

Ask the Investigators: Applying Emerging Clinical Research to the Care of Patients with Gastroesophageal Cancers

A Satellite Educational Symposium Held in Conjunction with the 2021 AACR Virtual Annual Meeting

**Monday, April 12, 2021
6:30 PM – 7:30 PM ET**

Faculty

**Joseph Chao, MD
Yelena Y Janjigian, MD**

Moderator

Neil Love, MD

Faculty



Joseph Chao, MD

Associate Clinical Professor
Department of Medical Oncology and
Therapeutics Research
GI Medical Oncology Section
City of Hope Comprehensive Cancer Center
Duarte, California



Yelena Y Janjigian, MD

Associate Attending Physician
Associate Professor, Weill Cornell Medical College
Chief, Gastrointestinal Oncology Service
Memorial Sloan Kettering Cancer Center
New York, New York

Commercial Support

This activity is supported by educational grants from AstraZeneca Pharmaceuticals LP, Daiichi Sankyo Inc and Five Prime Therapeutics Inc.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Adaptive Biotechnologies Corporation, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Eisai Inc, Epizyme Inc, Exact Sciences Inc, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, Genentech, a member of the Roche Group, Gilead Sciences Inc, GlaxoSmithKline, Grail Inc, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Merck, Novartis, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seagen Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro, A GSK Company, Turning Point Therapeutics Inc and Verastem Inc.

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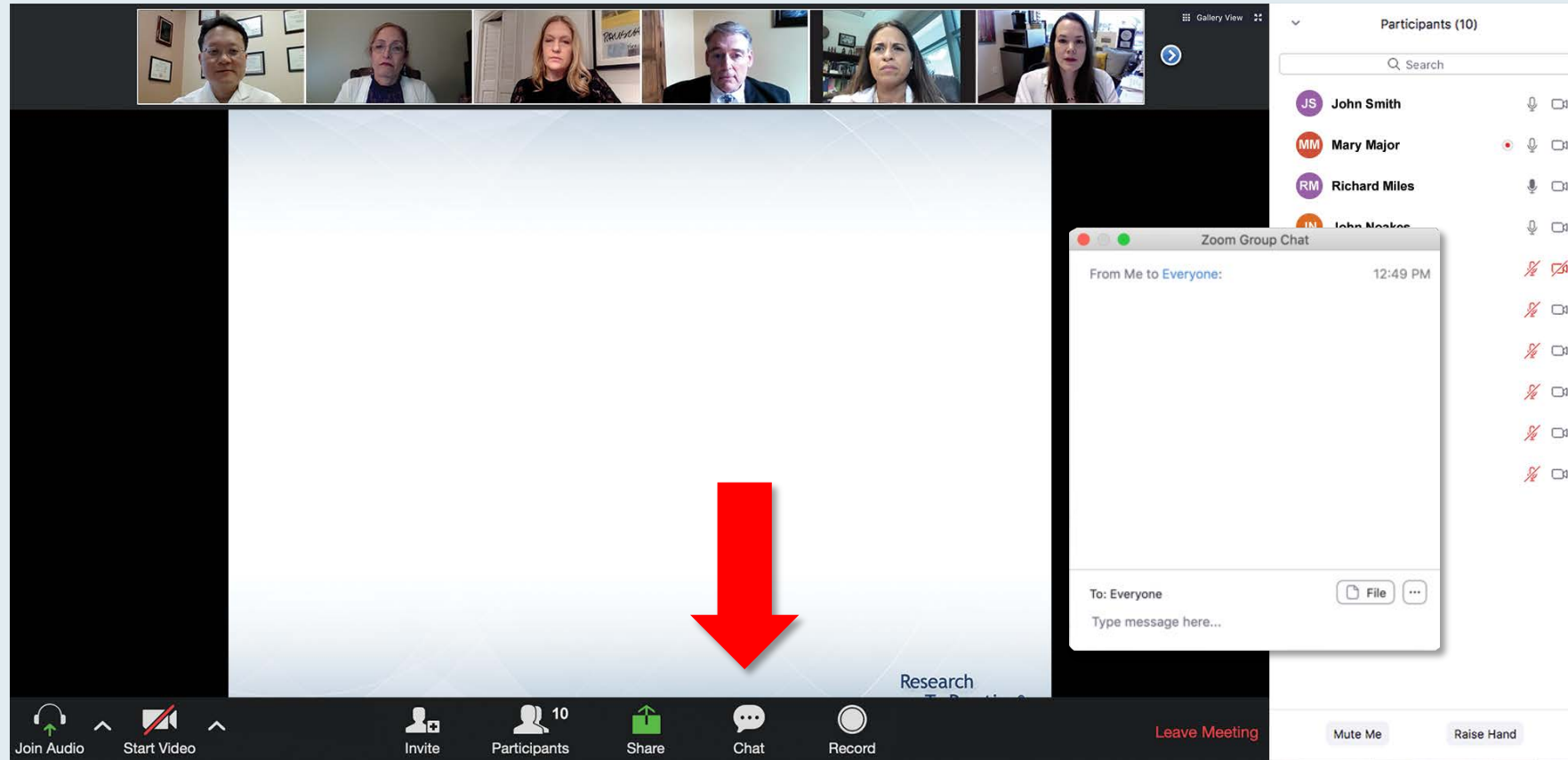
Dr Chao — Disclosures

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Contracted Research	Brooklyn ImmunoTherapeutics, Merck
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Dr Janjigian — Disclosures

Consulting Agreements	AstraZeneca Pharmaceuticals LP, Basilea Pharmaceutica Ltd, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Daiichi Sankyo Inc, Imugene, Lilly, Merck, Merck Serono, Pfizer Inc, Rgenix, Zymeworks
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Ownership Interest (Stock Options)	Rgenix

We Encourage Clinicians in Practice to Submit Questions



Feel free to submit questions now before the program begins and throughout the program.

Familiarizing Yourself with the Zoom Interface

How to answer poll questions

The screenshot displays a Zoom meeting interface. At the top, a gallery view shows six participants. The main screen displays a poll question: "What is your usual treatment recommendation for a patient with MM who has been followed by ASCT for 1-5 years who then experiences an asymptomatic relapse?". Below the question is a list of ten treatment options, each preceded by a number. A "Quick Poll" overlay is visible, showing a list of radio button options corresponding to the numbered list. The options are: 1. Carfilzomib +/- dexamethasone, 2. Pomalidomide +/- dexamethasone, 3. Carfilzomib + pomalidomide +/- dexamethasone, 4. Elotuzumab + lenalidomide +/- dexamethasone, 5. Elotuzumab + pomalidomide +/- dexamethasone, 6. Daratumumab + lenalidomide +/- dexamethasone, 7. Daratumumab + pomalidomide +/- dexamethasone, 8. Daratumumab + bortezomib +/- dexamethasone, 9. Ixazomib + Rd, and 10. Other. The "Submit" button is at the bottom of the poll overlay. On the right side, the "Participants (10)" list is visible, showing names and icons for audio, video, and chat. At the bottom, the Zoom control bar includes buttons for "Join Audio", "Start Video", "Invite", "Participants", "Share", "Chat", "Record", and "Leave Meeting".

What is your usual treatment recommendation for a patient with MM who has been followed by ASCT for 1-5 years who then experiences an asymptomatic relapse?

Quick Poll

- ☐ Carfilzomib +/- dexamethasone
- ☐ Pomalidomide +/- dexamethasone
- ☐ Carfilzomib + pomalidomide +/- dexamethasone
- ☐ Elotuzumab + lenalidomide +/- dexamethasone
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- ☐ Daratumumab + bortezomib +/- dexamethasone
- ☐ Ixazomib + Rd
- ☐ Other

Submit

Co-provided by USF Health Research To Practice®

Join Audio Start Video Invite Participants Share Chat Record Leave Meeting

Participants (10)

Search

- JS John Smith
- MM Mary Major
- RM Richard Miles
- JN John Noakes
- AS Alice Suarez
- JP Jane Perez
- RS Robert Stiles
- JF Juan Fernandez
- AK Ashok Kumar
- JS Jeremy Smith

Mute Me Raise Hand

When a poll question pops up, click your answer choice from the available options.
Results will be shown after everyone has answered.

Familiarizing Yourself with the Zoom Interface

Expand chat submission box

The screenshot shows a Zoom meeting interface. At the top, there are video thumbnails for participants: RTP Coordinat..., Kirsten Miller, RTP Mike Rivera, and Lisa Suarez. Below the thumbnails is a 'Recording...' button. The main content area displays a slide titled 'Meet The Professor Program Steering Committee' with six members listed:

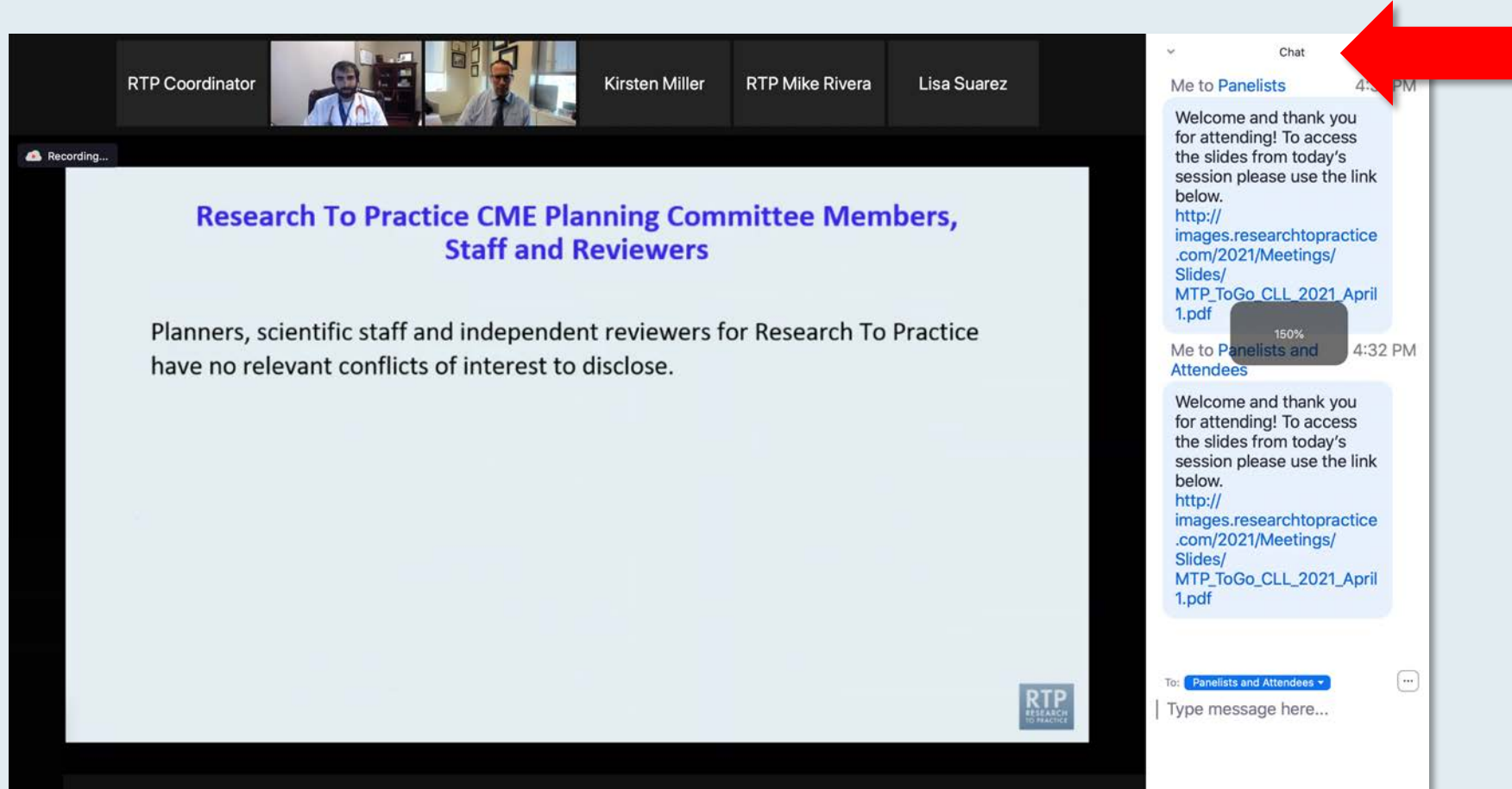
- John N Allan, MD**
Assistant Professor of Medicine
Weill Cornell Medicine
New York, New York
- Ian W Flinn, MD, PhD**
Director of Lymphoma Research Program
Sarah Cannon Research Institute
Tennessee Oncology
Nashville, Tennessee
- Steven Coutre, MD**
Professor of Medicine (Hematology)
Stanford University School of Medicine
Stanford, California
- Prof John G Gribben, MD, DSc, FMedSci**
Chair of Medical Oncology
Barts Cancer Institute
Queen Mary University of London
Charterhouse Square
London, United Kingdom
- Matthew S Davids, MD, MMSc**
Associate Professor of Medicine
Harvard Medical School
Division of Lymphoma
Dana-Farber Cancer Institute
Boston, Massachusetts
- Brian T Hill, MD, PhD**
Director, Lymphoid Malignancy Program
Cleveland Clinic Taussig Cancer Institute
Cleveland, Ohio

The chat window on the right is titled 'Chat' and shows two messages from 'Me to Panelists' and 'Me to Panelists and Attendees' at 4:31 PM and 4:32 PM respectively. Each message includes a welcome message and a link to a PDF file: http://images.researchtopractice.com/2021/Meetings/Slides/MTP_ToGo_CLL_2021_April1.pdf. At the bottom of the chat window, there is a 'To:' dropdown menu set to 'Panelists and Attendees' and a text input field labeled 'Type message here...'. A large red arrow points to the white line above the text input field, indicating where to drag to expand the box.

