# **GI SLIDE DECK 2019**

Selected abstracts from:







#### **Letter from ESDO**

#### **DEAR COLLEAGUES**

It is our pleasure to present this ESDO slide set which has been designed to highlight and summarise key findings in digestive cancers from the major congresses in 2019. This slide set specifically focuses on the **2019 Gastrointestinal Cancers Symposium** 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 realisation of this activity.

Yours sincerely,

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european society of digestive oncology

(ESDO Governing Board)

## **ESDO Medical Oncology Slide Deck**

#### Editors 2019

#### **COLORECTAL CANCERS**

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# **Glossary**

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# CANCERS OF THE OESOPHAGUS AND STOMACH

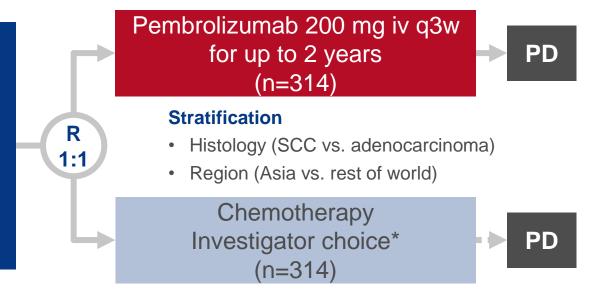
### Study objective

 To assess the efficacy and safety of pembrolizumab as a 2L treatment for patients with advanced or metastatic SCC and esophageal or GEJ adenocarcinoma in KEYNOTE-181

## Key patient inclusion criteria

- Advanced or metastatic SCC or esophageal/GEJ adenocarcinoma
- Progression on or after 1L therapy
- ECOG PS 0–1

(n=628)



#### PRIMARY ENDPOINT

 OS in PD-L1 CPS ≥10, SCC, total population

#### SECONDARY ENDPOINTS

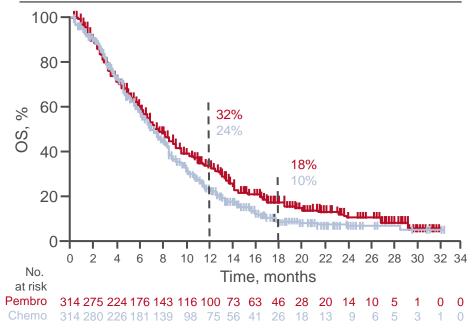
PFS, ORR (RECIST v1.1), safety

<sup>\*</sup>Paclitaxel 80–100 mg/m<sup>2</sup> D1, 8, 15 q4w; docetaxel 75 mg/m<sup>2</sup> q3w; or irinotecan 180 mg/m<sup>2</sup> q2w

### **Key results**

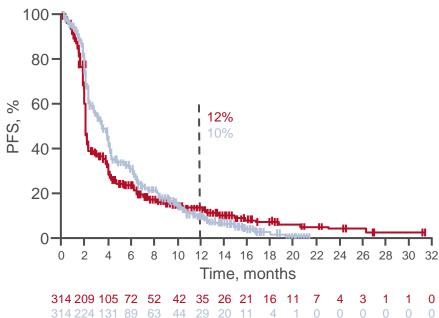
### OS in total population

	Events, n	Median, mo (95%CI)	HR <sup>a</sup> (95%CI)	p-value
Pembrolizumab	314	7.1 (6.2, 8.1)	0.89 (0.75, 1.05)	0.0560
Chemotherapy	314	7.1 (6.3, 8.0)	_	0.0560



# PFS in total population

	Median, mo (95%CI)	HR (95%CI)
Pembrolizumab	2.1 (2.1, 2.2)	1.11
Chemotherapy	3.4 (2.8, 3.9)	(0.94, 1.31)



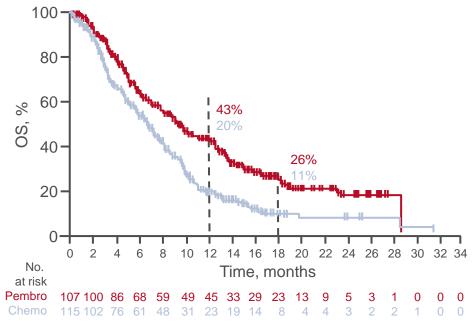
<sup>a</sup>Based on Cox regression model with treatment as a covariate stratified by region and histology

Kojima T, et al. J Clin Oncol 2019;37(Suppl):Abstr 2

### Key results (cont.)

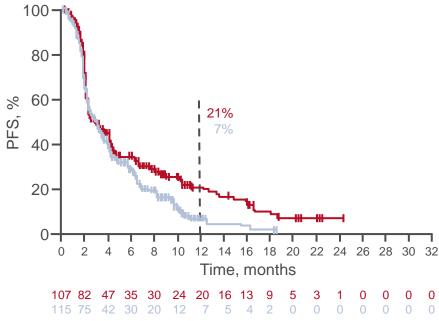
#### OS in PD-L1 CPS ≥10

	Events, n	Median, mo (95%CI)	HR <sup>a</sup> (95%CI)	p-value
Pembrolizumab	107	9.3 (6.6, 12.5)	0.69 (0.52, 0.93)	0.0074
Chemotherapy	115	6.7 (5.1, 8.2)	_	0.0074



#### PFS in PD-L1 CPS ≥10

	Median, mo (95%CI)	HR (95%CI)
Pembrolizumab	2.6 (2.1, 4.1)	0.73
Chemotherapy	3.0 (2.1, 3.7)	(0.54, 0.97)

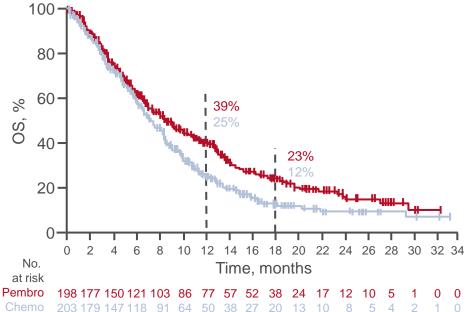


<sup>a</sup>Based on Cox regression model with treatment as a covariate stratified by region and histology

### Key results (cont.)

#### OS in SCC

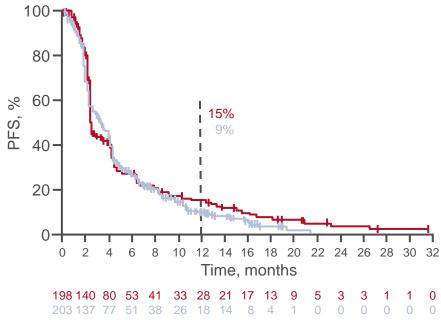
	Events, n	Median, mo (95%CI)	HR <sup>a</sup> (95%CI)	p-value
Pembrolizumab	198	8.2 (6.7, 10.3)	0.78 (0.63, 0.96)	0.0095b
Chemotherapy	203	7.1 (6.1, 8.2)	_	0.0095



# <sup>a</sup>Based on Cox regression model with treatment as a covariate stratified by region and histology; <sup>b</sup>not significant based on pre-specified statistical boundaries

#### **PFS in SCC**

	Median, mo (95%CI)	HR (95%CI)
Pembrolizumab	2.2 (2.1, 3.2)	0.92
Chemotherapy	3.1 (2.2, 3.9)	(0.75, 1.13)



Kojima T, et al. J Clin Oncol 2019;37(Suppl):Abstr 2

## Key results (cont.)

ORR, %	Pembrolizumab	Chemotherapy	p-value
Total population	13.1	6.7	0.0037
PD-L1 CPS ≥10	21.5	6.1	0.0006
SCC	16.7	7.4	0.0022

TRAE, n (%)	Pembrolizumab (n=314)	Chemotherapy (n=296)
Treatment-related	202 (64.3)	255 (86.1)
Grade 3–5	57 (18.2)	121 (40.9)
Led to discontinuation	19 (6.1)	19 (6.4)
Led to death	5 (1.5)	5 (1.7)

#### **Conclusions**

- In patients with metastatic esophageal cancer and PD-L1 CPS ≥10 who had progressed after 1 prior therapy, pembrolizumab provided significant improvement in OS and higher ORR when compared with chemotherapy
- The pembrolizumab safety profile was more favorable than chemotherapy
- In patients with metastatic esophageal cancer and PD-L1 CPS ≥10, pembrolizumab may be a new 2L SoC

4: A phase 3, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of andecaliximab combined with mFOLFOX6 as first-line treatment in patients with advanced gastric or gastroesophageal junction adenocarcinoma (GAMMA-1) – Shah MA, et al

#### Study objective

 To assess the efficacy and safety of andecaliximab, an MMP9 inhibitor, combined with mFOLFOX6 in patients with advanced gastric or GEJ adenocarcinoma

R

#### Key patient inclusion criteria

- Inoperable, locally advanced or metastatic HER2-negative gastric or GEJ adenocarcinoma
- Treatment naive

(n=432)

Andecaliximab 800 mg iv + mFOLFOX6\* D1, 15 q4w (n=218)

# PD/ toxicity/ death

#### Stratification

- ECOG PS
- Region (Latin America vs. rest of world)
- · Primary tumor site (gastric vs. GEJ)

Placebo + mFOLFOX6\* D1, 15 q4w (n=214) PD/ toxicity/ death

#### PRIMARY ENDPOINT

OS

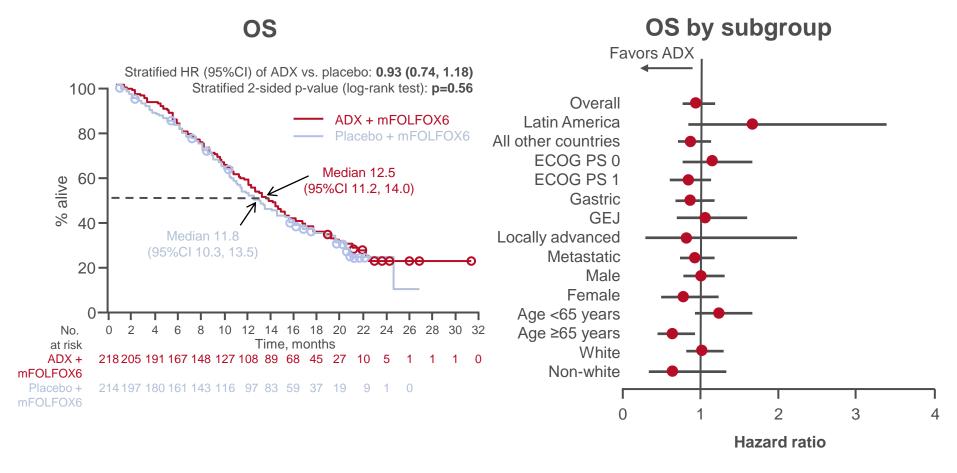
#### SECONDARY ENDPOINTS

PFS, ORR (RECIST v1.1), safety

<sup>\*</sup>Oxaliplatin D1, 15 followed by leucovorin + 5FU D1, 15 of 28-day cycle

