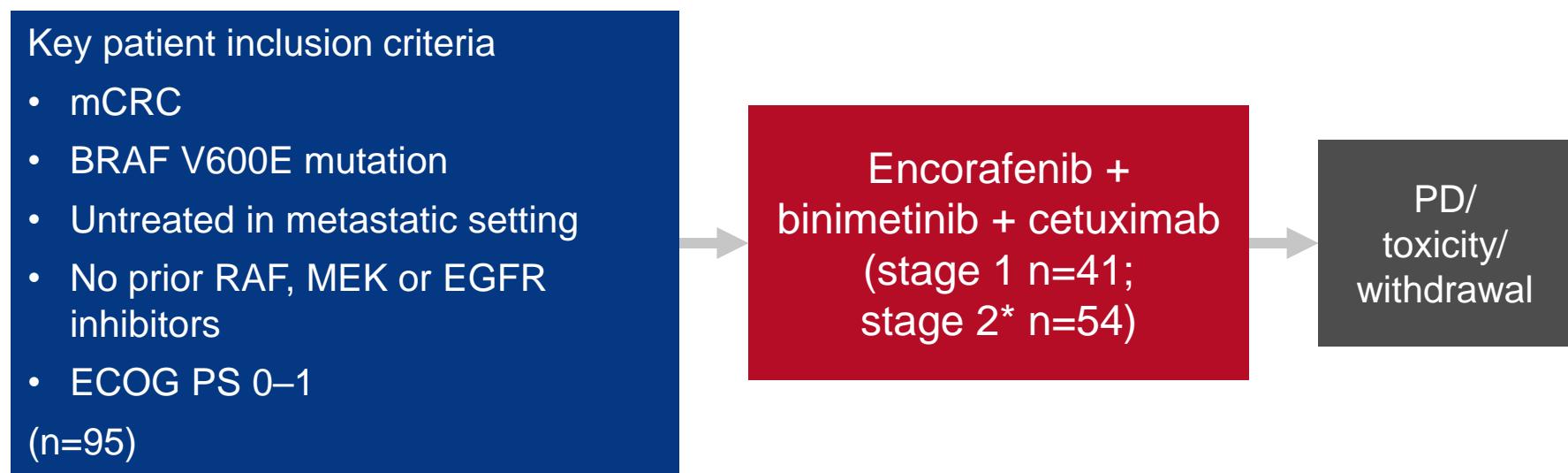
### Conclusions

- In patients with mCRC, maintenance therapy with vemurafenib + cetuximab + 5FU/LV in the 1L setting showed numerically longer mOS and ORR, but not PFS, compared with fluoropyrimidine + bevacizumab; there were no new safety findings

## O-10: ANCHOR CRC: results from a single-arm, phase 2 study of encorafenib, binimetinib plus cetuximab in previously untreated BRAF V600E-mutant metastatic colorectal cancer – Van Cutsem E, et al

### Study objective

- To evaluate the efficacy and safety of encorafenib + binimetinib + cetuximab as a 1L treatment for patients with BRAF V600E-mutant mCRC



### PRIMARY ENDPOINT

- ORR (investigator assessed)