Drag the white line above the submission box up to create more space for your message.

Familiarizing Yourself with the Zoom Interface

Increase chat font size



**Press Command (for Mac) or Control (for PC) and the + symbol.
You may do this as many times as you need for readability.**

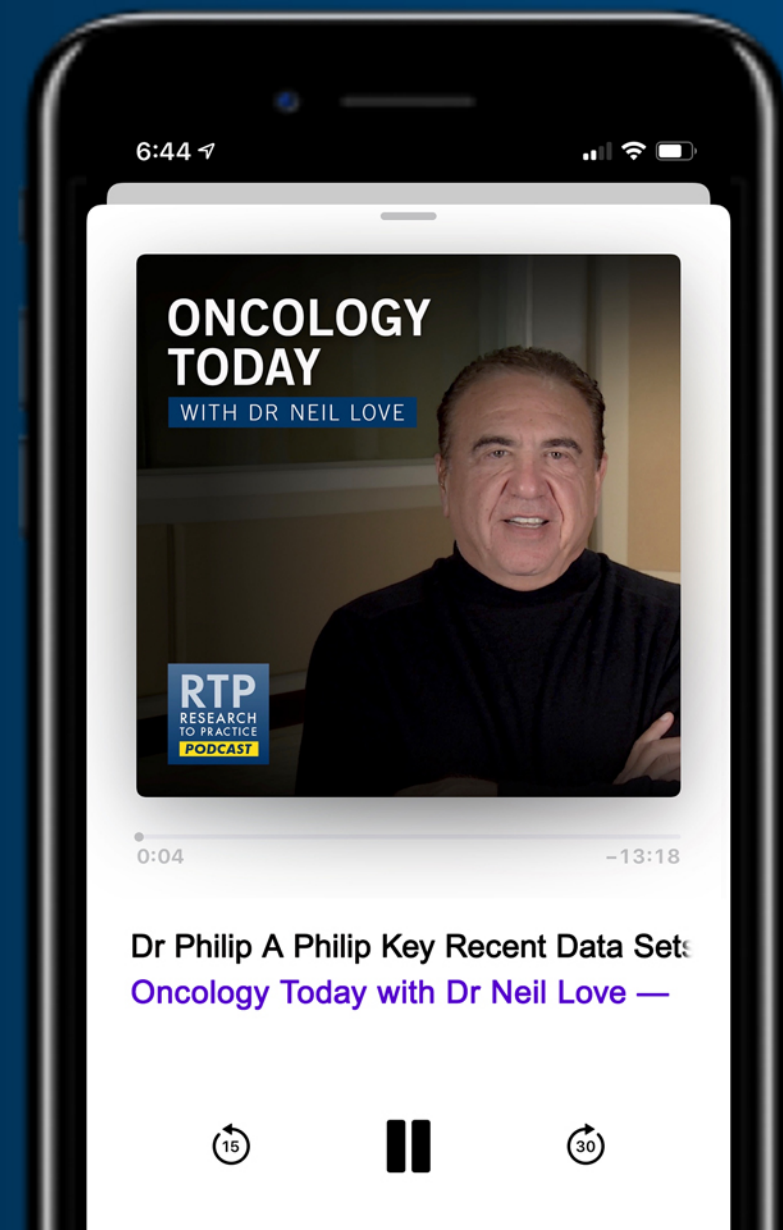
ONCOLOGY TODAY

WITH DR NEIL LOVE

Key Recent Data Sets in Gastrointestinal Cancers



DR PHILIP A PHILIP
KARMANOS CANCER INSTITUTE
WAYNE STATE UNIVERSITY



Meet The Professor

Management of Chronic Lymphocytic Leukemia

**Thursday, April 15, 2021
5:00 PM – 6:00 PM ET**

Faculty

John N Allan, MD

Moderator

Neil Love, MD

Dissecting the Decision: Investigator Perspectives on Key Issues in the Management of Common Cancers

A Complimentary NCPD Live Webinar Series Hosted in Conjunction with the 46th Annual ONS Congress

Breast Cancer

Tuesday, April 20, 2021

8:30 AM – 10:00 AM ET

Non-Small Cell Lung Cancer

Tuesday, April 20, 2021

5:00 PM – 6:30 PM ET

Acute Myeloid Leukemia

Wednesday, April 21, 2021

12:00 PM – 1:00 PM ET

Colorectal and Gastroesophageal Cancers

Wednesday, April 21, 2021

4:45 PM – 5:45 PM ET

Prostate Cancer

Thursday, April 22, 2021

8:30 AM – 10:00 AM ET

Hodgkin and Non-Hodgkin Lymphomas

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5:00 PM – 6:30 PM ET

Multiple Myeloma

Tuesday, April 27, 2021

8:30 AM – 10:00 AM ET

Gynecologic Cancers

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Urothelial Bladder Carcinoma

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Chimeric Antigen Receptor T-Cell Therapy

Thursday, April 29, 2021

5:00 PM – 6:30 PM ET

Ask the Expert: Clinical Investigators Provide Perspectives on the Management of Renal Cell Carcinoma

In Partnership with Project Echo® and Florida Cancer Specialists

**Tuesday, May 4, 2021
5:00 PM – 6:00 PM ET**

Faculty

Chung-Han Lee, MD, PhD

Moderator

Neil Love, MD

Thank you for joining us!

CME credit information will be emailed to each participant within 3 business days.

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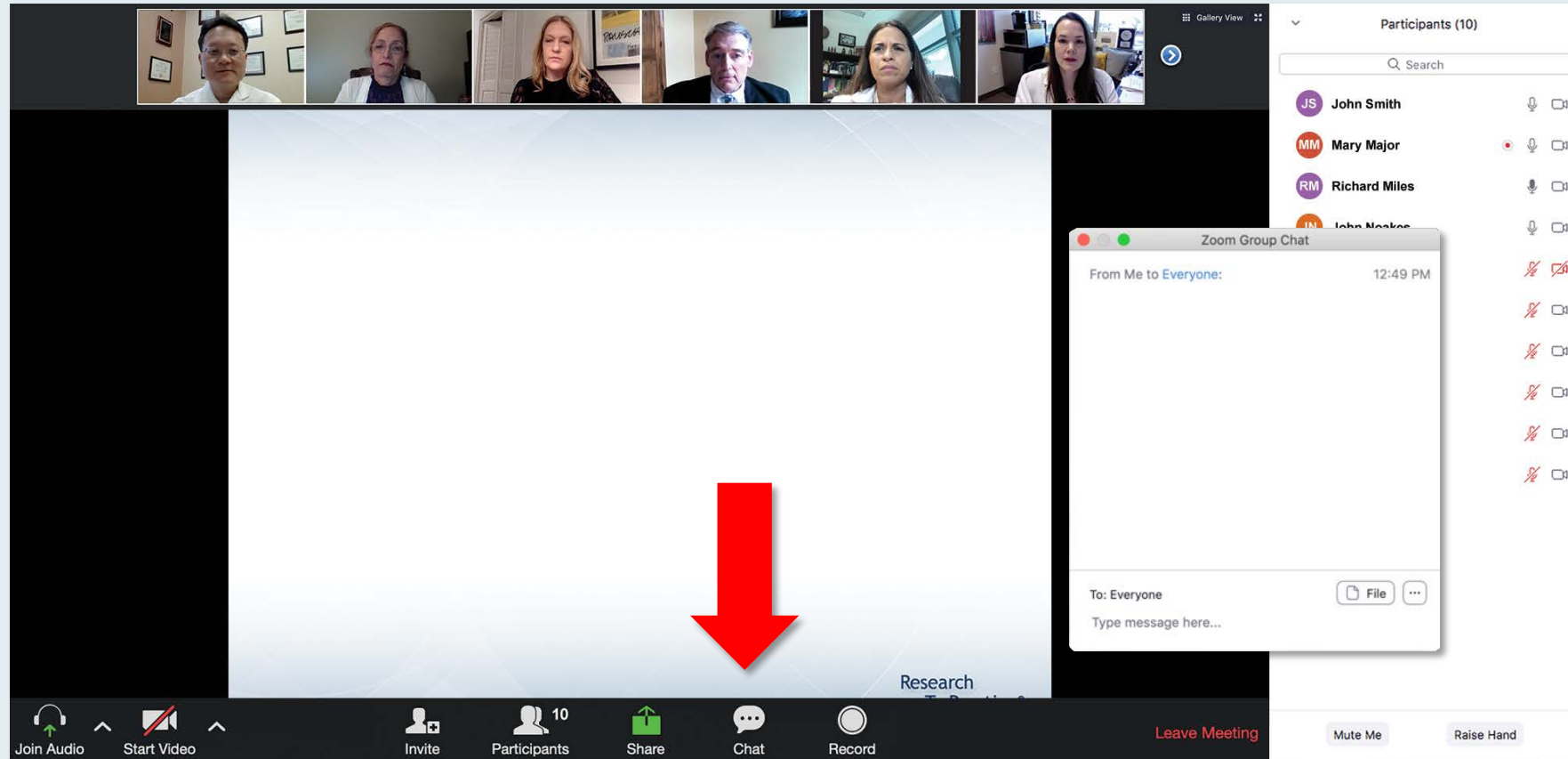
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What is your usual treatment recommendation for a patient with MM who has been followed by ASCT for 1-5 years who then experiences an asymptomatic relapse?

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- ☐ Ixazomib + Rd
- ☐ Other

Submit

Co-provided by USF Health Research To Practice®

Join Audio Start Video Invite Participants 10 Share Chat Record Leave Meeting Mute Me Raise Hand

Participants (10)

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- MM Mary Major
- RM Richard Miles
- JN John Noakes
- AS Alice Suarez
- JP Jane Perez
- RS Robert Stiles
- JF Juan Fernandez
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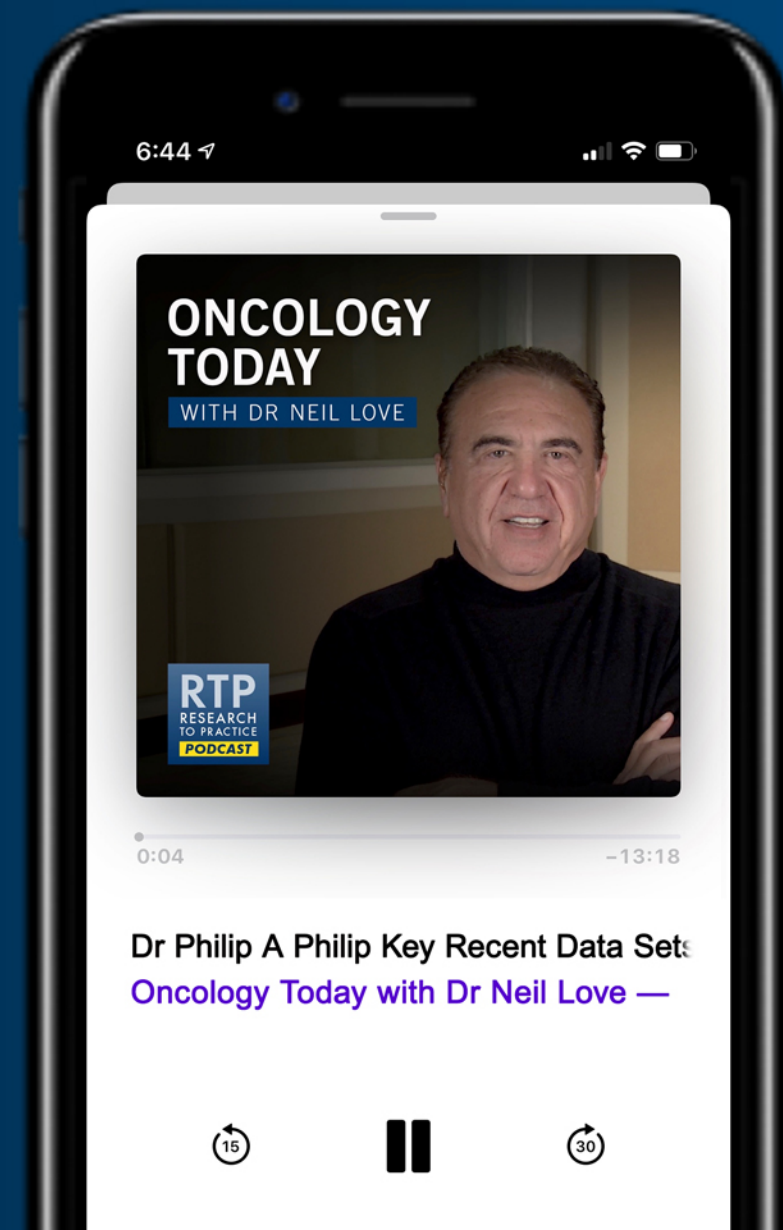
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Daniel Catenacci, MD