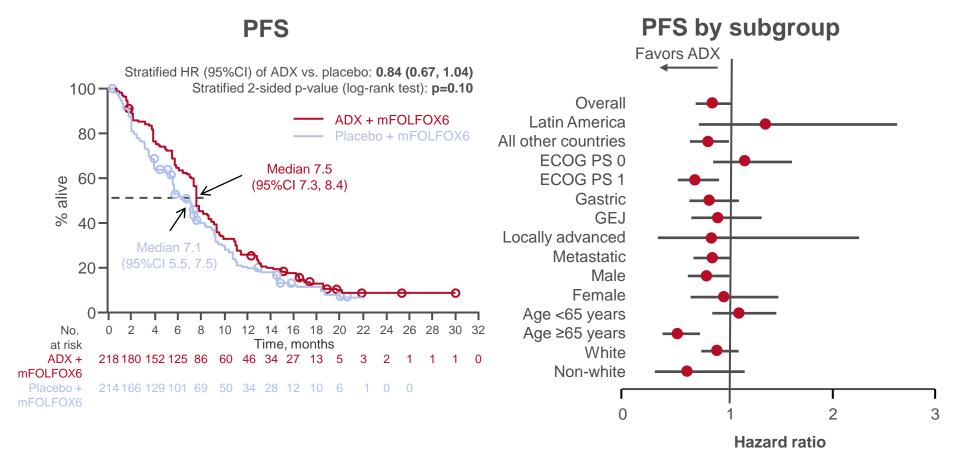
4: A phase 3, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of andecaliximab combined with mFOLFOX6 as first-line treatment in patients with advanced gastric or gastroesophageal junction adenocarcinoma (GAMMA-1) – Shah MA, et al

### **Key results**



4: A phase 3, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of andecaliximab combined with mFOLFOX6 as first-line treatment in patients with advanced gastric or gastroesophageal junction adenocarcinoma (GAMMA-1) – Shah MA, et al.

Key results (cont.)



4: A phase 3, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of andecaliximab combined with mFOLFOX6 as first-line treatment in patients with advanced gastric or gastroesophageal junction adenocarcinoma (GAMMA-1) – Shah MA, et al

## **Key results (cont.)**

Grade ≥3 TRAEs occurring in ≥5%, %	Andecaliximab	Placebo
Neutropenia	22	27
Anemia	8	11
Fatigue	5	8
Neutrophil count decreased	7	6
Pulmonary embolism	5	8
Vomiting	6	4
Abdominal pain	5	4

#### **Conclusions**

- In treatment-naïve patients with HER2-negative gastric or GEJ adenocarcinoma, adding andecaliximab to mFOLFOX6 did not provide any improvement in survival
- The safety profile between the two treatment groups was similar

5: Safety and efficacy of durvalumab following trimodality therapy for locally advanced esophageal and GEJ adenocarcinoma: Early efficacy results from Big Ten Cancer Research Consortium study – Mamdani H, et al

#### Study objective

 To assess the efficacy and safety of durvalumab in patients with locally advanced esophageal or GEJ adenocarcinoma

### Key patient inclusion criteria

- Locally advanced esophageal or GEJ adenocarcinoma
- ECOG PS 0–1

(n=24)

Preoperative
CRT\* followed
by surgery
(R0 resection)

Durvalumab 1500 mg iv<sup>†</sup> q4w for up to 1 year

#### PRIMARY ENDPOINT

1-year RFS

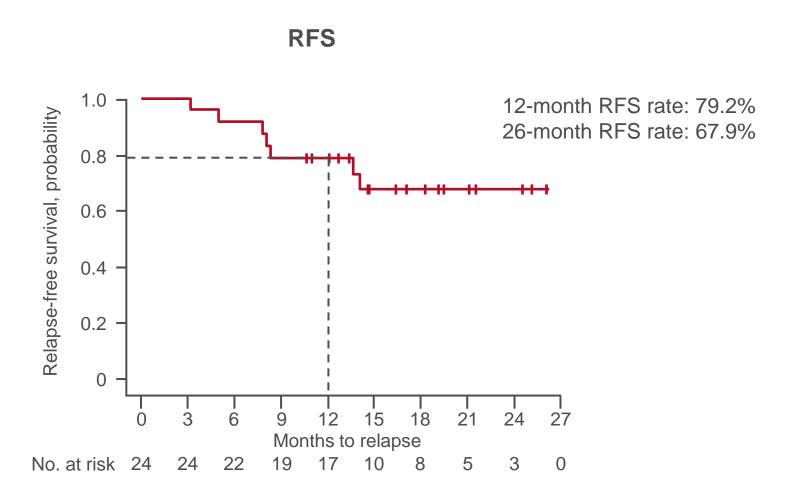
#### SECONDARY ENDPOINTS

Safety

<sup>\*</sup>Carboplatin/paclitaxel or cisplatin/5FU + definitive radiation; †durvalumab started within 1–3 months of surgery

5: Safety and efficacy of durvalumab following trimodality therapy for locally advanced esophageal and GEJ adenocarcinoma: Early efficacy results from Big Ten Cancer Research Consortium study – Mamdani H, et al

### **Key results**



# 5: Safety and efficacy of durvalumab following trimodality therapy for locally advanced esophageal and GEJ adenocarcinoma: Early efficacy results from Big Ten Cancer Research Consortium study – Mamdani H, et al

## **Key results (cont.)**

AEs occurring in ≥10%, n (%)	Grade 1	Grade 2
Fatigue	6 (25.0)	2 (8.3)
Nausea	6 (25.0)	0 (0)
Cough	3 (12.5)	2 (8.3)
Diarrhea	3 (12.5)	1 (4.2)
Pruritus	3 (12.5)	1 (4.2)
Dyspnea	1 (4.2)	2 (8.3)

- Grade 3 AEs included hypoglycemia (n=1) and hyperglycemia (n=1)
- Grade 3 TRAEs leading to discontinuation occurred in 3 patients (1 pneumonitis, 1 hepatitis, 1 colitis)

5: Safety and efficacy of durvalumab following trimodality therapy for locally advanced esophageal and GEJ adenocarcinoma: Early efficacy results from Big Ten Cancer Research Consortium study – Mamdani H, et al

#### **Conclusions**

- In patients with locally advanced esophageal or GEJ adenocarcinoma, adjuvant durvalumab was feasible and showed encouraging efficacy data
- Durvalumab demonstrated a safety profile similar to previous findings

# 8: Evaluation of efficacy of nivolumab by baseline factors from ATTRACTION-2 – Kang YK, et al

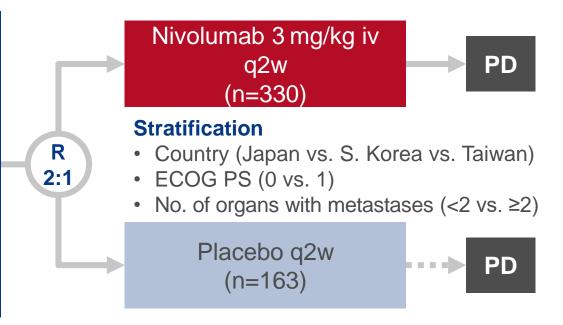
#### Study objective

 To assess factors that might contribute to early disease progression after receiving nivolumab – an exploratory analysis of ATTRACTION-2

## Key patient inclusion criteria

- Unresectable advanced or recurrent gastric or GEJ cancer
- Refractory to or intolerant of ≥2 standard therapy regimens
- ECOG PS 0–1

(n=493)

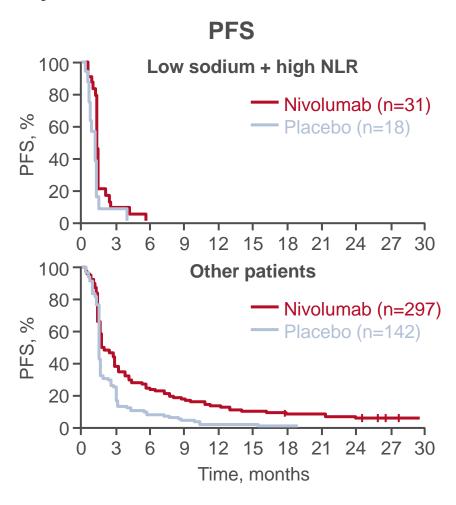


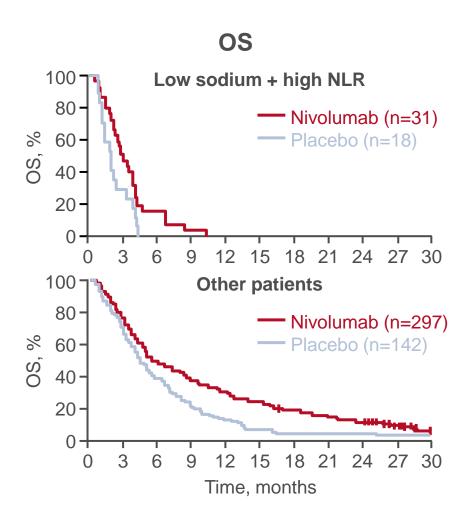
#### **EXPLORATORY ENDPOINT**

 Clinical factors for early progression/death using Bayesian additive regression trees

# 8: Evaluation of efficacy of nivolumab by baseline factors from ATTRACTION-2 – Kang YK, et al

### **Key results**





Kang YK, et al. J Clin Oncol 2019;37(Suppl):Abstr 8

# 8: Evaluation of efficacy of nivolumab by baseline factors from ATTRACTION-2 – Kang YK, et al

### **Key results (cont.)**

- Factors found to be associated with early progression or death on nivolumab treatment included low sodium, high neutrophil-to-lymphocyte ratio (NLR), ECOG PS of 1 and no prior ramucirumab treatment
- Biomarker analysis did not find any correlation between PD-L1 expression, TMB or MSI status and the efficacy of nivolumab