### SECONDARY ENDPOINTS

- PFS, OS, PK, QoL, safety

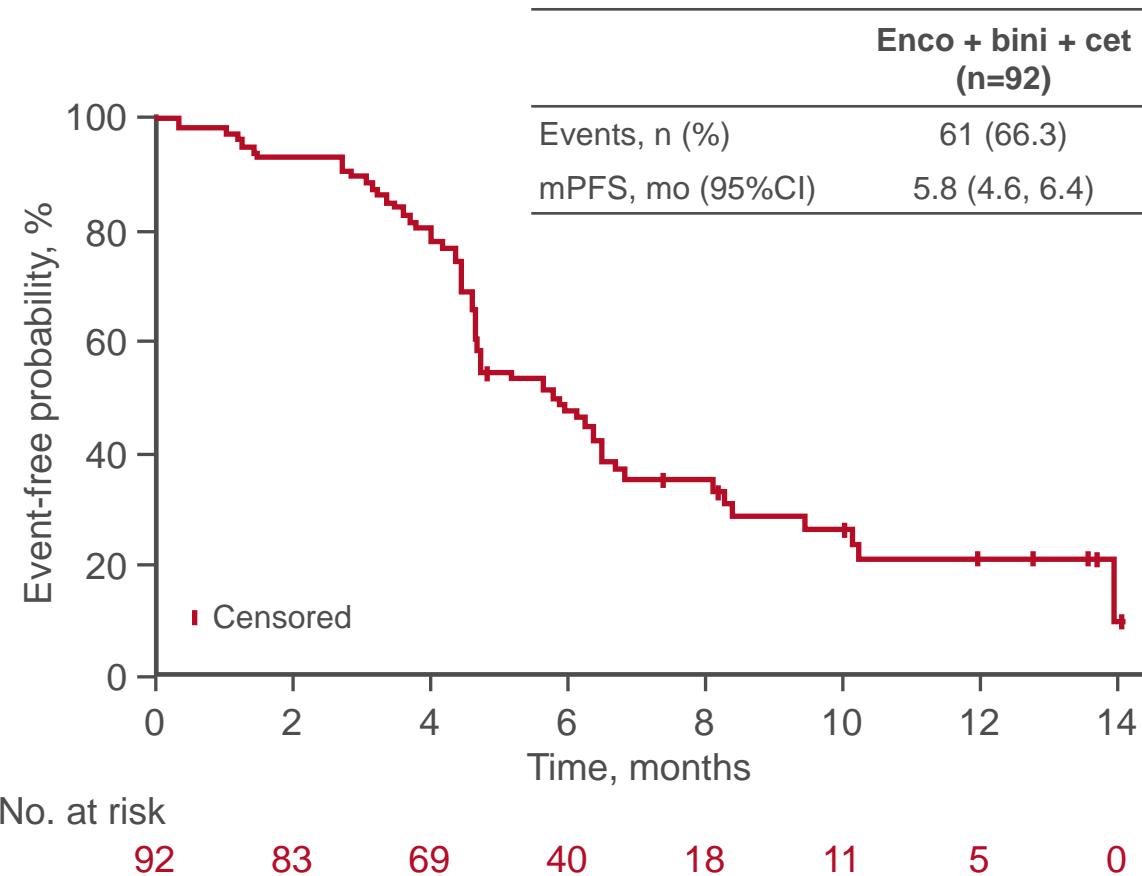
\*Enrolment after ≥12 responses occurred in stage 1

Van Cutsem E, et al. Ann Oncol 2021;32(suppl):abstr O-10

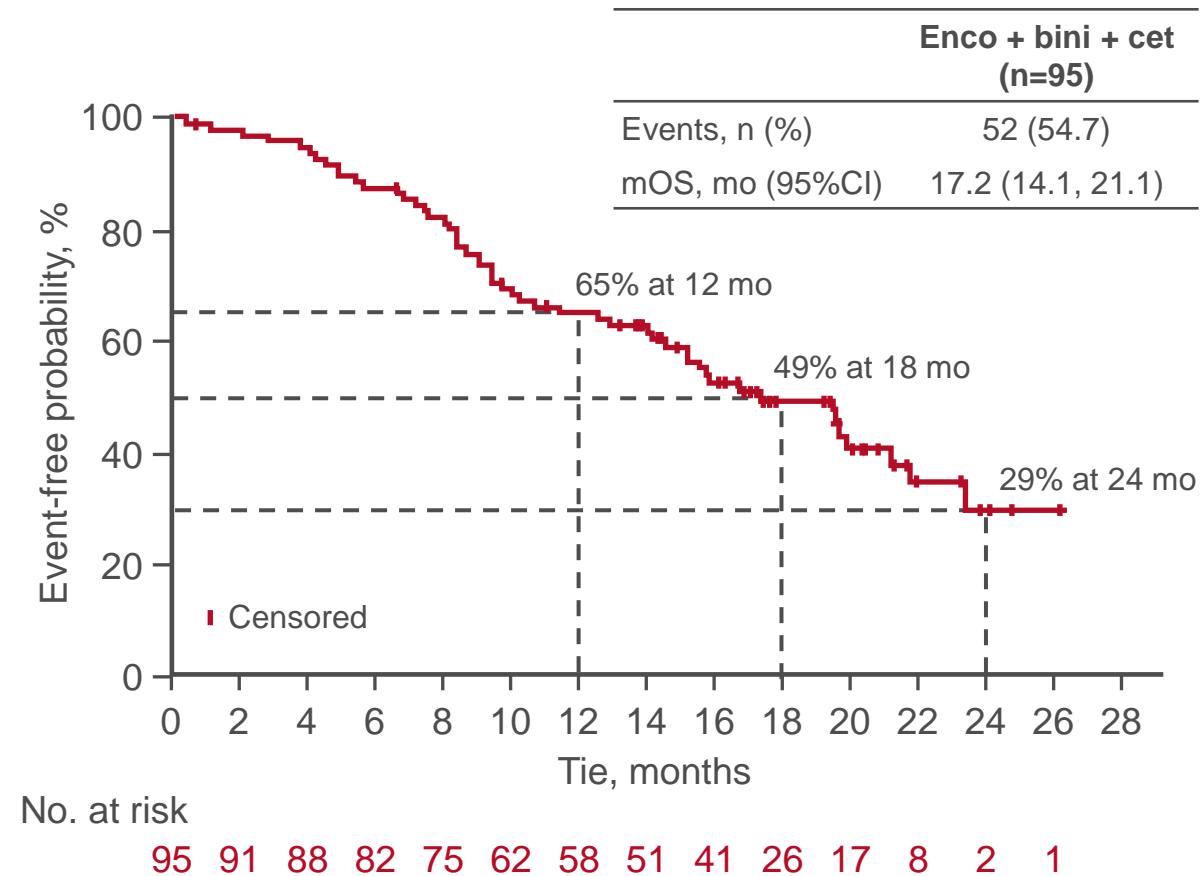
# O-10: ANCHOR CRC: results from a single-arm, phase 2 study of encorafenib, binimetinib plus cetuximab in previously untreated BRAF V600E-mutant metastatic colorectal cancer – Van Cutsem E, et al