Associate Professor, Department of Medicine, Section of Hematology and Oncology
Director, Interdisciplinary Gastrointestinal Oncology Program
Assistant Director, Translational Research, Comprehensive Cancer Center
The University of Chicago Medical Center and Biological Sciences
Chicago, Illinois

Agenda

Cases from the Practice of Dr Catenacci

Case 1: A 54-year-old man with MSS metastatic GEJ adenocarcinoma – PD-L1 CPS 20, HER2-negative

Case 2: A 56-year-old man with localized adenocarcinoma of the esophagus – MSS, PD-L1 CPS 10

Case 3: A 68-year-old man with relapsed MSS adenocarcinoma of the esophagus – HER2-positive, PD-L1 CPS 0

Case 4: A 35-year-old woman with relapsed metastatic gastric cancer and disease progression on T-DXd

Case 5: A 68-year-old man with newly diagnosed metastatic GEJ cancer with an FGFR2b mutation

Case 6: A 66-year-old woman with metastatic squamous cell carcinoma of the esophagus – PD-L1 CPS 50

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Case Presentation – A 54-year-old man with microsatellite-stable metastatic gastroesophageal junction adenocarcinoma – PD-L1 CPS 20, HER2-negative



Dr Daniel Catenacci

- Presents with dysphagia and 10-pound weight loss
 - Imaging shows liver lesions and EGD reveals mass at the GEJ
 - GEJ and liver biopsy results consistent with adenocarcinoma
- FOLFOX + pembrolizumab (400mg q6weeks) initiated
- Restaging CT demonstrates stable disease
- Therapy continued with 5-FU and pembrolizumab maintenance
 - Progressive disease at 8 months
- Patient switched to 2nd line FOLFIRI + ramucirumab

Questions

- Do you use nivolumab or pembrolizumab for GEJ adenocarcinoma? Do you prefer cisplatin or oxaliplatin as a backbone chemotherapy?
- What dosing do you use for pembrolizumab when administering FOLFOX backbone chemotherapy?

FDA Approves Pembrolizumab in Combination with Chemotherapy for Esophageal or GEJ Carcinoma

Press Release – March 22, 2021

“On March 22, 2021, the Food and Drug Administration approved pembrolizumab in combination with platinum and fluoropyrimidine-based chemotherapy for patients with metastatic or locally advanced esophageal or gastroesophageal (GEJ) (tumors with epicenter 1 to 5 centimeters above the gastroesophageal junction) carcinoma who are not candidates for surgical resection or definitive chemoradiation.

Efficacy was evaluated in KEYNOTE-590 (NCT03189719), a multicenter, randomized, placebo-controlled trial that enrolled 749 patients with metastatic or locally advanced esophageal or gastroesophageal junction carcinoma who were not candidates for surgical resection or definitive chemoradiation.

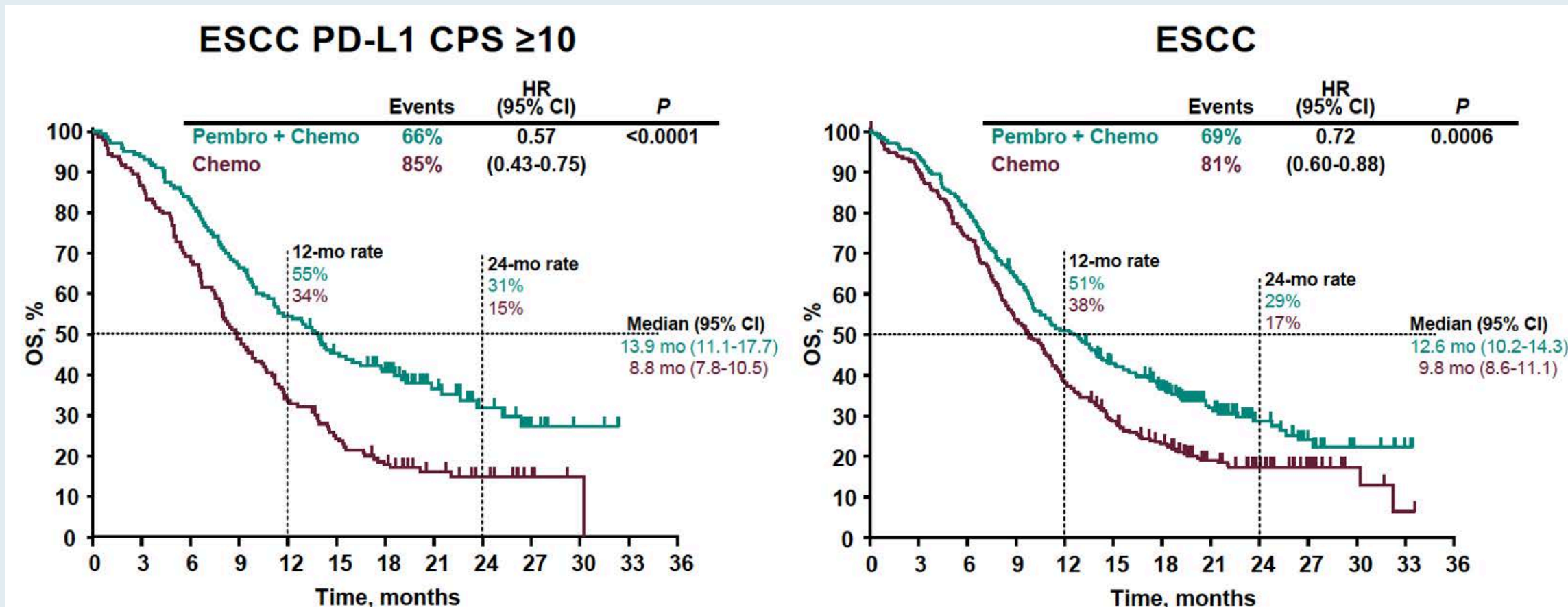
The recommended pembrolizumab dose for esophageal cancer is 200 mg every 3 weeks or 400 mg every 6 weeks.”

Pembrolizumab plus Chemotherapy versus Chemotherapy as First-Line Therapy in Patients with Advanced Esophageal Cancer: The Phase 3 KEYNOTE-590 Study

Kato K et al.

ESMO 2020;Abstract LBA8_PR.

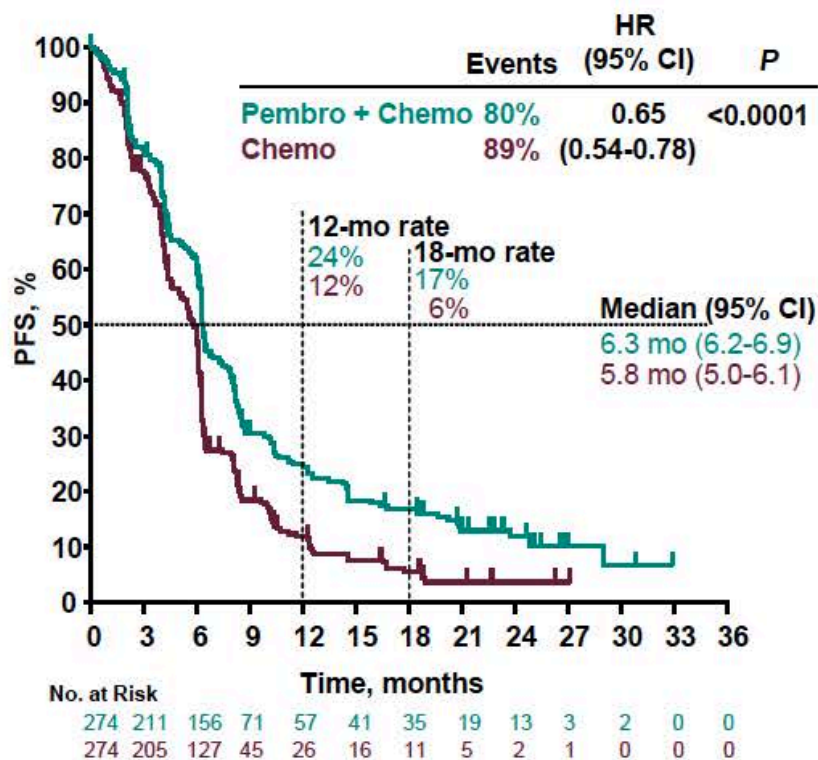
KEYNOTE-590: Overall Survival



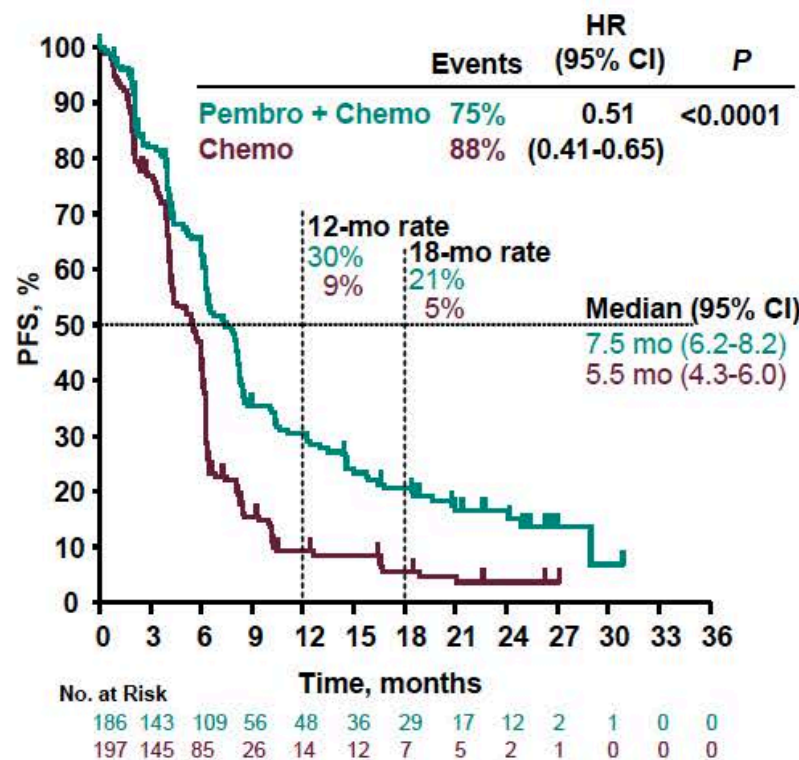
Median OS	Pembro + chemo	Chemo	HR (<i>p</i> -value)
All patients	12.4 mo	9.8 mo	0.73 (<0.0001)
PD-L1 CPS ≥ 10	13.5 mo	9.4 mo	0.62 (<0.0001)