#### **Conclusions**

- In patients with advanced gastric or GEJ cancer, the efficacy of nivolumab may be reduced in those with factors suggestive of poorer overall condition such as low sodium and high NLR
- However, these results are exploratory and need to be verified

#### Study objective

• To assess the efficacy and safety of pembrolizumab combined with chemotherapy and trastuzumab in patients with HER2-positive metastatic esophagogastric adenocarcinoma

#### Key patient inclusion criteria

- Stage IV esophagogastric adenocarcinoma
- HER2 IHC 3+ or IHC 2+/ FISH >2.0 irrespective of PD-L1 status
- Treatment naive (n=37)

Pembrolizumab
200 mg iv +
trastuzumab
8 mg/kg
1 cycle

Pembrolizumab 200 mg + trastuzumab 6 mg/kg + CAPOX (oxaliplatin 130 mg/m² q3w + capecitabine 850 mg/m² D1–14) (n=24)

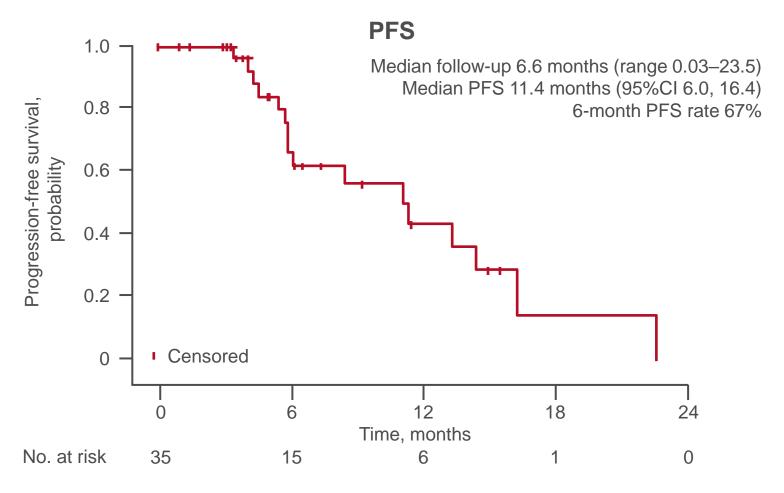
#### PRIMARY ENDPOINT

6-month PFS

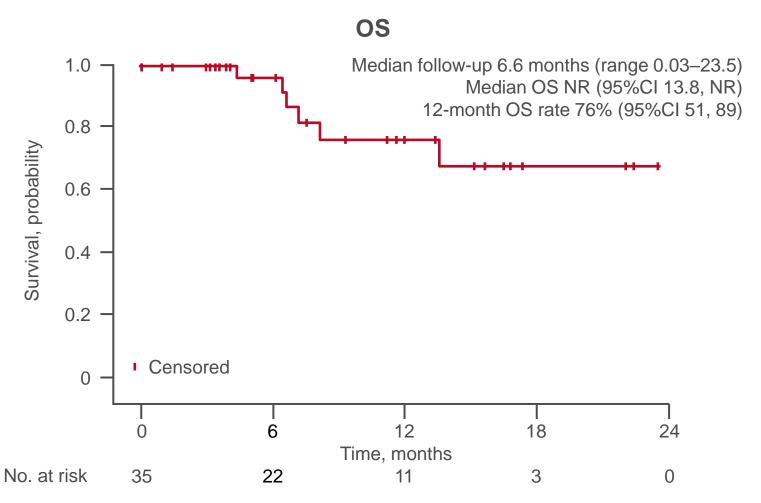
#### SECONDARY ENDPOINTS

OS, ORR, DCR, safety, biomarker analysis

### **Key results**



Key results (cont.)



Key results (cont.)

TRAEs occurring in ≥10%, n (%)	Grade 3	Grade 4
ALT/AST increased	1 (3)	
Anemia	2 (6)	
Diarrhea	1 (3)	
Dry skin/maculopapular rash	1 (3)	
Lymphocyte count decreased	3 (9)	1 (3)
Mucositis oral	1 (3)	
Nausea	2 (6)	
Immune-related		
Colitis	1 (3)	0 (0)
Interstitial nephritis	0 (0)	2 (3)
AST/ALT elevation	4 (11)	1 (3)

#### **Conclusions**

- In patients with HER2-positive metastatic esophagogastric adenocarcinoma, pembrolizumab + trastuzumab + CAPOX provided encouraging responses and was generally well tolerated
- A phase 3 study (KEYNOTE-811) is ongoing

66: MSI-GC-01: Individual patient data (IPD) meta-analysis of microsatellite instability (MSI) and gastric cancer (GC) from four randomized clinical trials (RCTs) – Pietrantonio F, et al

### Study objective

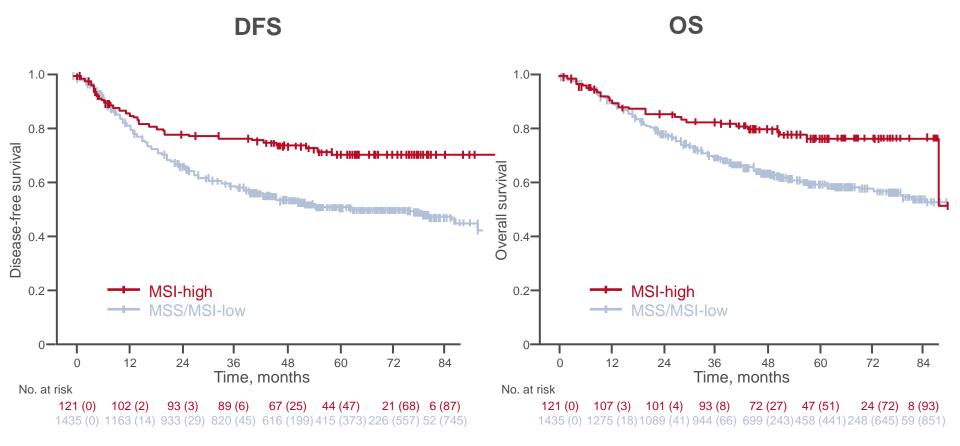
To assess the prognostic and predictive impact of MSI in patients with gastric cancer

#### **Methods**

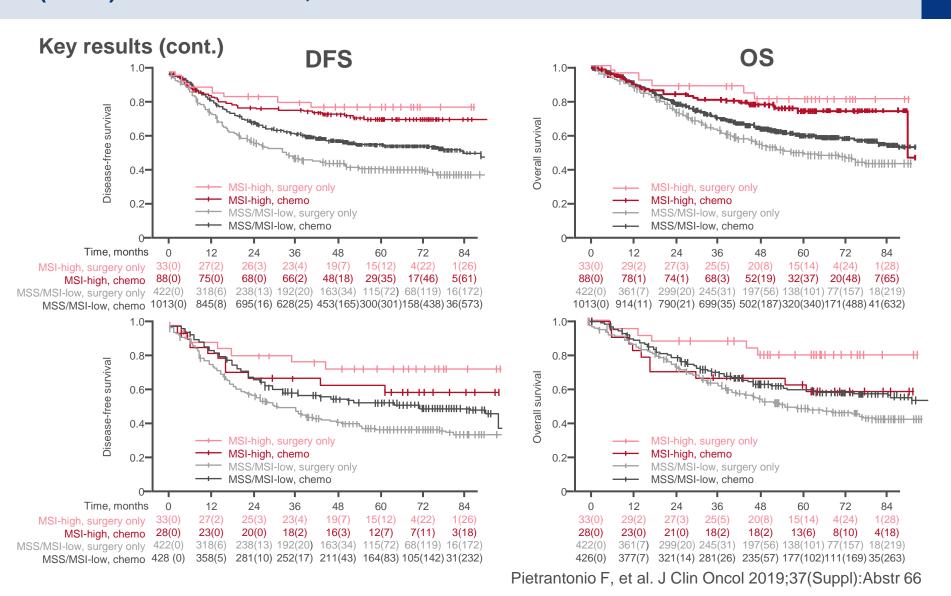
- Data for patients with resectable gastric cancer (n=1522) were pooled from 4 clinical trials
   MAGIC, CLASSIC, ARTIST and ITACA-S
- The following data were collected: patient demographics (age, sex, and race), primary site (stomach vs. junctional), histotype (intestinal vs. other), T/N stage (7th TNM), treatment received (multimodal therapy vs. surgery alone) and MSI
- Univariate and multivariate associations with DFS and OS were assessed
- The predictive role of MSI according to treatment received was assessed overall and in the 2 clinical trials with a surgery alone arm (MAGIC and CLASSIC)

66: MSI-GC-01: Individual patient data (IPD) meta-analysis of microsatellite instability (MSI) and gastric cancer (GC) from four randomized clinical trials (RCTs) – Pietrantonio F, et al





# 66: MSI-GC-01: Individual patient data (IPD) meta-analysis of microsatellite instability (MSI) and gastric cancer (GC) from four randomized clinical trials (RCTs) – Pietrantonio F, et al



66: MSI-GC-01: Individual patient data (IPD) meta-analysis of microsatellite instability (MSI) and gastric cancer (GC) from four randomized clinical trials (RCTs) – Pietrantonio F, et al

#### **Conclusions**

- In patients with resectable gastric cancer, MSI is an independent prognostic marker and should be considered as a stratification factor in future trials
- In patients with gastric cancer who are MSI-high, further investigation is required on chemotherapy omission and/or immune checkpoint blockade depending on the risk of relapse

# CANCERS OF THE PANCREAS, SMALL BOWEL AND HEPATOBILIARY TRACT

Cancers of the pancreas, small bowel and hepatobiliary tract

# PANCREATIC CANCER

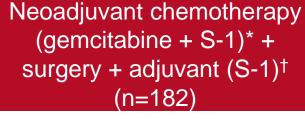
#### Study objective

 To assess the efficacy and safety of neoadjuvant chemotherapy compared with upfront surgery in patients with resectable pancreatic ductal adenocarcinoma

## Key patient inclusion criteria

- Pancreatic ductal adenocarcinoma
- Treatment naïve
- R0/R1 resectable
- ECOG PS 0-1

(n=364)



#### **Stratification**

- CA19-9
- Institutions

Surgery + adjuvant (S-1)<sup>†</sup> (n=180)