## Key results

### Progression-free survival



### Overall survival



## O-10: ANCHOR CRC: results from a single-arm, phase 2 study of encorafenib, binimetinib plus cetuximab in previously untreated BRAF V600E-mutant metastatic colorectal cancer – Van Cutsem E, et al

### Key results (cont.)

	Encorafenib + binimetinib + cetuximab (n=92)	Grade ≥3 AEs occurring in ≥2%, n (%)	Encorafenib + binimetinib + cetuximab (n=92)
ORR, n (%) [95%CI]	44 (47.8) [37.3, 58.5]	Anaemia	10 (10.5)
BOR, n (%)		Lipase increased	10 (10.5)
CR	0	Diarrhoea	9 (9.5)
PR	44 (47.8)	Nausea	8 (8.4)
SD	37 (40.2)	Amylase increased	4 (4.2)
PD	5 (5.4)	Abdominal pain	4 (4.2)
NE	6 (6.5)	Dermatitis acneiform	3 (3.2)
DCR, %	88	Vomiting	3 (3.2)
		Decreased appetite	3 (3.2)
		Asthenia	2 (2.1)

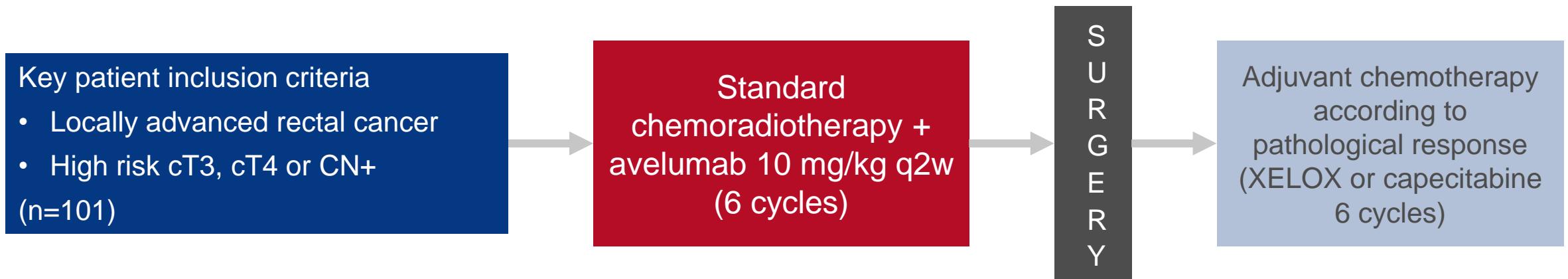
### Conclusions

- In patients with BRAF V600E-mutant mCRC, 1L encorafenib + binimetinib + cetuximab demonstrated encouraging clinical activity and was generally well-tolerated

## O-12: Phase II study of preoperative (preop) chemoradiotherapy (CTRT) plus avelumab (AVE) in patients (pts) with locally advanced rectal cancer (LARC): the AVANA study – Salvatore L, et al

### Study objective

- To evaluate the efficacy and safety of preoperative chemoradiotherapy + avelumab in patients with locally advanced rectal cancer in the phase 2 AVANA study