KEYNOTE-590: Progression-Free Survival

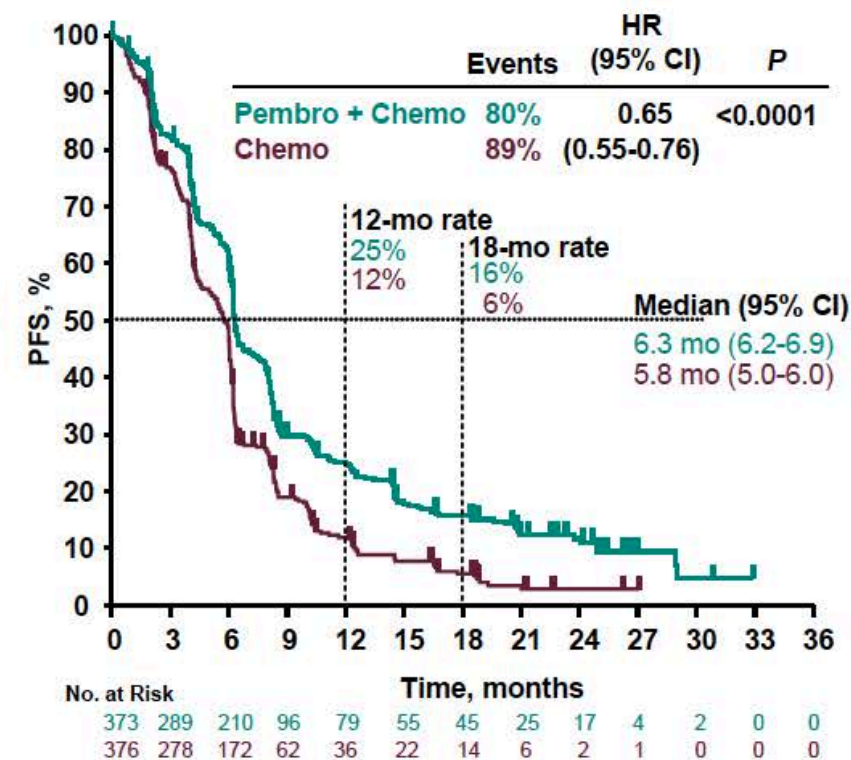
ESCC



PD-L1 CPS ≥10



All Patients

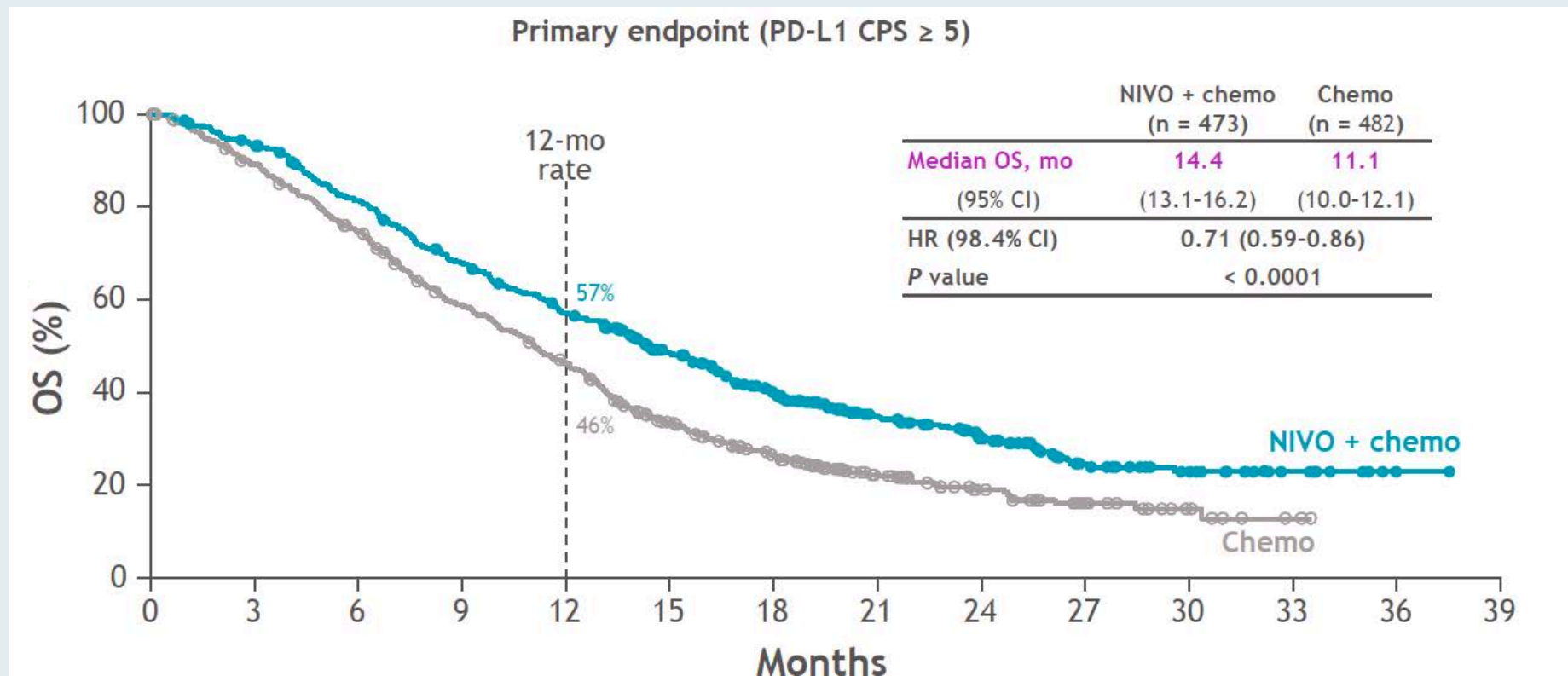


Nivolumab (Nivo) plus Chemotherapy (Chemo) versus Chemo as First-Line (1L) Treatment for Advanced Gastric Cancer/Gastroesophageal Junction Cancer (GC/GEJC)/Esophageal Adenocarcinoma (EAC): First Results of the CheckMate 649 Study

Moehler M et al.

ESMO 2020;Abstract LBA6.

CheckMate 649: Overall Survival



Median OS	Nivo + chemo (n = 641)	Chemo (n = 655)	HR (p-value)
PD-L1 CPS ≥ 1	14.0 mo	11.3 mo	0.77 (0.0001)
All treated patients	13.8 mo	11.6 mo	0.80 (0.0002)

KEY DIFFERENCES: KEYNOTE-062 VS. CheckMate 649

	KN062	CM 649
Population	CPS1, Gastric/GEJ adenocarcinoma	All comers, EAC/Gastric/GEJ adenocarcinoma
Chemo backbone	FP/XP	FOLFOX/CAPOX
N	~250/group	~790/group
Minimum follow- up	22 months	12 months

	KN062 (based on screened patients with PD-L1 status)	KN062 All CPS1	CM649 (all comers)
CPS1	72%	100%	82%
CPS 5	29%	61%	60%
CPS10	17%	37%	--

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Case 6: A 66-year-old woman with metastatic squamous cell carcinoma of the esophagus – PD-L1 CPS 50

Case 7: A 64-year-old man with GEJ cancer and COVID-19 vaccine-associated imaging issues

Case Presentation – A 56-year-old man with localized adenocarcinoma of the esophagus – MSS, PD-L1 CPS 10



Dr Daniel Catenacci

- Presents with dysphagia and weight loss
 - EGD demonstrated large fungating mass in the distal esophagus not involving the GEJ
- Neoadjuvant carboplatin/paclitaxel initiated → surgery
- Patient then treated with adjuvant nivolumab x 6 months
 - Development of autoimmune dermatitis and hypothyroidism → treatment discontinued
- Patient continues on surveillance → NED

Questions

- Would you consider adjuvant nivolumab in this case?
- Would the PD-L1 score affect your decision (what if the PD-L1 CPS was 0)?

Regulatory and reimbursement issues aside, in which line of therapy if any would you generally recommend an anti-PD-1/PD-L1 antibody (with or without chemotherapy) for a 65-year-old patient with metastatic HER2-negative, MSS adenocarcinoma of the GEJ with a PD-L1 CPS of 5%?

1. First line
2. Second line
3. Third line
4. Beyond third line
5. I would not recommend an anti-PD-1/PD-L1 antibody

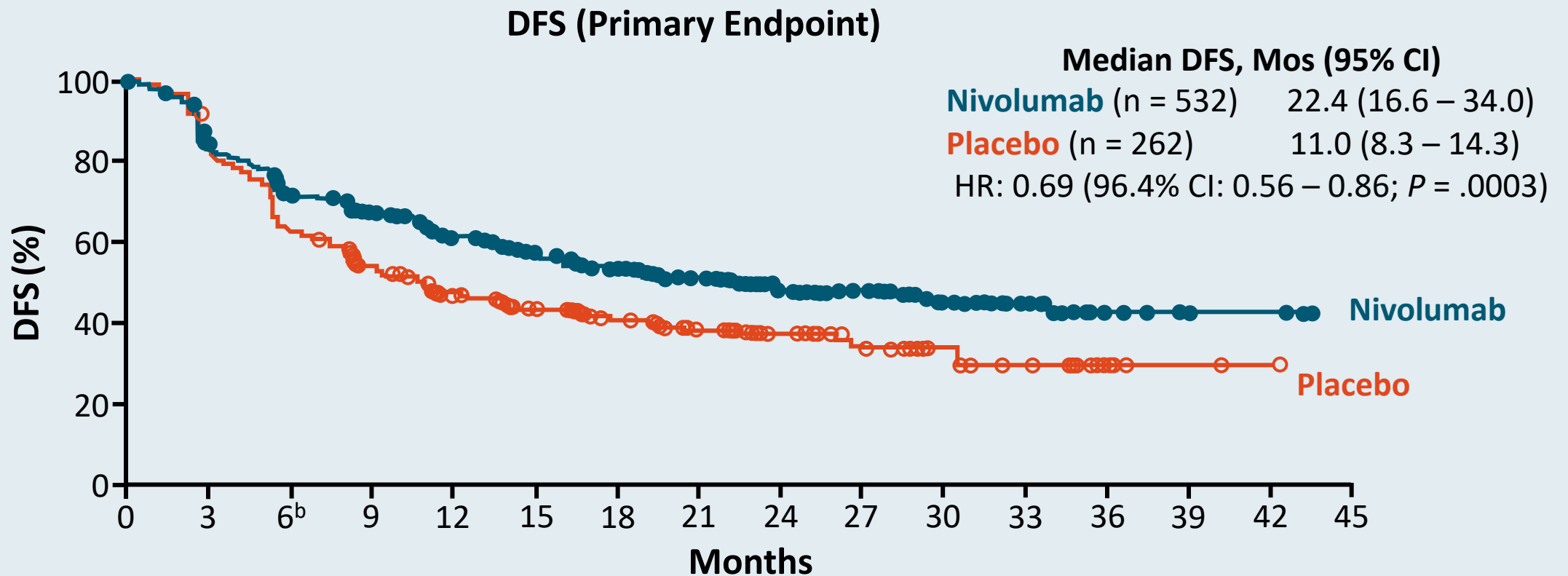
Adjuvant Nivolumab in Resected Esophageal or Gastroesophageal Junction Cancer (EC/GEJC) Following Neoadjuvant Chemoradiation Therapy (CRT): First Results of the CheckMate 577 Study

Kelly RJ et al

ESMO 2020;Abstract LBA9_PR

CheckMate 577: Adjuvant Nivolumab After Neoadjuvant CRT/Resection for Esophageal/GEJ Cancer

- Randomized phase III trial of **adjuvant nivolumab** vs **placebo** following neoadjuvant CRT + surgical resection* for pts with stage II/III **esophageal/GEJ adenocarcinoma/SCC** (N = 794)



*Residual pathologic disease \geq ypT1 or \geq ypN1.

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Case Presentation – A 68-year-old man with relapsed MSS adenocarcinoma of the esophagus – HER2-positive, PD-L1 CPS 0



Dr Daniel Catenacci

- Presents with dysphagia and weight loss
 - EGD reveals distal esophageal adenocarcinoma
 - No evidence of metastatic disease
- Neoadjuvant carboplatin/paclitaxel → surgery
- Restaging CT reveals liver lesions
- First-line FOLFOX plus trastuzumab initiated → liver and lung metastases 9 months later
- Patient switched to 2nd line FOLFIRI + ramucirumab → disease progression 15 months later
- Trastuzumab deruxtecan (T-DXd) initiated → response but discontinued after 6 months due to pneumonitis
- Patient started on 4th line T-DM1 with PD → patient enrolled in hospice

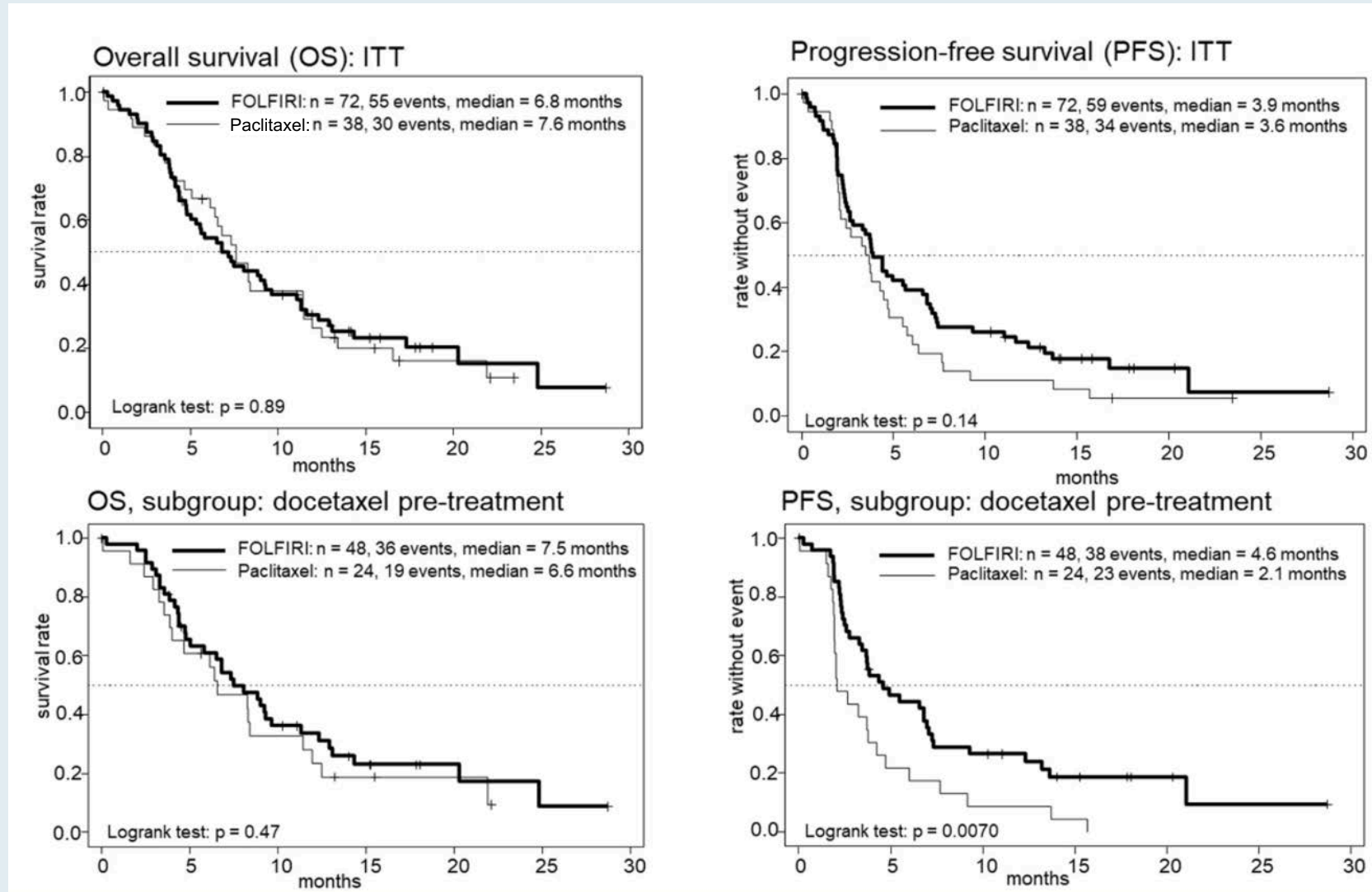
Questions

- Do you use anti-HER2 therapy perioperatively?
- Do you assess HER2 status at each progression time point to determine optimal therapy options?