#### PRIMARY ENDPOINT

OS

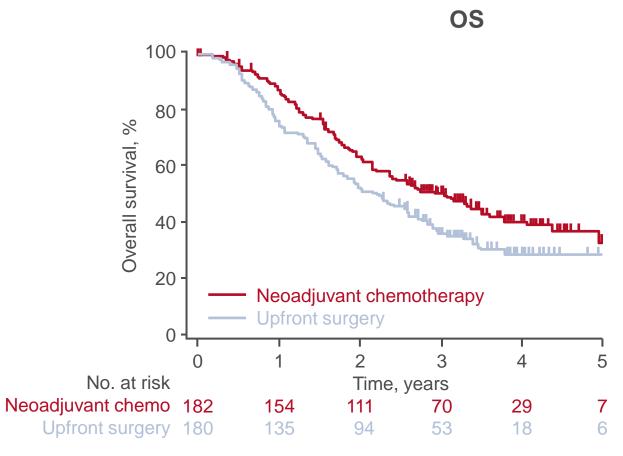
\*Gemcitabine 1 g/m² D1, 8 + oral S-1 40 mg/m² bid D1–14 for 2 cycles; †S-1 for 6 months in patients with curative resection and fully recovered within 10 weeks of surgery

#### SECONDARY ENDPOINTS

Resection rate, RFS, safety

Unno M, et al. J Clin Oncol 2019;37(Suppl):Abstr 189

### **Key results**



Neoadjuvant chemotherapy: 36.7 months (95%Cl 28.7, 43.3) Upfront surgery: 26.7 months (95%Cl 21.0, 31.3) HR 0.72 (95%Cl 0.55, 0.94); log-rank test p=0.015

2-year OS: 63.7% vs. 52.5%

## **Key results (cont.)**

Recurrence, n (%)	Neoadjuvant chemotherapy (n=182)	Upfront surgery (n=180)	p-value
Local	30 (27.3)	27 (22.9)	0.54
Liver	33 (30.0)	56 (47.5)	0.01
Distant LN	18 (16.4)	28 (23.7)	0.22
Lung	20 (18.2)	16 (13.6)	0.44
Peritoneal dissemination	23 (20.9)	17 (14.4)	0.26
Others	8 (7.3)	13 (11.0)	0.46

## **Key results (cont.)**

AEs with neoadjuvant chemotherapy, n (%)	Grade 3	Grade 4
Total	84 (48.8)	41 (23.8)
Hematologic	71 (41.3)	41 (23.8)
Leukopenia	46 (26.7)	7 (4.1)
Neutrophilia	60 (34.9)	39 (22.7)
Anemia	7 (4.1)	1 (0.6)
Thrombocytopenia	6 (3.5)	4 (2.3)
Febrile neutropenia	11 (6.4)	0
Stomatitis	10 (5.8)	0
Appetite loss	13 (7.6)	0
Skin rash	15 (8.7)	0

#### Conclusion

 In patients with pancreatic ductal adenocarcinoma, neoadjuvant chemotherapy significantly improved survival over upfront surgery and may be a new SoC for these patients

#### Study objective

To assess the efficacy and safety of ICI + SBRT in patients with advanced pancreatic

adenocarcinoma

Key patient inclusion criteria

 Advanced pancreatic adenocarcinoma

(n=51)

SBRT 8 Gy x 1

SBRT 5 Gy x 5 Durvalumab 1500 mg iv q4w (n=14)

Durvalumab 1500 mg iv q4w + tremelimumab 75 mg iv q4w x 4 (n=17)

Durvalumab 1500 mg iv q2w (n=10)

Durvalumab 1500 mg iv q4w + tremelimumab 75 mg iv q4w x 4 (n=10)

#### **SECONDARY ENDPOINTS**

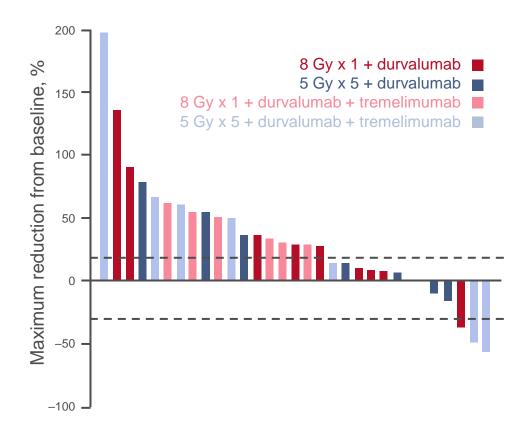
ORR, PFS, OS

PRIMARY ENDPOINT

Safety

Brar G, et al. J Clin Oncol 2019;37(Suppl):Abstr 192

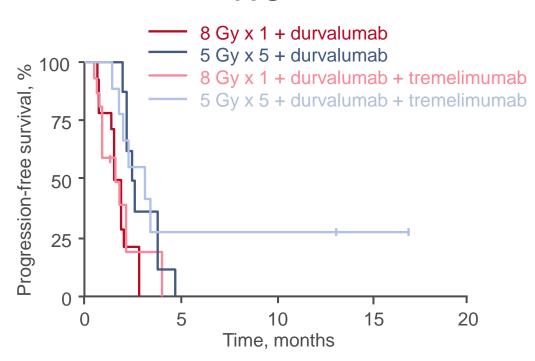
#### **Key results**



Response, n (%)	
ORR	3 (10.3)
CR	0
PR	3 (10.3)
SD	8 (27.6)
PD	18 (62.1)

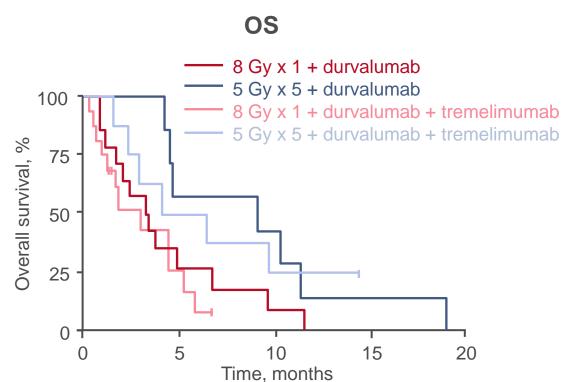
#### Key results (cont.)





Cohort	PFS, months (95%CI)
8 Gy x 1 + durvalumab	1.7 (0.7, 2.8)
5 Gy x 5 + durvalumab	2.6 (2.1, 4.7)
8 Gy x 1 + durvalumab + tremelimumab	1.6 (0.5, 4.0)
5 Gy x 5 + durvalumab + tremelimumab	3.2 (1.5, 16.5)

#### Key results (cont.)



Cohort	OS, months (95%CI)
8 Gy x 1 + durvalumab	3.4 (0.9, 11.4)
5 Gy x 5 + durvalumab	9.1 (3.4, 18.7)
8 Gy x 1 + durvalumab + tremelimumab	3.0 (0.7, 6.6)
5 Gy x 5 + durvalumab + tremelimumab	6.4 (1.5, 17.6)

#### **Key results (cont.)**

• The most common grade 2 TRAEs were hypothyroidism (6.5%) and rash (3.2%) and grade 3 TRAEs were hyperthyroidism (3.2%), lymphopenia (3.2%), diarrhea (3.2%) and dysgeusia (3.2%)

#### Conclusion

 In patients with advanced pancreatic adenocarcinoma, combined SBRT with ICI was generally well tolerated and provided some durable responses

Cancers of the pancreas, small bowel and hepatobiliary tract

# HEPATOCELLULAR CARCINOMA

R

#### Study objective

To assess the efficacy and safety of perioperative nivolumab + ipilimumab in patients with

HCC

Key patient inclusion criteria

• Resectable HCC

(n=30)

Nivolumab 240 mg q2w + ipilimumab 1 mg/kg for 6 weeks (n=3)

Nivolumab 240 mg q2w for 6 weeks (n=5) Surgical resection within 4 weeks of last cycle

Continue
adjuvant
immunotherapy
for up to
2 years after
resection

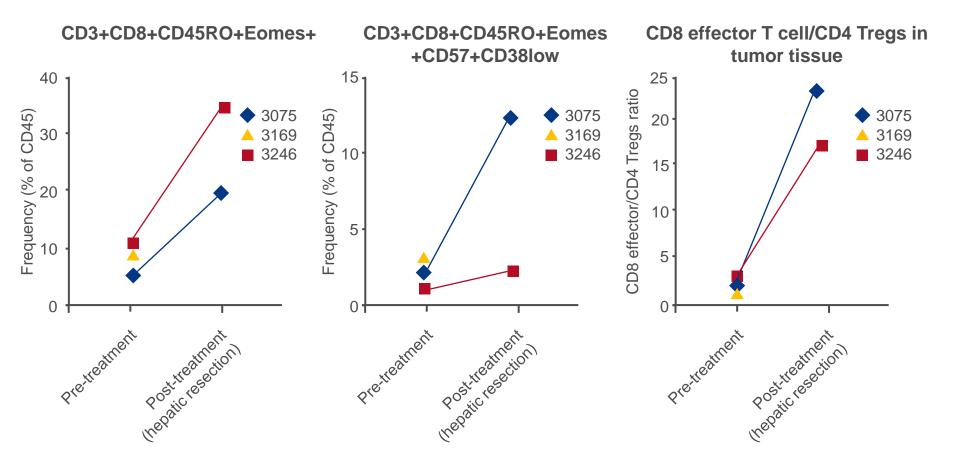
#### PRIMARY ENDPOINT

Safety

#### SECONDARY ENDPOINTS

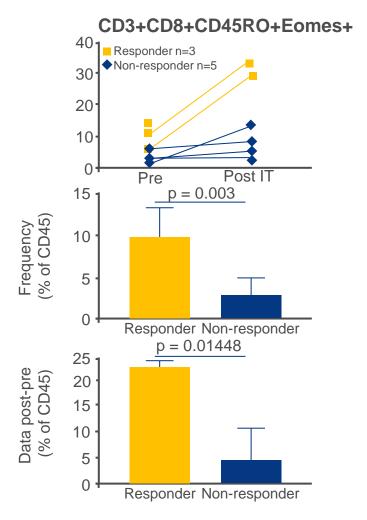
ORR, pCR, TTP

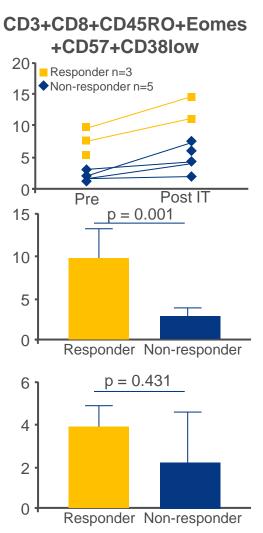
#### **Key results**



<sup>\*</sup>Post therapy 'surgical' sample from 1 patient not available

#### Key results (cont.)





Kaseb AO, et al. J Clin Oncol 2019;37(Suppl):Abstr 185

#### **Key results (cont.)**

- pCR was demonstrated in 3 of the 8 patients
- The most common grade 3 AE preoperative was ALT/AST increase in 1 patient and postoperative were colitis and amylase/lipase increase occurring in 1 patient each