### PRIMARY ENDPOINT

- pCR

### SECONDARY ENDPOINTS

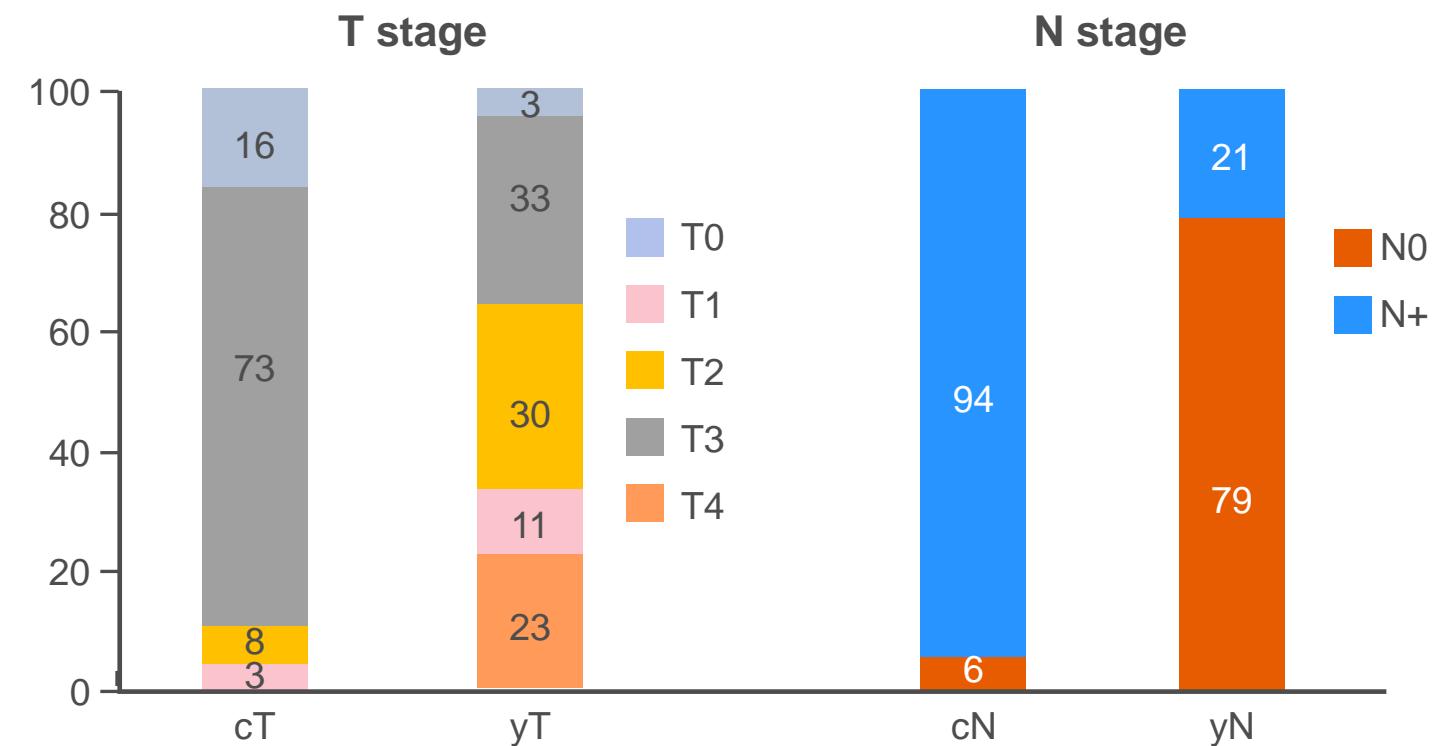
- R0 resection rate, downstaging, local recurrence, sphincter preservation rate, PFS, OS, safety

# O-12: Phase II study of preoperative (preop) chemoradiotherapy (CTRT) plus avelumab (AVE) in patients (pts) with locally advanced rectal cancer (LARC): the AVANA study – Salvatore L, et al

## Key results

	n=100*
yT stage, %	
yT0	23
yT1	11
yT2	30
yT3	33
yT4	3
yN stage, %	
yN0	79
yN+	21
Pathological response, %	
Pathological complete response	23
Major pathological response	60
No response	17

	n=100
Pathological complete response, n (%) [95%CI]	23 (23) [16, 32]
Major pathological response, n (%) [95%CI]	60 (6) [50, 69]



\*One patient was not evaluable, he refused surgery (bx: negative for cancer cells; CT scan; PR rectum, PD right adrenal gland)

Salvatore L, et al. Ann Oncol 2021;32(suppl):abstr O-12

## O-12: Phase II study of preoperative (preop) chemoradiotherapy (CTTRT) plus avelumab (AVE) in patients (pts) with locally advanced rectal cancer (LARC): the AVANA study – Salvatore L, et al

### Key results (cont.)

Grade ≥3 AEs, %	n=101
Diarrhoea	3
Nausea	2
Neutropenia	1
Vomiting	1
Asthenia	1

Grade ≥3 irAEs, %	n=101
Any	4
Infusion reaction	2
Heart failure	1
Alanine aminotransferase increased	1