What would you currently recommend as second-line therapy for a patient with metastatic HER2-positive, MSS adenocarcinoma of the GEJ who has experienced disease progression on first-line FOLFOX/trastuzumab?

1. Ramucirumab
2. Ramucirumab/paclitaxel
3. Continue trastuzumab and switch chemotherapy
4. Test for PD-L1 CPS and administer pembrolizumab if $\geq 1\%$
5. Test for PD-L1 CPS and administer pembrolizumab if $\geq 5\%$
6. Anti-PD-1/PD-L1 antibody
7. Trastuzumab deruxtecan
8. Other

Phase II RAMIRIS Trial of Second-Line Ramucirumab plus FOLFIRI – Patients with Advanced or Metastatic Gastroesophageal Adenocarcinoma with or without Prior Docetaxel



Pivotal Randomized Phase II and III Trials of HER2-Targeted Agents for HER2-Positive Advanced Gastric or GEJ Cancer

Trial	Agent	Line of therapy	Result for primary endpoint
ToGA	Trastuzumab	First	Positive
LOGiC	Lapatinib	First	Negative
JACOB	Pertuzumab	First	Negative
T-ACT	Trastuzumab	Second	Negative
TyTAN	Lapatinib	Second	Negative
GATSBY	T-DM1	Second	Negative

FDA Approves fam-Trastuzumab Deruxtecan-nxki for HER2-Positive Gastric Adenocarcinomas

Press Release – January 15, 2021

“On January 15, 2021, the Food and Drug Administration approved fam-trastuzumab deruxtecan-nxki for adult patients with locally advanced or metastatic HER2-positive gastric or gastroesophageal (GEJ) adenocarcinoma who have received a prior trastuzumab-based regimen.

Efficacy was evaluated in a multicenter, open-label, randomized trial (DESTINY-Gastric01, NCT03329690) in patients with HER2-positive locally advanced or metastatic gastric or GEJ adenocarcinoma who had progressed on at least two prior regimens, including trastuzumab, a fluoropyrimidine- and a platinum-containing chemotherapy.”

The NEW ENGLAND JOURNAL *of* MEDICINE

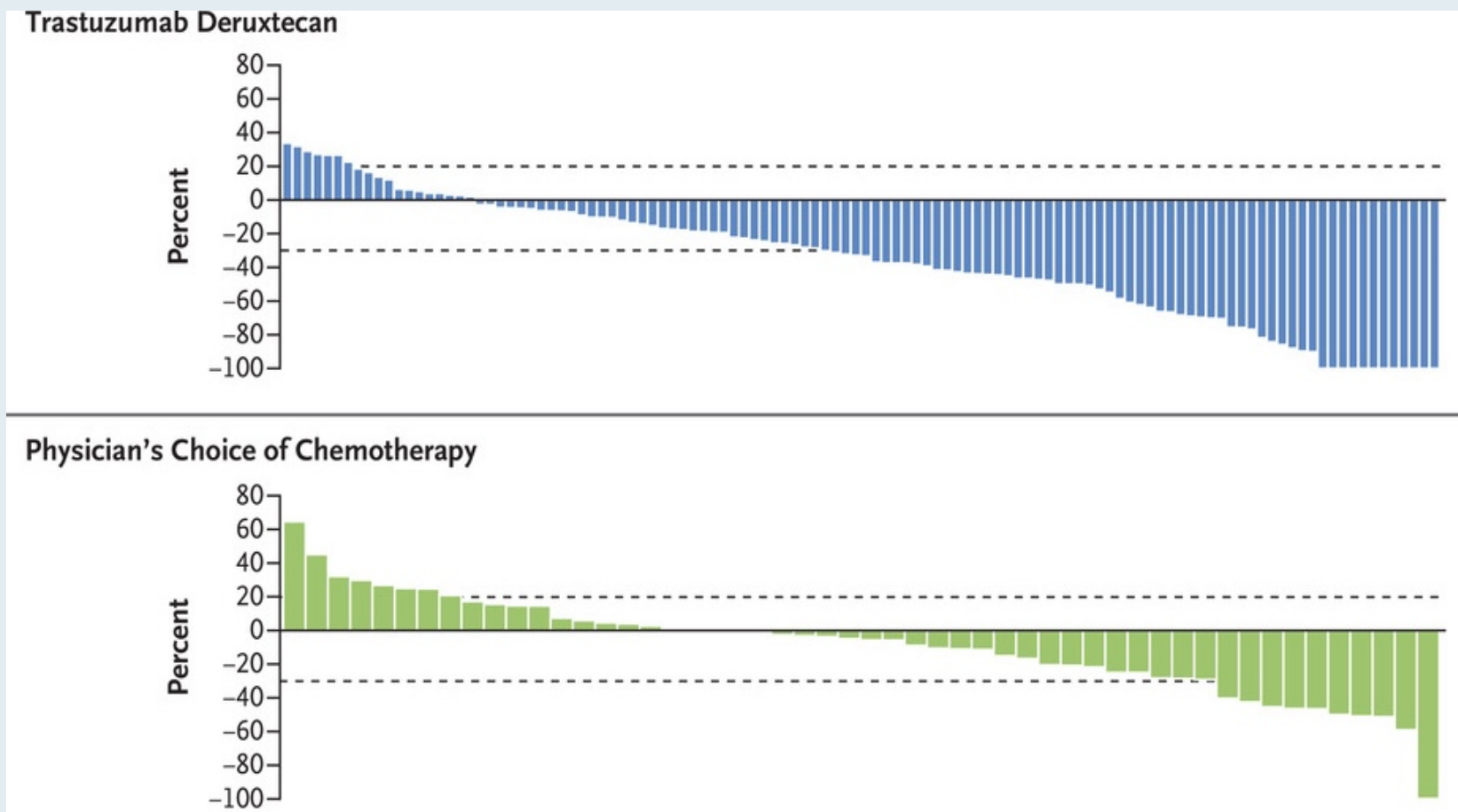
ORIGINAL ARTICLE

Trastuzumab Deruxtecan in Previously Treated HER2-Positive Gastric Cancer

K. Shitara, Y.-J. Bang, S. Iwasa, N. Sugimoto, M.-H. Ryu, D. Sakai, H.-C. Chung, H. Kawakami, H. Yabusaki, J. Lee, K. Saito, Y. Kawaguchi, T. Kamio, A. Kojima, M. Sugihara, and K. Yamaguchi, for the DESTINY-Gastric01 Investigators*

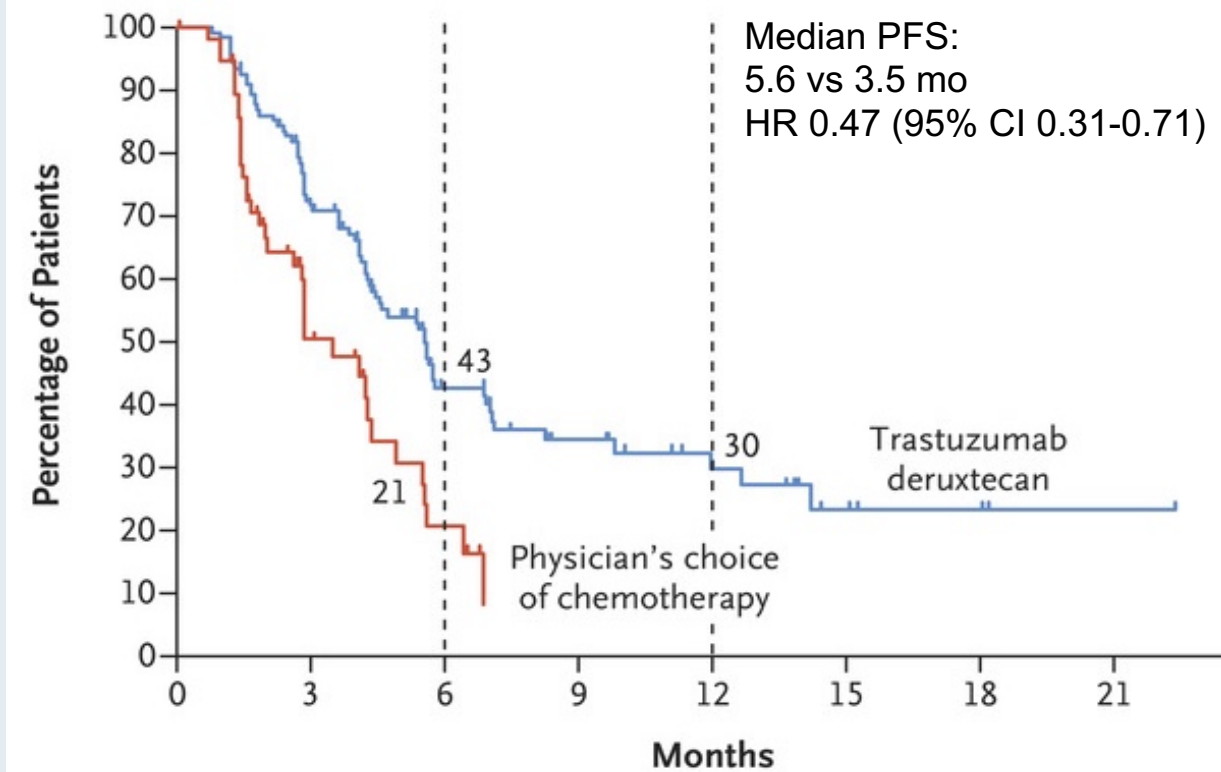
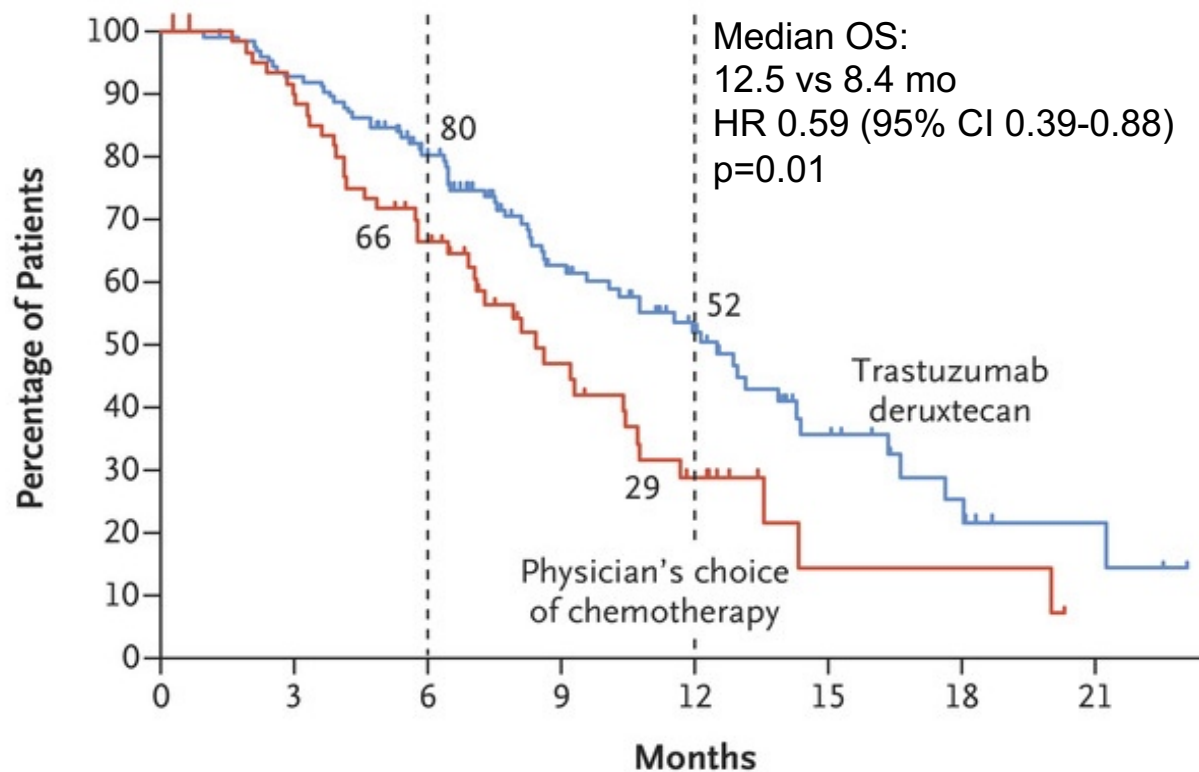
***N Engl J Med* 2020;382(25):2419-30.**

DESTINY-Gastric01: Trastuzumab Deruxtecan for Previously Treated HER2-Positive Gastric Cancer



	T-DXd (n = 119)	PC (n = 56)
ORR	51%	14%
Confirmed ORR	43%	12%
CR	8%	0%
PR	34%	12%

DESTINY-Gastric01: Survival Results



DESTINY-Gastric01: Select Adverse Events

Adverse event	Trastuzumab deruxtecan (n = 125)			Physician's choice of chemo (n = 62)		
	Any grade	Grade 3	Grade 4	Any grade	Grade 3	Grade 4
Neutrophil count decreased	63%	38%	13%	35%	16%	8%
Anemia	58%	38%	0	31%	21%	2%
Platelet count decreased	39%	10%	2%	6%	2%	2%
White cell count decreased	38%	21%	0	35%	8%	3%
Fatigue	22%	7%	0	24%	3%	0
Lymphocyte count decreased	22%	6%	5%	3%	0	2%

- A total of 12 patients (10%) in the trastuzumab deruxtecan group had drug-related interstitial lung disease or pneumonitis compared to 0 patients in the physician's choice group
- 1 drug-related death (pneumonia) occurred in the trastuzumab deruxtecan group

Pooled Analysis of Drug-Related Interstitial Lung Disease (ILD) in 8 Single-Arm Trastuzumab Deruxtecan (T-DXd) Studies

Powell CA et al.