#### Conclusion

 In patients with resectable HCC, perioperative nivolumab + ipilimumab demonstrated encouraging responses and was generally well tolerated with no delays in surgical resection in this interim analysis 186: Analysis of survival and objective response (OR) in patients with hepatocellular carcinoma in a phase III study of lenvatinib (REFLECT) – Kudo M, et al

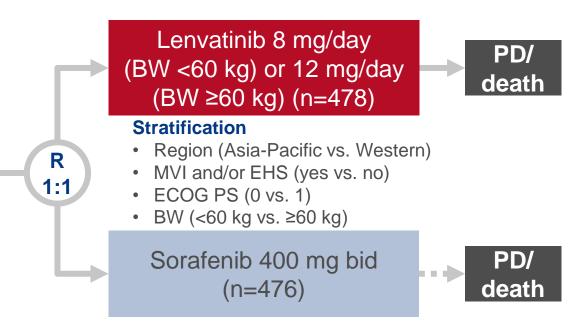
#### Study objective

 To assess the relationship between OR and OS in patients with HCC treated with lenvatinib or sorafenib in the REFLECT trial

#### Key patient inclusion criteria<sup>†</sup>

- No prior systemic therapy for unresectable HCC
- ≥1 measurable target lesion per mRECIST
- BCLC stage B or C
- Child-Pugh A
- ECOG PS ≤1

(n=954)



#### **EXPLORATORY ENDPOINT**

 OR and OS in responders (CR or PR) and non-responders (SD, PD or unknown/NE)

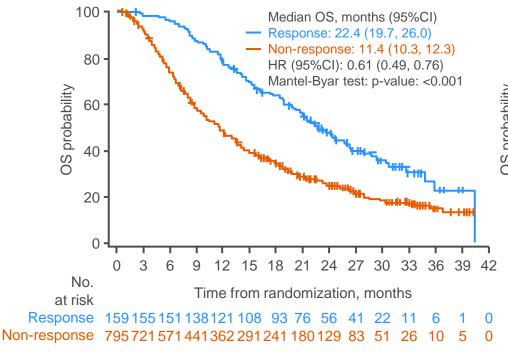
†Excluded patients with ≥50% liver occupation, clear bile duct invasion, or portal vein invasion at the main portal vein

Kudo M, et al. J Clin Oncol 2019;37(Suppl):Abstr 186

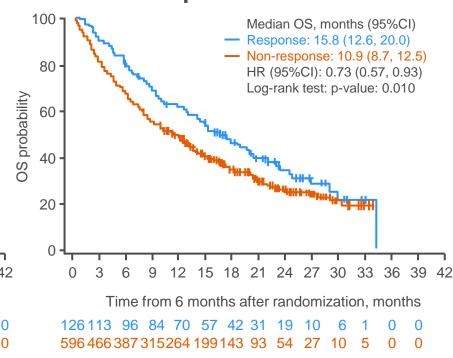
186: Analysis of survival and objective response (OR) in patients with hepatocellular carcinoma in a phase III study of lenvatinib (REFLECT) – Kudo M, et al

#### **Key results**

#### OS by OR in overall population



## OS by OR according to tumor response at 6 months



## 186: Analysis of survival and objective response (OR) in patients with hepatocellular carcinoma in a phase III study of lenvatinib (REFLECT) – Kudo M, et al

**Key results (cont.)** 

Multivariate analysis of factors associated with OS	HR (95%CI)	p-value
Macroscopic portal vein invasion (yes vs. no)	1.366 (1.141, 1.636)	0.0007
Baseline AFP (<200 vs. ≥200 mg/mL)	0.564 (0.483, 0.659)	< 0.0001
No. of tumor sites at baseline (2 vs. 1)	1.400 (1.180, 1.662)	<0.0001
No. of tumor sites at baseline (≥3 vs. 1)	2.024 (1.659, 2.469)	< 0.0001
Involved tumor site – liver (yes vs. no)	1.675 (1.203, 2.332)	0.0022
Etiology HBV (yes vs. no)	1.199 (1.031, 1.395)	0.0185
Prior procedure for HCC (yes vs. no)	0.844 (0.723, 0.986)	0.0323
Treatment (lenvatinib vs. sorafenib)	0.855 (0.734, 0.996)	0.0439
Objective response (yes vs. no)	0.611 (0.490, 0.762)	<0.0001

#### **Conclusions**

- In patients with HCC, mRECIST OR was an independent predictor of OS regardless of treatment
- Those patients who have an OR are likely to have a longer survival

#### Study objective

 To assess the efficacy and safety of tremelimumab + durvalumab in patients with advanced HCC or BTC

#### Key patient inclusion criteria

- Advanced HCC or BTC (intrahepatic, extrahepatic, gallbladder or ampullary)
- Not amenable for resection, transplantation or ablation
- Progressed on ≥1 prior therapy\*
- ECOG PS 0–2

(n=22)

#### PRIMARY ENDPOINT

6-month PFS

Tremelimumab 75 mg + durvalumab 1500 mg for 4 doses

Durvalumab 1500 mg q4w

PD/ toxicity

#### SECONDARY ENDPOINTS

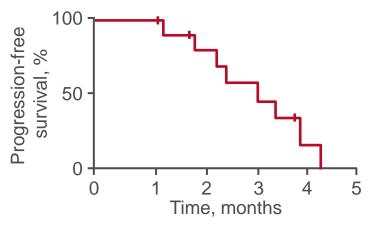
· OS, DCR, safety

<sup>\*</sup>Sorafenib for HCC and chemotherapy for BTC

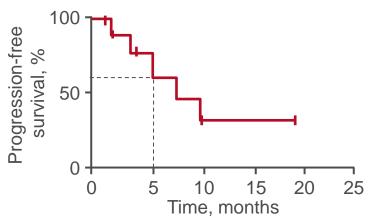
**Key results** 

**PFS** 

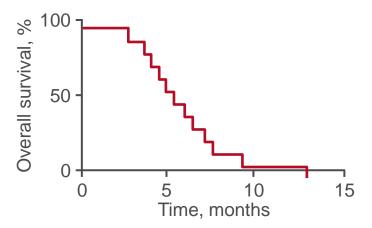
BTC: median 3.1 months (95%Cl 0.8, 4.6)



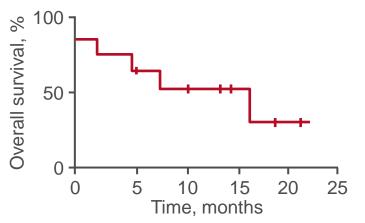
HCC: median 7.8 months (95%CI 2.6, 10.6)



OS BTC: median 5.45 months (95%Cl 4.6, 8.3)



HCC: median 15.9 months (95%CI 7.1, 16.3)



Floudas CS, et al. J Clin Oncol 2019;37(Suppl):Abstr 336

#### **Key results (cont.)**

Response	HCC (n=10)	BTC (n=12)
BOR, n (%)		
PR	2 (20.0)	1 (8.3)
SD	5 (50.0)	5 (41.7)
PD	2 (20.0)	5 (41.7)
NA	1 (10.0)	1 (8.3)
DCR, n (%) [95%CI]	7 (70.0) [39.6, 89.2]	6 (50.0) [25.3, 74.6]

#### **Key results (cont.)**

 Grade ≥3 TRAEs included hyponatremia, lymphopenia, bullous dermatitis, hypophosphatemia, infection, oral mucositis, pain, maculopapular rash, anaphylaxis, respiratory failure, pleural effusion and dyspnea

#### Conclusion

 In patients with HCC and BTC, tremelimumab + durvalumab provided encouraging activity and was generally well tolerated

Cancers of the pancreas, small bowel and hepatobiliary tract

### **BILIARY TRACT CANCER**

187: Efficacy and safety of dabrafenib (D) and trametinib (T) in patients (pts) with BRAF V600E-mutated biliary tract cancer (BTC): A cohort of the ROAR basket trial – Wainberg ZA, et al

#### Study objective

To assess the efficacy and safety of dabrafenib (a BRAF inhibitor) + trametinib (a MEK inhibitor) in the cohort of patients with BRAF V600E-mutated BTC in the ROAR basket trial

#### Key patient inclusion criteria

- Advanced or metastatic BTC
- BRAF V600E mutated
- Progression on gemcitabine
- ECOG PS ≤2

(n=35)

Dabrafenib 150 mg bid + trametinib 2 mg/day

PD/ toxicity/ death

#### PRIMARY ENDPOINT

ORR (RECIST v1.1)

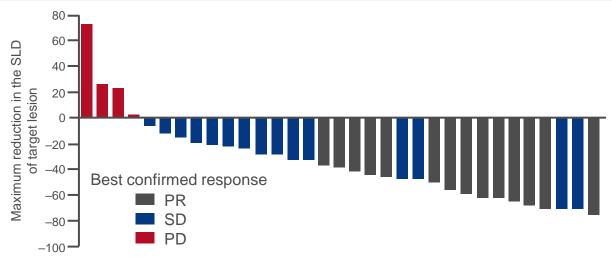
#### SECONDARY ENDPOINTS

DoR, PFS, OS, biomarkers, safety

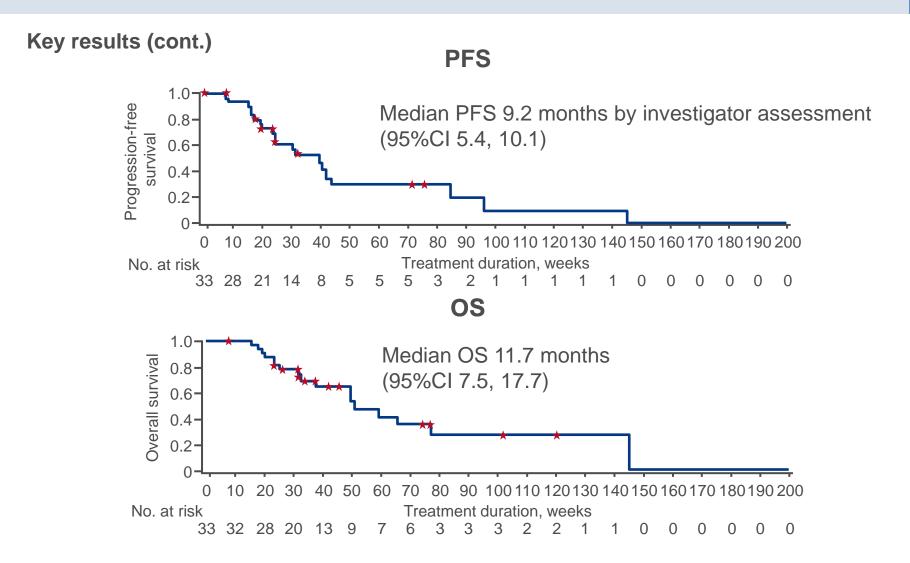
## 187: Efficacy and safety of dabrafenib (D) and trametinib (T) in patients (pts) with BRAF V600E-mutated biliary tract cancer (BTC): A cohort of the ROAR basket trial – Wainberg ZA, et al