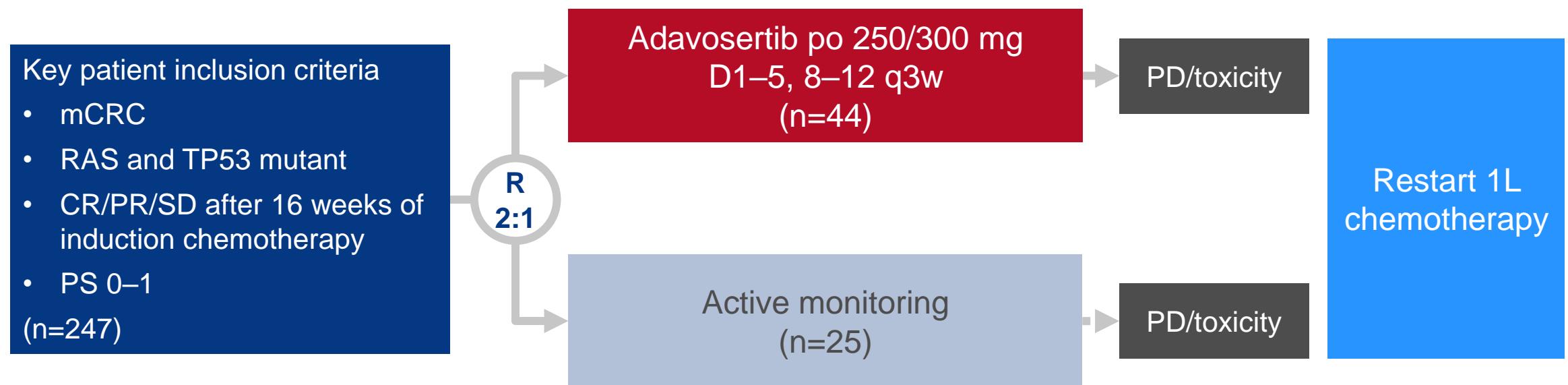
### Conclusions

- In patients with locally advanced rectal cancer, preoperative chemoradiotherapy + avelumab demonstrated encouraging activity and a manageable safety profile

## 382O: Inhibition of WEE1 is effective in TP53 and RAS mutant metastatic colorectal cancer (mCRC): a randomised phase II trial (FOCUS4-C) comparing adavosertib (AZD1775) with active monitoring – Seligmann J, et al

### Study objective

- To evaluate the efficacy and safety of adavosertib in patients with RAS and TP53 mutant mCRC in the FOCUS4-C study