AACR 2021;Abstract CT167.

Lancet Oncol 2020;21:821-31.

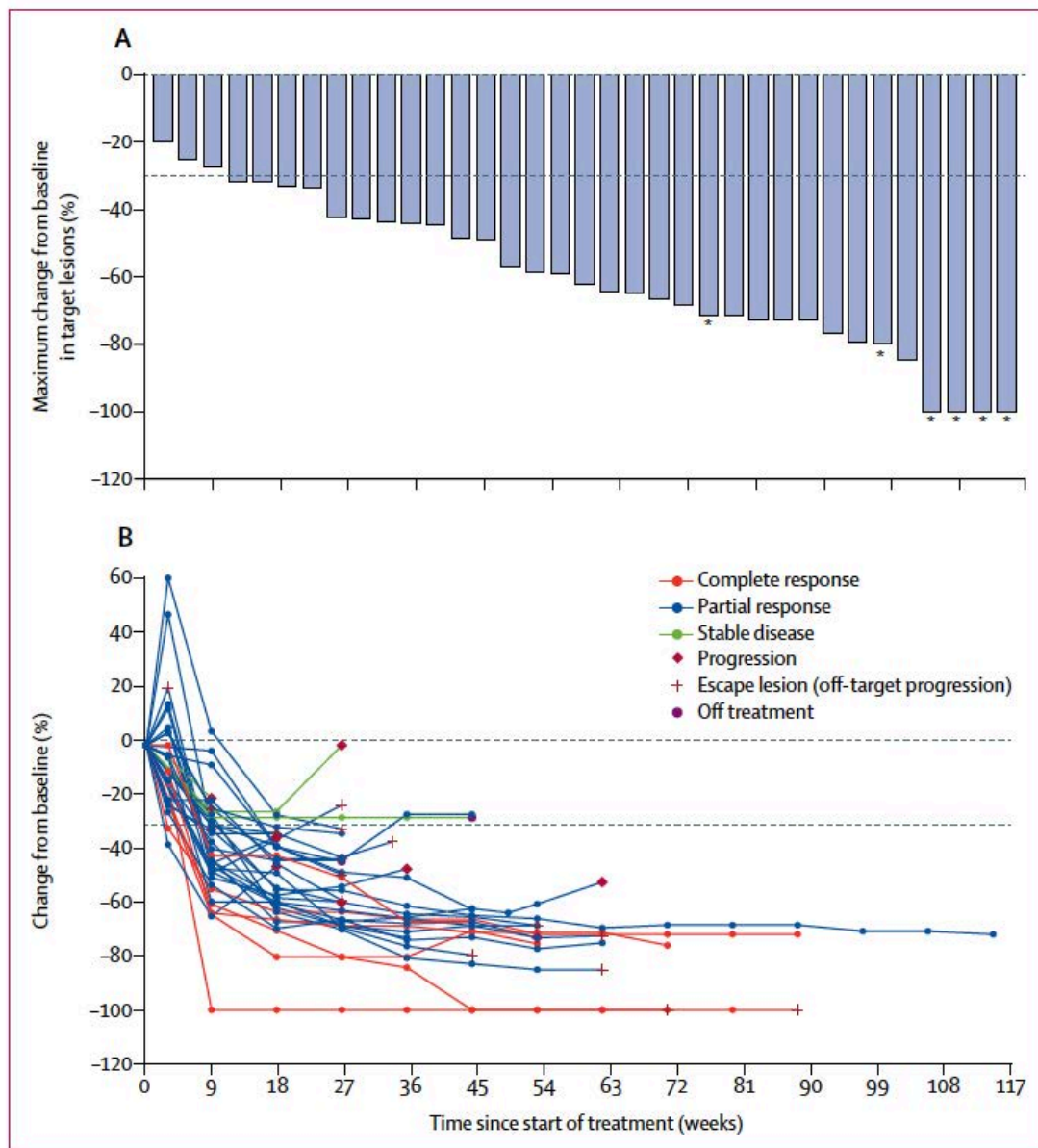
Articles

First-line pembrolizumab and trastuzumab in HER2-positive oesophageal, gastric, or gastro-oesophageal junction cancer: an open-label, single-arm, phase 2 trial



Yelena Y Janjigian, Steven B Maron, Walid K Chatila, Brittanie Millang, Shweta S Chavan, Carly Alterman, Joanne F Chou, Michal F Segal, Marc Z Simmons, Parisa Momtaz, Marina Shcherba, Geoffrey Y Ku, Alice Zervoudakis, Elizabeth S Won, David P Kelsen, David H Ilson, Rebecca J Nagy, Richard B Lanman, Ryan N Ptashkin, Mark T A Donoghue, Marinela Capanu, Barry S Taylor, David B Solit, Nikolaus Schultz, Jadyn F Hechtman

First Line Capecitabine/Oxaliplatin/Pembrolizumab/Trastuzumab



Best Response (n=37)	Patients, n (%)
ORR, n (%)	32 (91%) 95% CI (78%, 97%)
CR	6 (17)
PR	26 (74)
SD	3 (9)
PD	0
Disease Control Rate	100%

Second Line – Margetuximab/Pembrolizumab (Phase Ib/II CP-MGAH222-05 Trial)

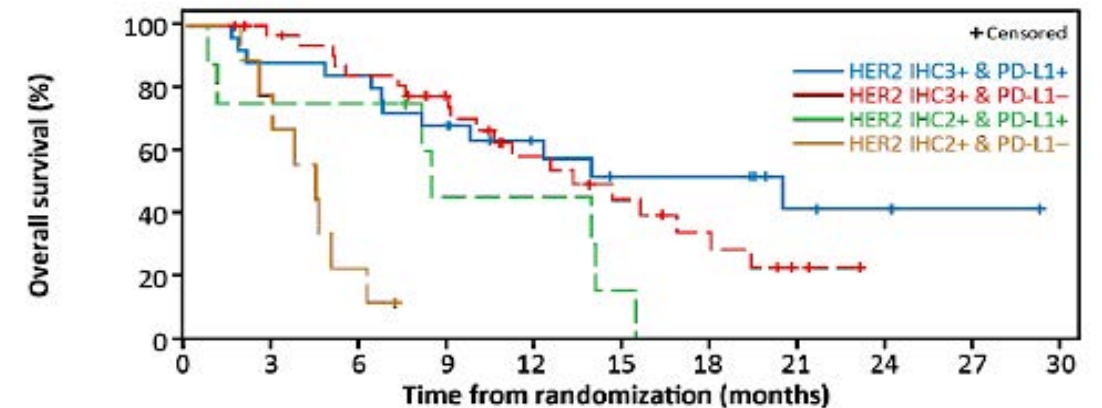
	Number of patients	Patients with an objective response* (%; 95% CI)	Disease control rate† (%; 95% CI)
Response-evaluable population‡	92	17 (18%; 11–28)§	49 (53%; 43–64)
HER2 IHC3-positive tissue prior to 1L	71	100% 17 (24%; 15–36)	44 (62%; 50–73)
HER2 IHC2-positive	21	0	5 (24%; 8–47)
PD-L1-positive tissue prior to 1L	33	79% 11 (33%; 18–52)	22 (67%; 48–82)
PD-L1-negative	43	3 (7%; 1–19)	19 (44%; 29–60)
HER2 IHC3-positive and PD-L1-positive	25	11 (44%; 24–65)	18 (72%; 51–88)
HER2 IHC3-positive and PD-L1-negative	34	3 (9%; 2–24)	19 (56%; 38–73)
HER2 IHC2-positive and PD-L1-positive	8	0	4 (50%; 16–84)
HER2 IHC2-positive and PD-L1-negative	9	0	0
HER2 ^{ctDNA} -positive ctDNA prior to 2L	48	88% 15 (31%; 19–46)	31 (65%; 49–78)
HER2 ^{ctDNA} -negative	35	2 (6%; 1–19)	14 (40%; 24–58)
HER2 ^{ctDNA} -positive and PD-L1-positive	18	9 (50%; 26–74)	14 (78%; 52–94)
HER2 ^{ctDNA} -positive and PD-L1-positive and HER2 IHC3-positive	15	9 (60%; 32–84)	12 (80%; 52–96)
HER2 ^{ctDNA} -positive and PD-L1-negative	19	3 (16%; 3–40)	12 (63%; 38–84)
HER2 ^{ctDNA} -positive and HER2 IHC2-positive	9	0	2 (2%; 3–60)
HER2 ^{ctDNA} -positive and PD-L1-negative and HER2 IHC2-positive	4	0	0

This table includes only confirmed responses; there were three additional unconfirmed responses. ctDNA=circulating tumour DNA. HER2^{ctDNA}=HER2 amplification by ctDNA. IHC=immunohistochemistry. *Confirmed complete response and confirmed partial response. †Confirmed complete response, confirmed partial response, and stable disease. ‡Patients who received at least one dose of margetuximab 15 mg/kg intravenously every 3 weeks and had baseline measurable disease. §One confirmed complete response was observed in the double-positive (HER2 IHC3-positive and PD-L1-positive) subgroup.

Table 4: Objective response and disease control rates overall and by biomarker expression (n=92)

F. HER2 & PD-L1 IHC OS (n=76)^a

	HER2 IHC3+ & PD-L1+ (n=25)	HER2 IHC3+ & PD-L1- (n=34)	HER2 IHC2+ & PD-L1+ (n=8)	HER2 IHC2+ & PD-L1- (n=9)
# of events	12	19	7	8
Median OS (95% CI)	20.47 months (8.08–NA)	13.27 months (9.95–18.00)	8.41 months (0.72–14.03)	4.44 months (1.87–6.21)
Double positive vs others: HR by Cox model, 0.54; 95% CI, 0.28–1.04; Log-rank p=0.0628				
12-month OS rate (95% CI)	63.14% (40.91–78.94)	58.06% (37.64–73.89)	45.00% (10.76–75.13)	0



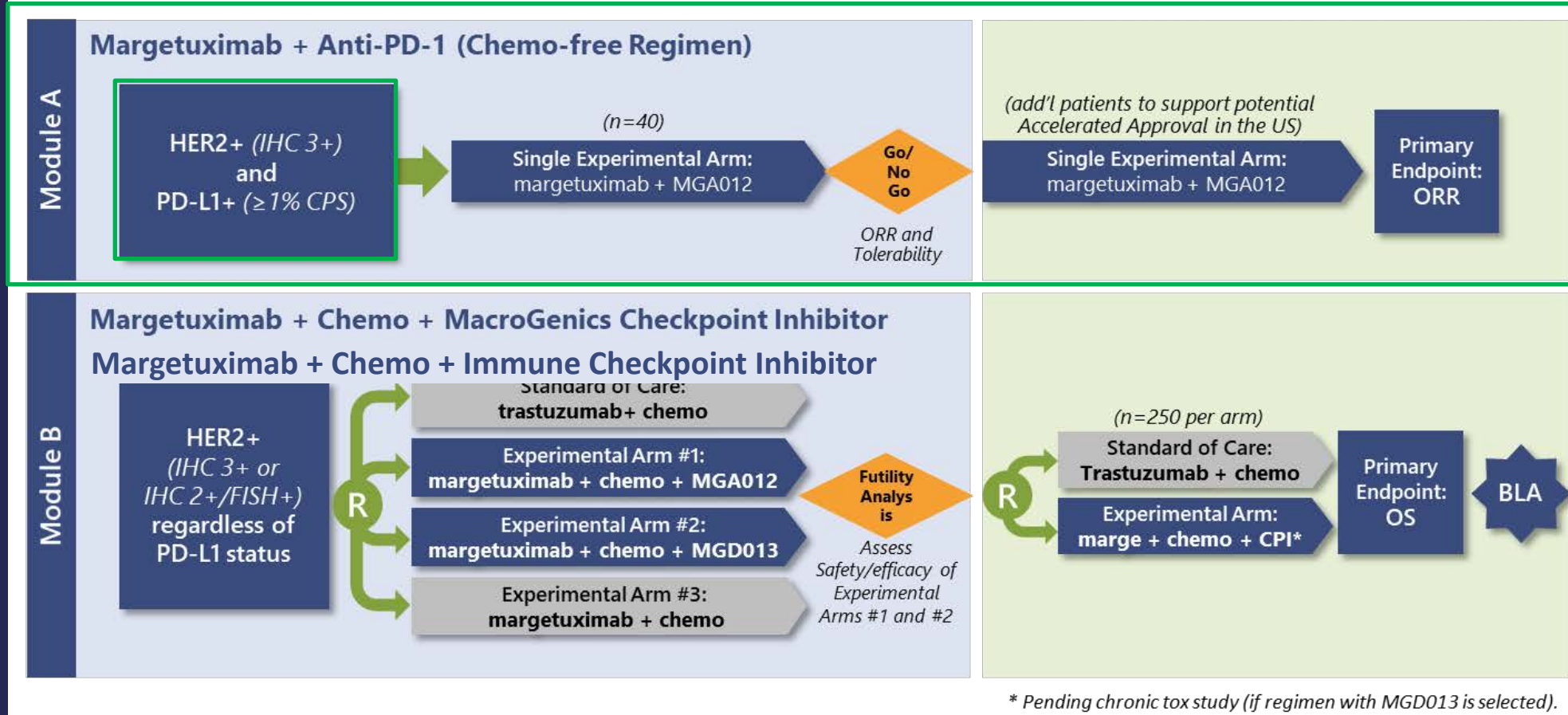
At risk (censored)