#### **Key results**

Response	Investigator-assessed	Independent review
BOR, n (%)		
CR	0	0
PR	14 (42)	12 (36)
SD	15 (45)	13 (39)
PD	4 (12)	4 (12)
NE/missing	0	4 (12)
ORR, n (%) [95%CI]	14 (42) [25.5, 60.8]	12 (36) [20.4, 54.9]



187: Efficacy and safety of dabrafenib (D) and trametinib (T) in patients (pts) with BRAF V600E-mutated biliary tract cancer (BTC): A cohort of the ROAR basket trial – Wainberg ZA, et al



## 187: Efficacy and safety of dabrafenib (D) and trametinib (T) in patients (pts) with BRAF V600E-mutated biliary tract cancer (BTC): A cohort of the ROAR basket trial – Wainberg ZA, et al

#### **Key results (cont.)**

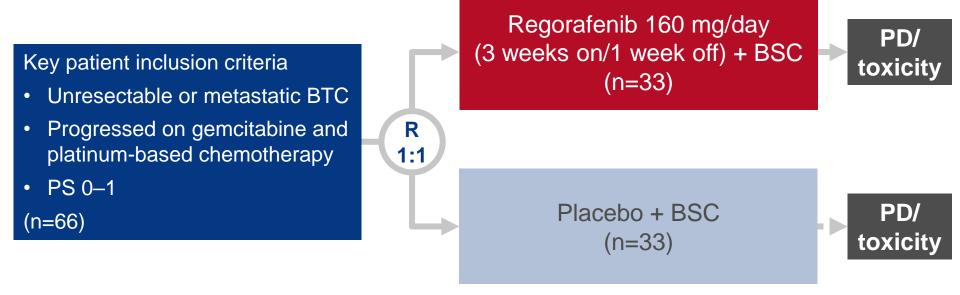
AEs, n (%)	BTC cohort (n=35)
Any grade / grade 3–4	35 (100) / 20 (57)
TRAEs	32 (91)
Pyrexia	14 (40)
Rash	10 (29)
Nausea	8 (23)
Diarrhea	8 (23)
Fatigue	8 (23)
Chills	7 (20)
SAEs	14 (40)
Leading to dose reduction / dose interruption / discontinuation	13 (37) / 19 (54) / 1 (3)

#### Conclusion

 In patients with BRAF V600E-mutated BTC, dabrafenib + trametinib provided clinical benefit with efficacy similar to 1L gemcitabine + cisplatin 345: Regorafenib after failure of gemcitabine and platinum-based chemotherapy for locally advanced (nonresectable) and metastatic biliary tumors: A randomized double-blinded placebo-controlled phase II trial – Demols A, et al

#### Study objective

 To assess the efficacy and safety of regorafenib + BSC in previously treated patients with unresectable or metastatic BTC



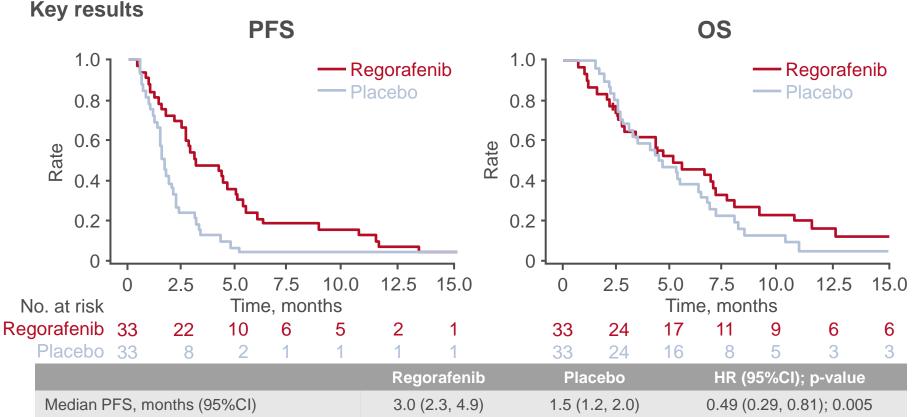
#### PRIMARY ENDPOINT

PFS

#### SECONDARY ENDPOINTS

OS, ORR, safety

345: Regorafenib after failure of gemcitabine and platinum-based chemotherapy for locally advanced (nonresectable) and metastatic biliary tumors: A randomized double-blinded placebo-controlled phase II trial – Demols A, et al



	Regorafenib	Placebo	HR (95%CI); p-value
Median PFS, months (95%CI)	3.0 (2.3, 4.9)	1.5 (1.2, 2.0)	0.49 (0.29, 0.81); 0.005
Estimated 6-month PFS rate, % (95%CI)	21 (7, 35)	3 (0, 12)	
Median OS, months (95%CI)	5.3 (2.7, 10.5)	5.0 (3.0, 6.4)	0.76 (0.44, 1.30); 0.31
Estimated 6-month OS rate, % (95%CI)	48 (31, 65)	40 (22, 58)	
DCR, % (95%CI)	70 (51, 84)	33 (18, 52)	0.002

Demols A, et al. J Clin Oncol 2019;37(Suppl):Abstr 345

345: Regorafenib after failure of gemcitabine and platinum-based chemotherapy for locally advanced (nonresectable) and metastatic biliary tumors: A randomized double-blinded placebo-controlled phase II trial – Demols A, et al

#### **Key results (cont.)**

Grade ≥3 AEs, n	Regorafenib (n=33)	Placebo (n=33)
Nausea	2	2
Vomiting	1	0
Fatigue	6	3
Diarrhea	1	0
Hypophosphatemia	1	0
Cutaneous toxicity	2	0
Mucositis	1	0
Anorexia	1	1

#### **Conclusions**

- In previously treated patients with unresectable or metastatic BTC, regorafenib provided significant improvement in PFS and DCR but not OS
- Regorafenib was generally well tolerated with no new safety signals

Cancers of the pancreas, small bowel and hepatobiliary tract

### **NEUROENDOCRINE TUMOUR**

#### Study objective

 To assess the efficacy and safety of pembrolizumab in patients with advanced neuroendocrine tumors

#### Key patient inclusion criteria

- Advanced neuroendocrine tumors of lung, appendix, small intestine, colon, rectum or pancreas
- Progression or intolerance to ≥1L of standard therapy
- Tumor sample for biomarker analysis
- ECOG PS 0–1

(n=107)

#### PRIMARY ENDPOINT

ORR (RECIST v1.1)

Pembrolizumab 200 mg iv q3w for up to 2 years

PD/ toxicity/ withdrawal

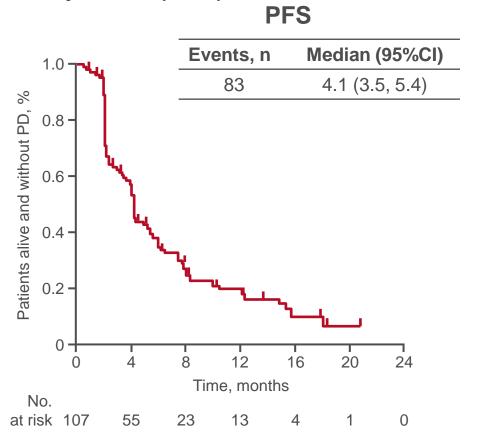
#### SECONDARY ENDPOINTS

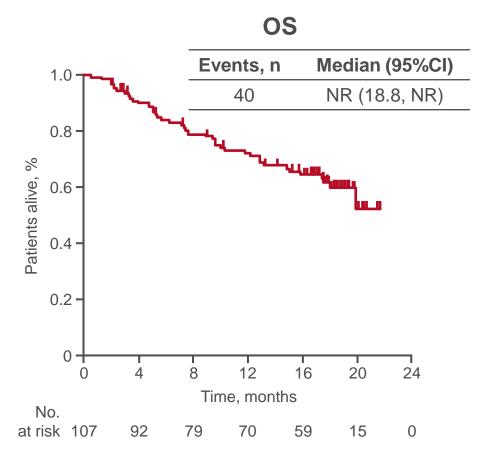
DoR, PFS, OS, safety

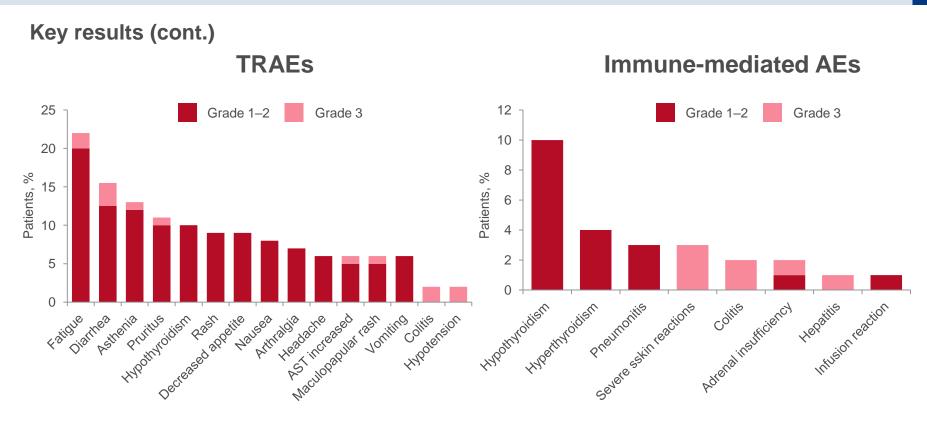
#### **Key results**

Response	Overall* (n=107)	PD-L1 positive (CPS ≥1) (n=17)	PD-L1 negative (n=82)
ORR, % (95%CI)	3.7 (1.0, 9.3)	0 (0, 19.5)	4.9 (1.8, 12.0)
BOR, n (%)			
CR	0	0	0
PR	4 (3.7)	0	4 (4.9)
SD	61 (57.0)	11 (64.7)	46 (56.1)
PD	33 (30.8)	6 (35.3)	23 (28.0)
NE	5 (4.7)	0	5 (6.1)
No assessment	4 (3.7)	0	4 (4.9)