#### PRIMARY ENDPOINT

- PFS

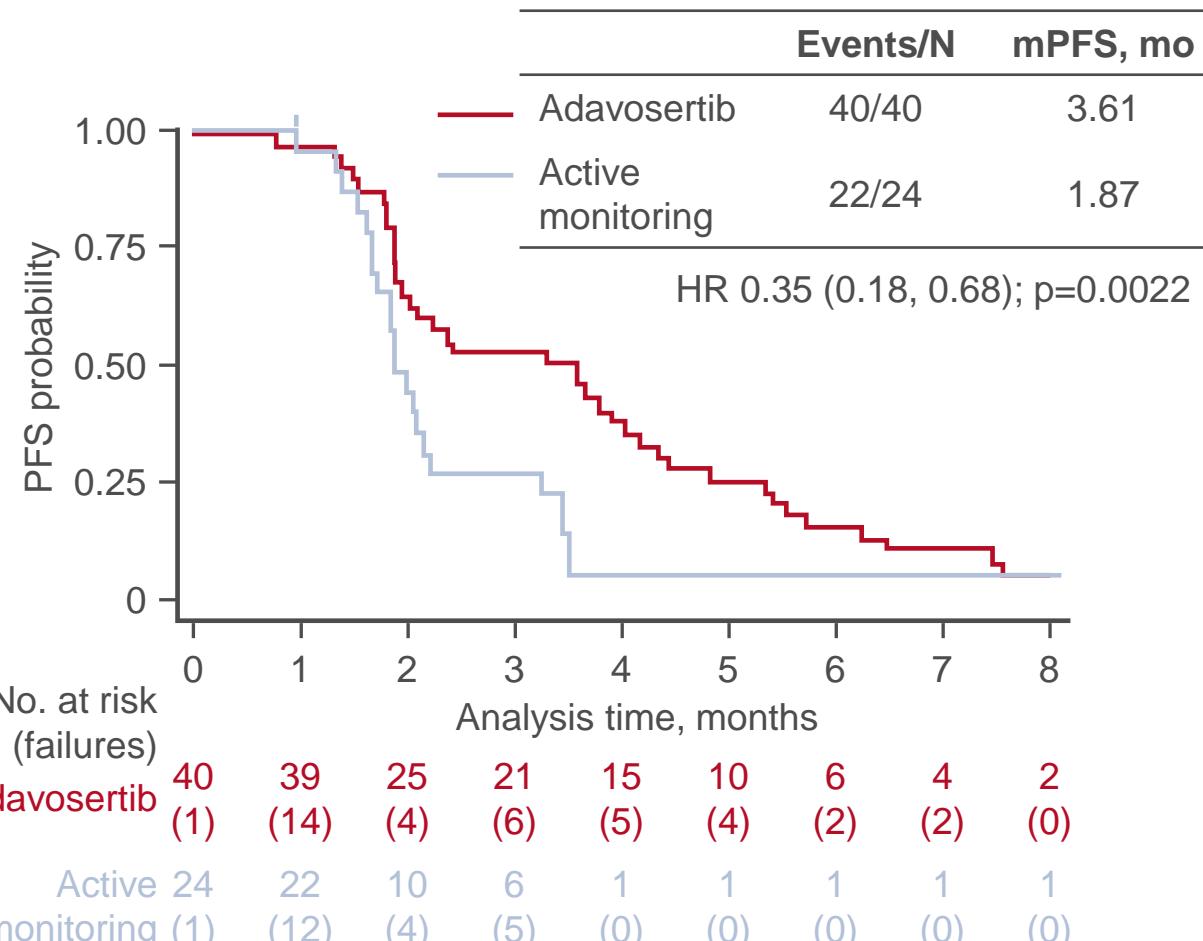
#### SECONDARY ENDPOINTS

- OS, response, safety

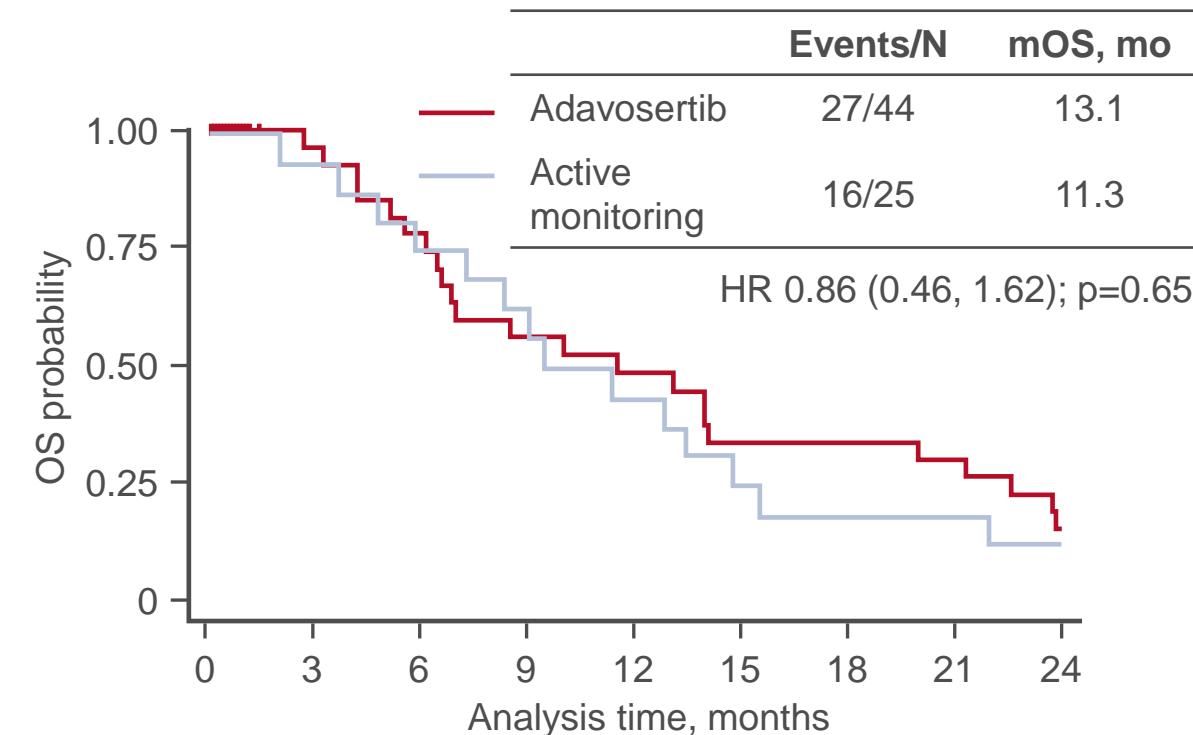
# 382O: Inhibition of WEE1 is effective in TP53 and RAS mutant metastatic colorectal cancer (mCRC): a randomised phase II trial (FOCUS4-C) comparing adavosertib (AZD1775) with active monitoring – Seligmann J, et al

## Key results

### Progression-free survival



### Overall survival



## 382O: Inhibition of WEE1 is effective in TP53 and RAS mutant metastatic colorectal cancer (mCRC): a randomised phase II trial (FOCUS4-C) comparing adavosertib (AZD1775) with active monitoring – Seligmann J, et al

### Key results (cont.)

	Left-sided (n=47)	Right-sided (n=22)	Interaction p-value
PFS, HR (95%CI)	0.24 (0.11, 0.51)	1.02 (0.41, 2.56)	0.043
	n	mOS, mo	HR (95%CI); p-value
RAS WT/TP53 WT (REF)	17	21.63	
MSI-H	20	7.82	9.05 (4.17, 19.60)
BRAF	60	10.85	2.72 (1.39, 5.32); <0.001
RAS WT/TP53 Mut	118	20.88	1.21 (0.63, 2.33); 0.004
RAS Mut/TP53 WT	79	16.44	1.52 (0.78, 2.96); 0.2
RAS Mut/TP53 Mut	144	14.86	2.06 (1.08, 3.93); 0.028