HER2 IHC3+ & PD-L1+	25(0)	22(0)	21(0)	16(1)	11(5)	8(6)	8(6)	4(9)	3(10)	1(12)	0(13)
HER2 IHC3+ & PD-L1-	34(0)	31(2)	26(3)	21(6)	13(9)	9(10)	6(11)	2(13)	0(15)	0(15)	0(15)
HER2 IHC2+ & PD-L1+	8(0)	6(0)	6(0)	3(1)	3(1)	1(1)	0(1)	0(1)	0(1)	0(1)	0(1)
HER2 IHC2+ & PD-L1-	9(0)	6(0)	2(0)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)

Courtesy of Daniel Catenacci, MD

First Line – Margetuximab Plus Immune Checkpoint Inhibitor

MAHOGANY Phase 2/3 Study: Registration Path in 1L Gastric & GEJ Cancer



MGA012 is an investigational anti-PD-1 monoclonal antibody

MGD013 is an investigational agent targeting both PD-1 and LAG-3

Courtesy of Daniel Catenacci, MD

Phase II Study of Avelumab and Trastuzumab with FOLFOX Chemotherapy in Previously Untreated HER2-Amplified Metastatic Gastroesophageal Adenocarcinoma

Lee MS et al.

AACR 2021;Abstract CT174.

Agenda

Cases from the Practice of Dr Catenacci

Case 1: A 54-year-old man with MSS metastatic GEJ adenocarcinoma – PD-L1 CPS 20, HER2-negative

Case 2: A 56-year-old man with localized adenocarcinoma of the esophagus – MSS, PD-L1 CPS 10

Case 3: A 68-year-old man with relapsed MSS adenocarcinoma of the esophagus – HER2-positive, PD-L1 CPS 0

Case 4: A 35-year-old woman with relapsed metastatic gastric cancer and disease progression on T-DXd

Case 5: A 68-year-old man with newly diagnosed metastatic GEJ cancer with an FGFR2b mutation

Case 6: A 66-year-old woman with metastatic squamous cell carcinoma of the esophagus – PD-L1 CPS 50

Case 7: A 64-year-old man with GEJ cancer and COVID-19 vaccine-associated imaging issues

Case Presentation – A 35-year-old woman with relapsed metastatic gastric cancer and disease progression on T-DXd



Dr Daniel Catenacci

- Presents with early satiety, dysphagia and 30 lb weight loss
 - EGD reveals mass in gastric body, adenocarcinoma HER2 amplified, MSS, CPS 1
 - Staging CE reveals liver and lung metastases
- FOLFOX/trastuzumab with symptom relief and stable disease for 9 months
 - New pleural effusions and worsening dysphagia
- Primary tumor reassessment: persistent HER2 amplification, but ctDNA and lung effusion cytology without HER2 amplification
- T-DXd initiated → lung/effusions at the time of first restaging CT
- Third line FOLFIRI plus ramucirumab

Questions

- Do you take into account the whole disease burden when assessing molecular markers to determine the next best line of therapy?
- Do you use trastuzumab deruxtecan in the third line or second line therapy?

Should a liquid biopsy be used outside the context of a clinical trial to assess HER2 status in a patient with tissue-proven overexpression?

1. Yes
2. No

Ongoing Trials of Trastuzumab Deruxtecan (T-DXd) in HER2-Positive Gastric or GEJ Adenocarcinoma

Trial name (Identifier)	Phase	Target accrual (N)	Setting	Treatment arms
DESTINY-Gastric04 (NCT04704934)	III	490	<ul style="list-style-type: none"> Unresectable and/or metastatic Progression on or after a trastuzumab-based regimen 	<ul style="list-style-type: none"> T-DXd Ramucirumab + paclitaxel
DESTINY-Gastric03 (NCT04379596)	II	220	<ul style="list-style-type: none"> Locally advanced, unresectable or metastatic Progression on or after at least 1 prior trastuzumab-based regimen – Part 1 Previously untreated dx – Part 2 	<p>Part 1</p> <ul style="list-style-type: none"> T-DXd + 5-FU ± oxaliplatin (Ox) T-DXd + Cape ± Ox T-DXd + durvalumab ± 5-FU or Cape <p>Part 2</p> <ul style="list-style-type: none"> Trastuzumab + 5-FU or Cape + Ox or Cisplatin T-DXd monotherapy T-DXd + 5-FU or Cape ± Ox T-DXd + 5-FU or Cape + durvalumab

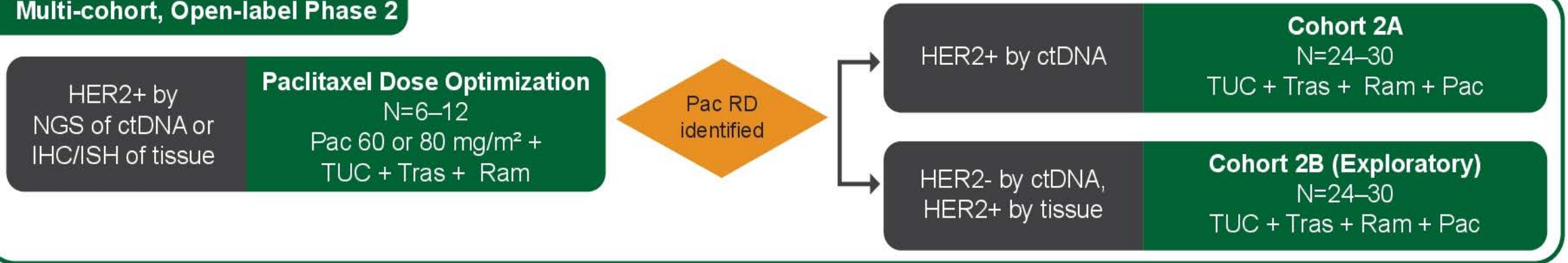
MOUNTAINEER-02: Phase II/III Study of Tucatinib, Trastuzumab, Ramucirumab, and Paclitaxel in Previously Treated HER2+ Gastric or Gastroesophageal Junction Adenocarcinoma — Trial in Progress

Strickler JH et al.

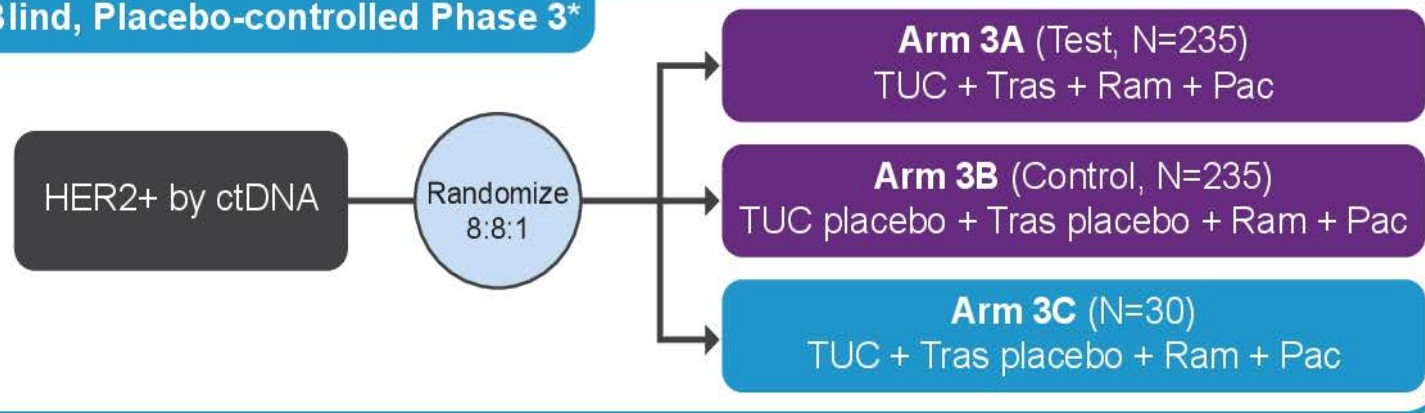
Gastrointestinal Cancers Symposium 2021;Abstract TPS252.

Study Design

Multi-cohort, Open-label Phase 2



Double Blind, Placebo-controlled Phase 3*



Formal statistical comparisons to be made between Arms 3A and 3B

Randomization stratified by Asia vs Rest of World, Time to Progression, Prior Gastrectomy

* The SMC may recommend proceeding to Phase 3 if the regimen is safe and tolerable and an ORR $\geq 36\%$ is observed in all response-evaluable patients treated at the Pac RD who have HER2+ disease by NGS assay of ctDNA.

Agenda

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Case 7: A 64-year-old man with GEJ cancer and COVID-19 vaccine-associated imaging issues

Case Presentation – A 68-year-old man with newly diagnosed metastatic GEJ cancer with an FGFR2b mutation



Dr Daniel Catenacci

- Presents with dysphagia
 - EGD demonstrates mass in distal esophagus/GEJ extending into the gastric cardia
 - Biopsy confirmed adenocarcinoma
- MSS | HER2 neg | PD-L1 CPS 2 | FGFR2 amplified and overexpressing
- FOLFOX/bemarituzumab initiated → excellent response
- Oxaliplatin stopped after 8 cycles due to neuropathy
- Patient continues on 5-FU/bemarituzumab → stable disease ~ 30 months

Questions

- Do you routinely assess for FGFR2 amplification/overexpression, and if so, how?
- Do you routinely stop oxaliplatin after 6-8 doses to limit cumulative neuropathy or do you continue treatment until PD/neuropathy before stopping it?

In general, FGFR2 status should be assessed in all patients with metastatic gastroesophageal cancer.

1. Agree, by IHC
2. Agree, by RTPCR
3. Agree, by either IHC or RTPCR
4. Disagree

A double-blind randomized study of bemarituzumab (bema) plus mFOLFOX6 versus placebo plus mFOLFOX6 as first-line treatment for advanced gastric/gastroesophageal junction cancer (FIGHT)