#### **Key results (cont.)**







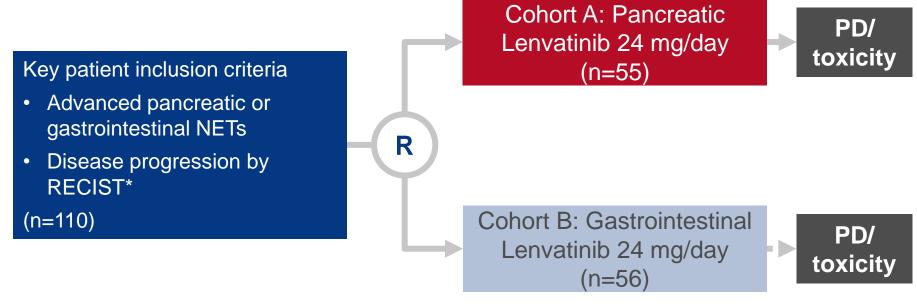
#### **Conclusions**

- In patients with advanced NETs, pembrolizumab demonstrated only 4 PRs although the responses were durable
- The safety profile of pembrolizumab was consistent with previous findings

332: Progression-free survival (PFS) and subgroup analyses of lenvatinib in patients (pts) with G1/G2 advanced pancreatic (panNETs) and gastrointestinal (giNETs) neuroendocrine tumors (NETS): Updated results from the phase II TALENT trial (GETNE 1509) – Capdevila J, et al

#### Study objective

 To assess the efficacy and safety of lenvatinib in patients with advanced pancreatic or gastrointestinal NETs – updated results from the TALENT trial



#### PRIMARY ENDPOINT

ORR (RECIST v1.1)

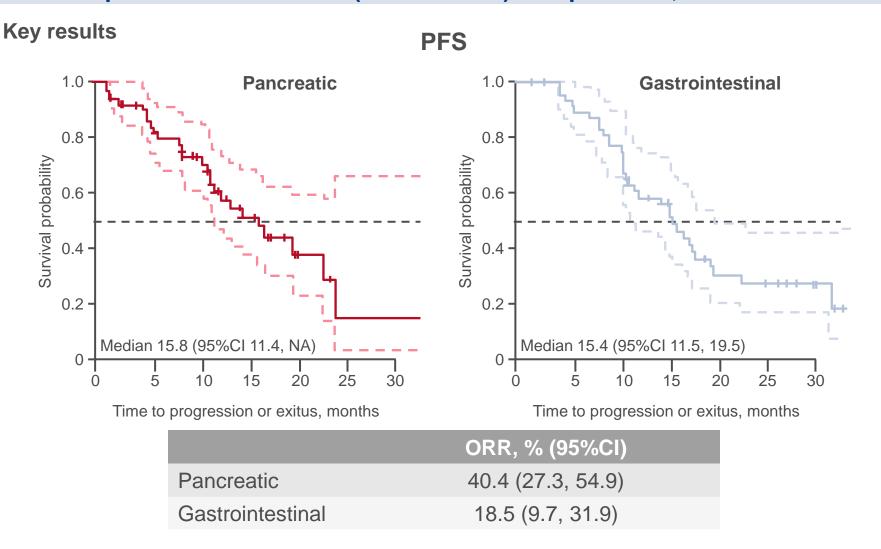
\*For pancreatic NETs, PD to targeted agents was mandatory regardless of prior therapy with somatostatin analogs or chemotherapy; for gastrointestinal NETs, PD on somatostatin analogs

#### SECONDARY ENDPOINTS

PFS, OS, biomarkers, safety

Capdevila J, et al. J Clin Oncol 2019;37(Suppl):Abstr 332

332: Progression-free survival (PFS) and subgroup analyses of lenvatinib in patients (pts) with G1/G2 advanced pancreatic (panNETs) and gastrointestinal (giNETs) neuroendocrine tumors (NETS): Updated results from the phase II TALENT trial (GETNE 1509) – Capdevila J, et al



332: Progression-free survival (PFS) and subgroup analyses of lenvatinib in patients (pts) with G1/G2 advanced pancreatic (panNETs) and gastrointestinal (giNETs) neuroendocrine tumors (NETS): Updated results from the phase II TALENT trial (GETNE 1509) – Capdevila J, et al

#### **Key results (cont.)**

Grade 3/4 AEs occurring in ≥5%, n (%)	Pancreatic NETs (n=55)	Gastrointestinal NETs (n=56)
Asthenia/fatigue	4 (7.2)	11 (19.6)
Hypertension	10 (18.1)	13 (23.2)
Diarrhea	3 (5.4)	5 (8.9)
Vomiting	4 (7.2)	1 (1.8)
Abdominal pain	3 (5.4)	3 (5.3)

#### Conclusion

 In patients with pancreatic or gastrointestinal NETs, lenvatinib demonstrated high ORR and encouraging PFS data

# CANCERS OF THE COLON, RECTUM AND ANUS

480: A randomized, double-blinded, placebo-controlled multicentre phase II trial of adjuvant immunotherapy with tecemotide (L-BLP25) after R0/R1 hepatic colorectal cancer metastasectomy (LICC): Final results – Schimanski CC, et al

#### Study objective

 To assess the efficacy and safety of tecemotide (an antigen-specific cancer vaccine targeting MUC1) in patients with liver metastases limited to CRC

#### Key patient inclusion criteria

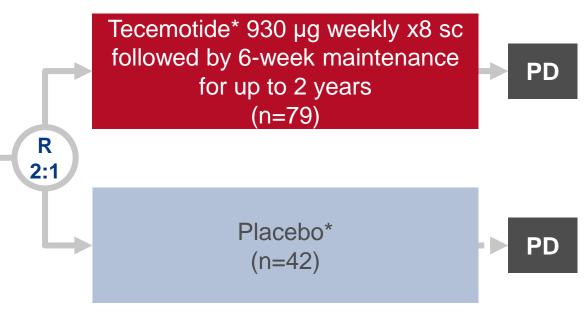
- Stage IV CRC limited to liver metastases
- Resection (R0/R1) of all liver metastases
- Metastasectomy with any neoadjuvant therapy
- ECOG PS 0–1

(n=121)

#### CO-PRIMARY ENDPOINTS

RFS, 3-year OS

\*Three days prior to tecemotide or placebo, cyclophosphamide 300 mg/m² or matching saline was given IV, respectively



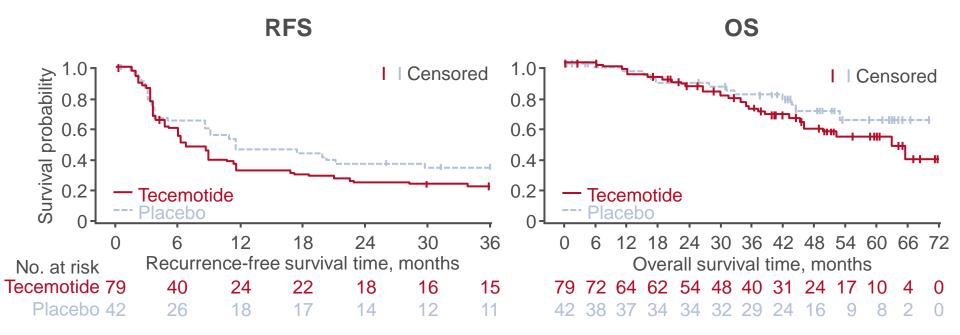
#### SECONDARY ENDPOINTS

 RFS and OS by MUC1 expression, safety

Schimanski CC, et al. J Clin Oncol 2019;37(Suppl):Abstr 480

480: A randomized, double-blinded, placebo-controlled multicentre phase II trial of adjuvant immunotherapy with tecemotide (L-BLP25) after R0/R1 hepatic colorectal cancer metastasectomy (LICC): Final results – Schimanski CC, et al

#### **Key results**



Outcome	Tecemotide (n=79)	Placebo (n=42)	p-value
Median RFS, months (90%CI)	6.1 (5.8, 8.8)	11.4 (5.0, 20.3)	0.1754
Median OS, months (90%CI)	62.8 (45.1, NR)	NA (53.6, NR)	0.2141

480: A randomized, double-blinded, placebo-controlled multicentre phase II trial of adjuvant immunotherapy with tecemotide (L-BLP25) after R0/R1 hepatic colorectal cancer metastasectomy (LICC): Final results – Schimanski CC, et al

#### **Key results (cont.)**

Grade 3/4 AEs occurring in ≥2 patients, n (%)	Tecemotide (n=79)	Placebo (n=42)
Diarrhea	2 (2.5)	2 (4.8)
Back pain	2 (2.5)	-
Anemia	2 (2.5)	-
Cholestasis	1 (1.3)	2 (4.8)
lleus	2 (2.5)	-
Jaundice cholestatic	2 (2.5)	-
Blood uric acid increased	2 (2.5)	-

#### Conclusion

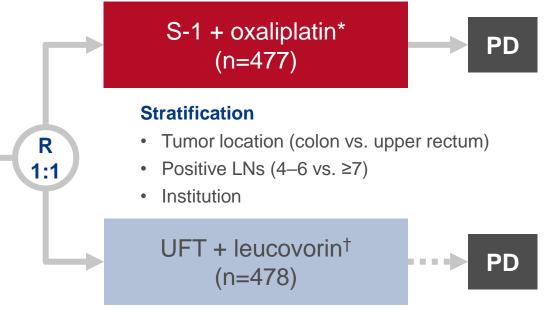
 In patients with hepatic CRC metastasectomy, tecemotide did not provide any benefit in survival over placebo 484: A randomized phase III trial of S-1/oxaliplatin (SOX) versus UFT/leucovorin as adjuvant chemotherapy for high-risk stage III colon cancer: The ACTS-CC 02 trial – Takahashi T, et al