Most common grade ≥3 AEs for adavosertib, %	Adavosertib 250 mg	Adavosertib 300 mg
Fatigue	9	14
Diarrhoea		14
Nausea		5

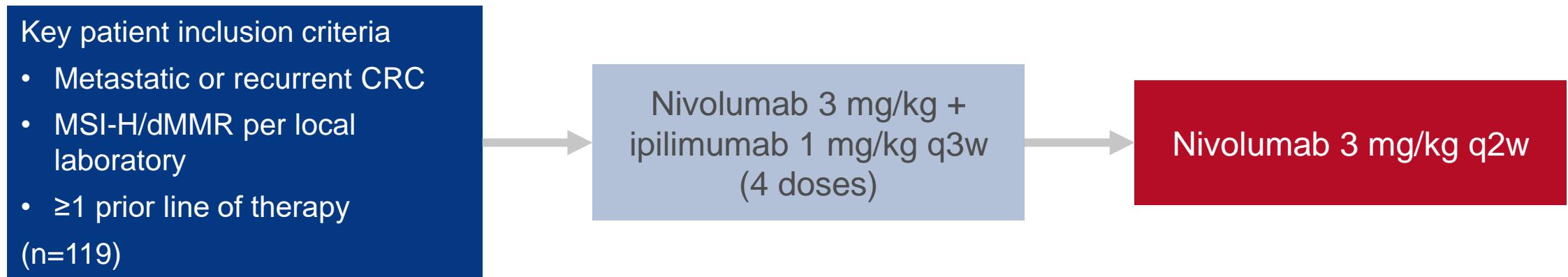
### Conclusions

- In patients with TP53 and RAS mutant mCRC after induction chemotherapy, adavosertib demonstrated a significant improvement in PFS and was generally well-tolerated

## SO-27: Nivolumab plus low-dose ipilimumab in previously treated patients with microsatellite instability-high/mismatch repair-deficient (MSI-H/dMMR) metastatic colorectal cancer (mCRC): 4-year follow-up from CheckMate 142 – André T, et al

### Study objective

- To evaluate the long-term efficacy and safety of nivolumab + low-dose ipilimumab in previously treated patients with MSI-H/dMMR mCRC in the CheckMate 142 study



#### PRIMARY ENDPOINT

- ORR (RECIST v1.1, investigator assessed)

#### SECONDARY ENDPOINTS

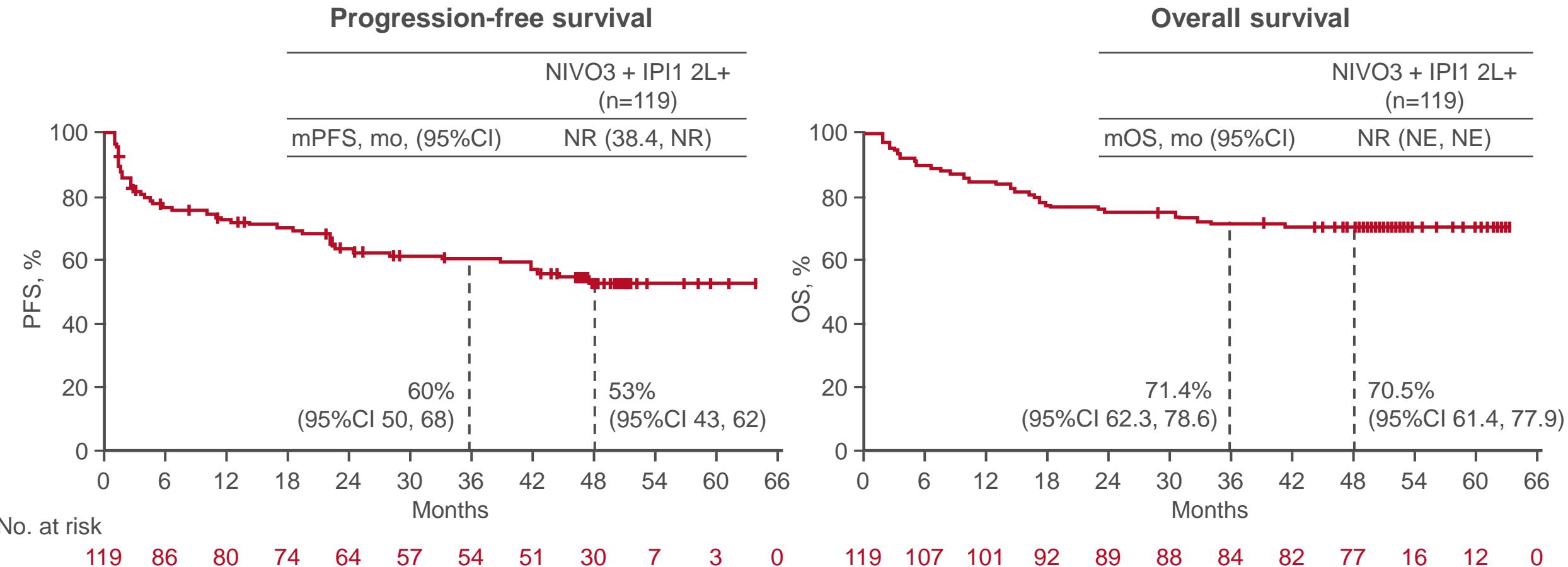
- ORR (BICR), DCR\*, DoR, PFS, OS, safety