#### Study objective

 To assess the efficacy and safety of S-1 + oxaliplatin (SOX) compared with UFT + leucovorin in patients with high-risk stage III colon cancer

#### Key patient inclusion criteria

- High-risk stage III colon cancer
- Underwent curative resection
- ECOG PS 0-1 (n=966)



#### PRIMARY ENDPOINT

DFS

\*S-1 80–120 mg/day according to BSA D1–14 + oxaliplatin 100 mg/m<sup>2</sup> q3w for 8 course; †UFT 300–600 mg/day according to BSA + leucovorin 75 mg/day D1–28 every 35 days for 5 courses

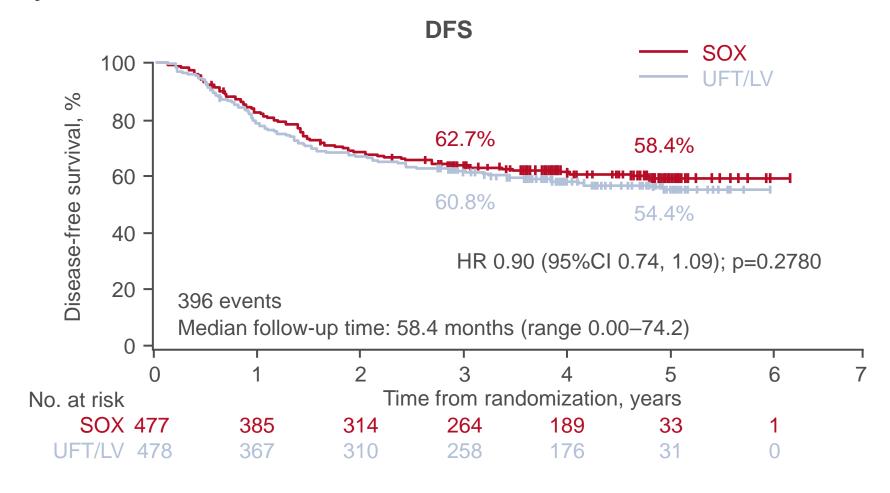
#### SECONDARY ENDPOINTS

· RFS, OS, safety

Takahashi T, et al. J Clin Oncol 2019;37(Suppl):Abstr 484

484: A randomized phase III trial of S-1/oxaliplatin (SOX) versus UFT/leucovorin as adjuvant chemotherapy for high-risk stage III colon cancer: The ACTS-CC 02 trial – Takahashi T, et al

#### **Key results**



484: A randomized phase III trial of S-1/oxaliplatin (SOX) versus UFT/leucovorin as adjuvant chemotherapy for high-risk stage III colon cancer: The ACTS-CC 02 trial – Takahashi T, et al

#### **Key results (cont.)**

Grade ≥3 AEs occurring in ≥2%, n (%)	SOX (n=459)	UFT + leucovorin (n=472)
Neutropenia	79 (17.2)	7 (1.5)
Thrombocytopenia	13 (2.8)	3 (0.6)
AST	3 (0.7)	10 (2.1)
ALT	4 (0.9)	14 (3.0)
Nausea	9 (2.0)	4 (0.8)
Diarrhea	25 (5.4)	38 (8.1)
Anorexia	16 (3.5)	11 (2.3)
Peripheral sensory neuropathy	21 (4.6)	1 (0.2)

#### Conclusion

 In patients with high-risk stage III colon cancer, SOX was not superior to UFT + leucovorin, although in more advanced disease (stage IIIC, N2b) SOX may be effective 483: Does a longer waiting period after neoadjuvant radiochemotherapy improve the oncological prognosis of rectal cancer? Three-year follow-up results of the GRECCAR-6 randomized multicentre trial – Lefevre JH, et al

#### Study objective

• To assess whether a long waiting period between radiochemotherapy and resection in patients with rectal cancer impacts the rate of cPR (ypT0N0) in the GRECCAR6 trial

R

#### Key patient inclusion criteria

- Mid-low rectal cancer
- cT3-T4N0 or TxN+ M0
- ECOG PS 0–1

(n=265)

# 7-week waiting period after radiochemotherapy 45–50 Gy iv 5FU or capecitabine (n=133)

11-week waiting period after radiochemotherapy 45–50 Gy iv 5FU or

#### SECONDARY ENDPOINTS

capecitabine (n=132)

OS, DFS, rate of recurrence

#### PRIMARY ENDPOINT

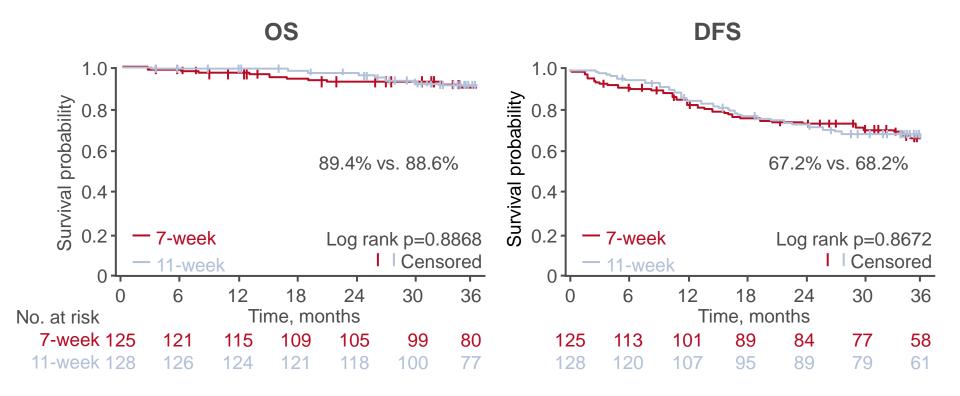
 Pathologic complete response (ypT0N0) rate



## 483: Does a longer waiting period after neoadjuvant radiochemotherapy improve the oncological prognosis of rectal cancer? Three-year follow-up results of the GRECCAR-6 randomized multicentre trial – Lefevre JH, et al

#### **Key results**

 The pathologic complete response (ypT0N0) rate was 15% and 17.4% in the 7- and 11-week groups, respectively (p=0.5983)



483: Does a longer waiting period after neoadjuvant radiochemotherapy improve the oncological prognosis of rectal cancer? Three-year follow-up results of the GRECCAR-6 randomized multicentre trial – Lefevre JH, et al

#### **Key results (cont.)**

Outcomes at 3 years, %	7-week	11-week	p-value
Metastatic recurrence	24.3	25.4	0.8589
Local recurrence	8.6	9.7	0.5780
In patients achieving ypT0N0 (n=43)			
OS	89	95	0.2597
Metastatic recurrence	5	29	0.0045
Local recurrence	11	0	0.0357

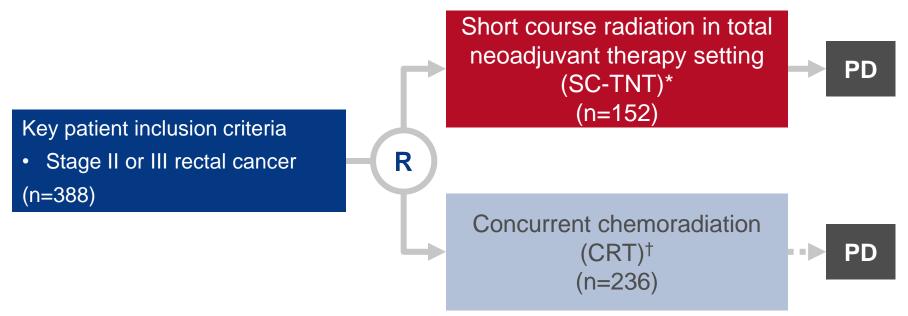
#### **Conclusions**

- In patients with rectal cancer, there was no difference on pathologic complete response rate or survival and recurrence between a 7- or 11-week waiting period after neoadjuvant radiochemotherapy
- It is suggested that surgery should be performed around 7–8 weeks after radiochemotherapy in the absence of a rectal sparing strategy

### 486: Total neoadjuvant therapy with short course radiation compared to concurrent chemoradiation in rectal cancer – Chapman W Jr, et al

#### Study objective

 To assess whether short course radiation in the total neoadjuvant therapy setting impacts outcomes as compared with concurrent chemoradiation



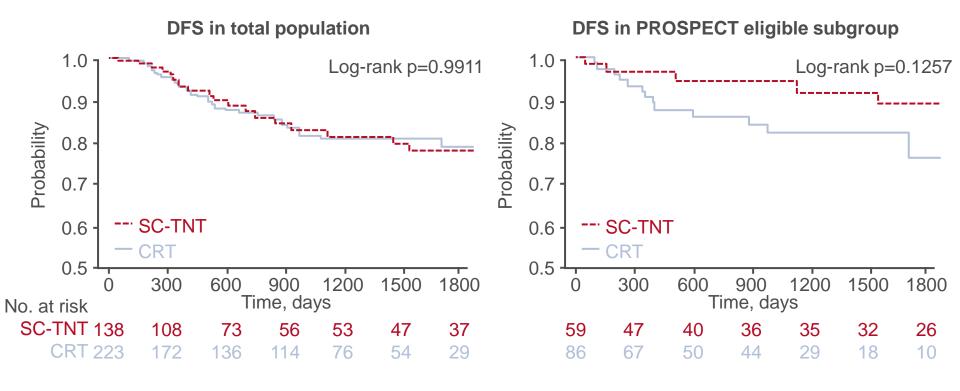
#### **ENDPOINTS**

Downstaging by pCR and neoadjuvant rectal (NAR) score, DFS

\*25–35 Gy 5 fractions followed by CAPOX or FOLFOX; †50–55 Gy 25–28 fractions with concurrent 5FU or capecitabine

## 486: Total neoadjuvant therapy with short course radiation compared to concurrent chemoradiation in rectal cancer – Chapman W Jr, et al

#### **Key results**



### 486: Total neoadjuvant therapy with short course radiation compared to concurrent chemoradiation in rectal cancer – Chapman W Jr, et al

#### **Key results (cont.)**

Outcomes, %	Short course radiation	Concurrent chemoradiation	p-value
Downstaging			
pCR	38 (25)	45 (19)	0.16
NAR <8	55 (36)	65 (28)	0.07
Any recurrence	21 (14.9)	32 (14.3)	0.87

#### Conclusion

 In patients with rectal cancer, the use of short course radiation demonstrated comparable effectiveness as concurrent chemoradiation with similar DFS although short course radiation may provide better downstaging