\*Patients with a CR, PR or SD for ≥12 weeks divided by the number of treated patients

André T, et al. Ann Oncol 2021;32(suppl):abstr SO-27

# SO-27: Nivolumab plus low-dose ipilimumab in previously treated patients with microsatellite instability-high/mismatch repair-deficient (MSI-H/dMMR) metastatic colorectal cancer (mCRC): 4-year follow-up from CheckMate 142 – André T, et al

## Key results



## SO-27: Nivolumab plus low-dose ipilimumab in previously treated patients with microsatellite instability-high/mismatch repair-deficient (MSI-H/dMMR) metastatic colorectal cancer (mCRC): 4-year follow-up from CheckMate 142 – André T, et al

### Key results

Follow-up of 50.9 months	NIVO3 + IPI1 ≥2L (n=119)	Grade 3/4 TRAEs, n (%)	NIVO3 + IPI1 ≥2L (n=119)
ORR, n (%) [95%CI]	77 (65) [55, 73]	Any	38 (32)
BOR, n (%)		Serious	24 (20)
CR	15 (13)	Led to discontinuation	12 (10)
PR	62 (52)	Select	
SD	25 (21)	Hepatic	14 (12)
PD	14 (12)	Endocrine	7 (6)
NE	3 (3)	Skin	5 (4)
DCR, n (%) [95%CI]	96 (81) [72, 87]	Gastrointestinal	4 (3)
Median TTR, months (range)	2.8 (1.1 to 37.1)	Renal	2 (2)
Median DoR, months (range)	NR (1.4+ to 58.0+)	Pulmonary	1 (<1)

### Conclusions

- In previously treated patients with MSI-H/dMMR mCRC, nivolumab + ipilimumab demonstrated durable clinical and survival benefit with a manageable safety profile

# SO-30: Efficacy and safety of neoadjuvant short-course radiation followed by mFOLFOX-6 plus avelumab for locally-advanced rectal adenocarcinoma: Averectal study – Shamseddine AL, et al

## Study objective

- To evaluate the efficacy and safety of neoadjuvant short-course radiation followed by mFOLFOX6 + avelumab in patients with locally advanced rectal adenocarcinoma in the Averectal study

### Key patient inclusion criteria

- Locally advanced rectal adenocarcinoma
  - cT2 N1–3, cT3/cT4a N0–3 and M0
  - Tumour >15 cm from anal verge
  - Potentially resectable tumour
  - No prior therapy
  - PS 0–1
- (n=44)



### PRIMARY ENDPOINT

- pCR<sup>†</sup>

### SECONDARY ENDPOINTS

- PFS, TRG, biomarkers, QoL, safety

\*Oxaliplatin 85 mg/m<sup>2</sup> 2-hour infusion + leucovorin 400 mg/m<sup>2</sup> over 2 hours followed by a 48-hour infusion of 5FU 200 mg/m<sup>2</sup>; <sup>†</sup>no viable tumour cells on the resected specimen

# SO-30: Efficacy and safety of neoadjuvant short-course radiation followed by mFOLFOX-6 plus avelumab for locally-advanced rectal adenocarcinoma: Averectal study – Shamseddine Al, et al

## Key results

TRG, n (%)	n=40
0 (pCR, no viable tumour cells)	15 (37.5)
1 (<10% viable tumour cells)	12 (30.0)
2 (10–50% viable tumour cells)	9 (22.5)
3 (>50% viable tumour cells)	4 (10.0)

TRG	n (%)	Median immunoscore	Median immunoscore
0	11 (34)	70	63.91
1	11 (34)	63.5	
2	7 (22)	38.2	40.69
3	3 (10)	61.4	
Total	32 (100)	70	62.45

Downstaging, n (%)	n	T1–2N0	T0N0
T3/T4 N+	35	6 (17)	13 (37)

Major pathological response rate (TRG 0 + 1) was 67.5%

Grade 3/4 AEs, n (%)	n=291
Avelumab related	0
Surgery related	
Electrolyte imbalance	12 (5.0)
Pelvic abscess	4 (1.3)
Perforation and anastomosis leak	2 (<1)
Small bowel obstruction	2 (<1)

## Conclusions

- In patients with locally advanced rectal adenocarcinoma, neoadjuvant short-course radiation + avelumab demonstrated a significant improvement in pCR and had an acceptable safety profile