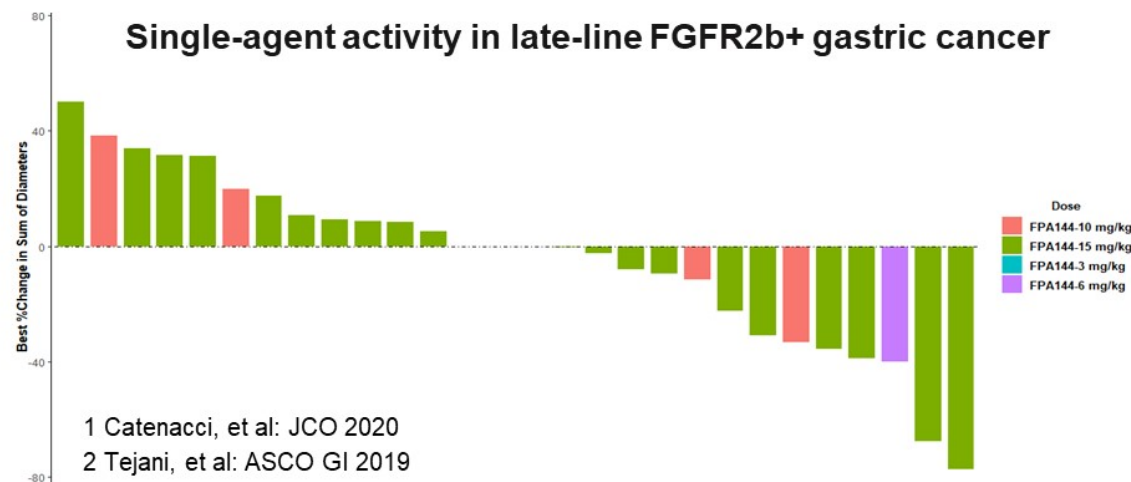
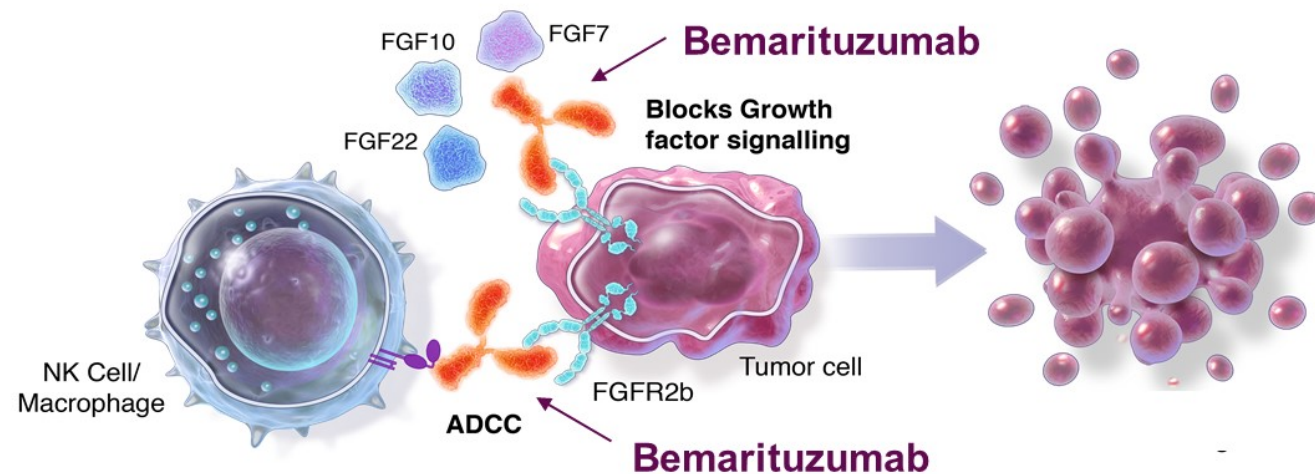
Zev A Wainberg, Peter Enzinger, Yoon-Koo Kang, Kensai Yamaguchi, Shukui Qin, Keun-Wook Lee, Sang Cheul Oh, Jin Li, Haci Mehmet Turk, Alexandra Teixeira, Giovanni Gerardo Cardellino, Rachel Guardeno Sanchez, Siddhartha Mitra, Yingsi Yang, Helen Collins, Daniel V Catenacci

¹University of California, Los Angeles, USA, ²Dana Farber Cancer Institute, Boston, USA, ³Asan Medical Center, Seoul, South Korea, ⁴The Cancer Institute Hospital of JFRC, Koto-Ku, Tokyo, Japan, ⁵1 Hospital Nanjing University of Chinese Medicine, Nanjing, China, ⁶Seoul National University College of Medicine, Seoul National University Bundang Hospital, Seongnam, Gyeonggi-do, S.Korea, ⁷Korea University Guro Hospital, Seoul, South Korea, ⁸Shanghai East Hospital, Shanghai, China, ⁹Bezmialem Vakif Universitesi Tip Fakultesi Hastanesi, Fatih, Turkey, ¹⁰Hospital Senhora Da Oliveira, Guimaraes, Portugal, ¹¹Dipartimento di Oncologia, Azienda Ospedaliero Universitaria, Udine, Italy, ¹²Institut Catala d Oncologia Girona, Spain, ¹³Five Prime Therapeutics, South San Francisco, USA, ¹⁴University of Chicago, Chicago, USA

Late Breaking Abstract (LBA160)

ASCO Gastrointestinal Cancer Symposium 2021

Bemarituzumab is an IgG1 antibody specific for the FGFR2b Receptor



- Confirmed ORR = 18% (n=28)¹
- No dose-limiting toxicities
- Corneal adverse events in 3/28 patients
- Recommended Phase 2 dose: 15mg/kg Q2W with a single 7.5mg/kg dose on Cycle 1 Day 8²

FIGHT Trial Design

Key Eligibility Criteria

- No prior therapy for unresectable locally advanced or metastatic gastric/GEJ adenocarcinoma
- RECIST v1.1 evaluable disease
- FGFR2b overexpression by IHC and/or *FGFR2* gene amplification by ctDNA¹
- ECOG 0/1
- HER2 not positive
- May receive 1 dose of mFOLFOX6

Stratification Factors

- Geographic region
- Single dose of mFOLFOX6 during screening
- Prior adjuvant or neo-adjuvant chemotherapy

R
1:1

Double blind, placebo controlled

Bema + mFOLFOX6
(n = 77)

VS

Placebo + mFOLFOX6
(n = 78)

Treatment Q2W²

Primary endpoint

- Investigator-Assessed Progression-Free Survival

Secondary endpoints

- Overall Survival
- Response Rate

Statistical Plan

Trial initially designed as registrational Phase 3 (n=548) with 2-sided α 0.05
Amended after enrolling n = 155 to a proof-of-concept Phase 2 with pre-specified statistical assumptions of:

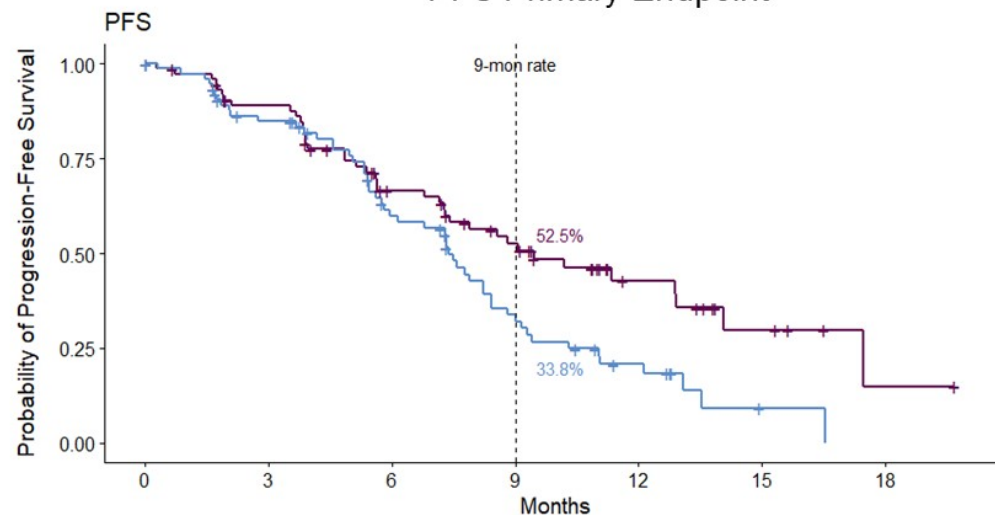
- Hierarchical sequential testing: PFS, then OS/ORR
- ≥ 84 events to demonstrate benefit at a $HR \leq 0.76$ for PFS at 2-sided α of 0.2

1 Central testing: Immunohistochemical stain (Ventana): cut-off any 2+/3+; circulating tumor DNA (PGDx): cut-off 1.5X

2 15mg/kg Q2W with a single 7.5mg/kg dose on Cycle 1 Day 8²

Progression-Free Survival and Overall Survival: Intent to Treat

PFS Primary Endpoint

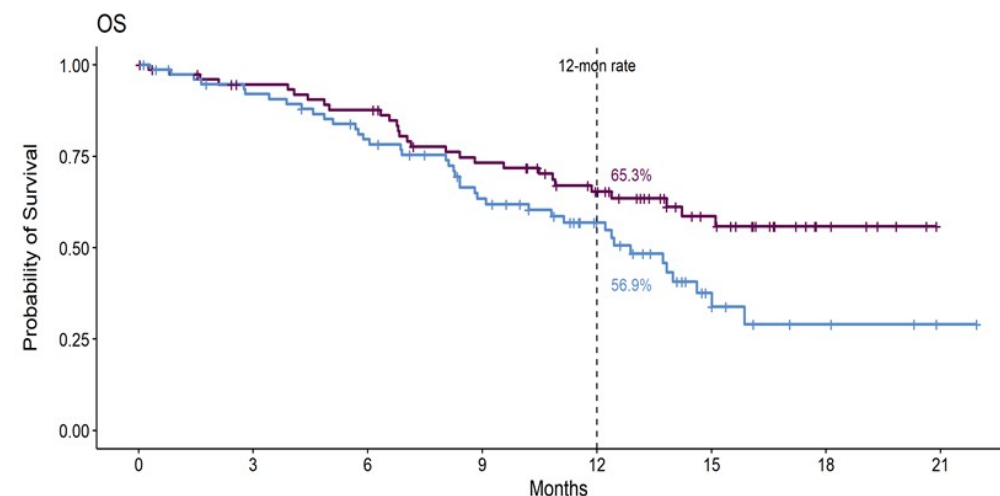


Number at risk

BEMA + mFOLFOX6	77	62	40	28	12	5	1
PLACEBO + mFOLFOX6	78	59	37	19	9	1	0

	Bema N = 77	Placebo N = 78
Median PFS, mo (95% CI)	9.5 (7.3, 12.9)	7.4 (5.8, 8.4)
	P=0.0727	
HR (95% CI)	0.68 (0.44, 1.04)	

OS Key Secondary Endpoint

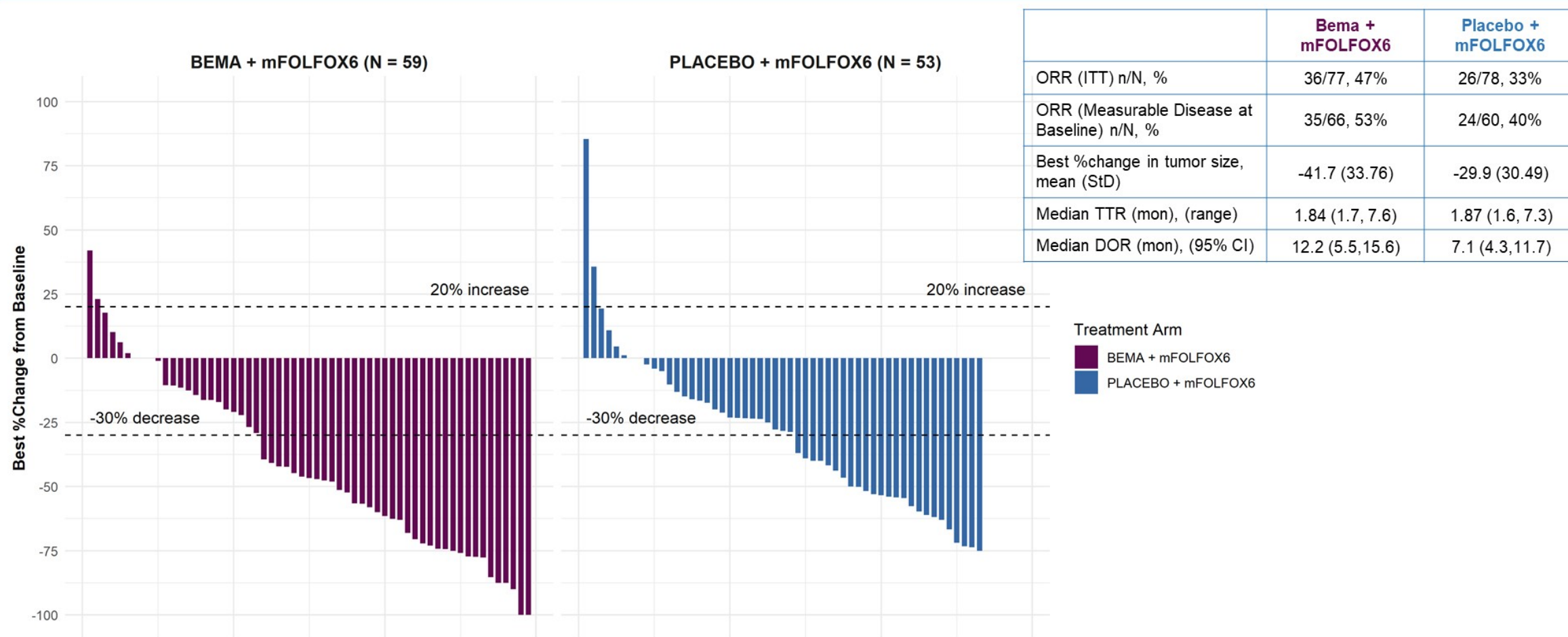


Number at risk

BEMA + mFOLFOX6	77	68	63	50	38	21	6	0
PLACEBO + mFOLFOX6	78	68	57	42	27	10	4	1

	Bema N = 77	Placebo N = 78
Median OS, mo (95% CI)	NR (13.8, NR)	12.9 (9.1, 15.0)
	P=0.0268	
HR (95% CI)	0.58 (0.35, 0.95)	

Best % Change in Target Lesions from Baseline



Only subjects with measurable disease at baseline and at least 1 evaluable scan postbaseline are included in the waterfall plot.

DOR = Duration of response; TTR = Time to response

^: estimated among subjects with measurable disease at baseline

FIGHT: Corneal-Related Adverse Events

Trial required corneal evaluation at baseline and every 8 weeks until the end of treatment¹

	Bema (N = 76)	Placebo (N = 77)
Corneal Adverse Events (SMQ) ² All Grade ³	51 (67.1%)	8 (10.4%)
Corneal Adverse Events (SMQ) Grade 3 ⁴	18 (23.7%)	0
Median time to onset to any grade, weeks (range)	16.1 (0.1, 41.0)	11.6 (6.0, 29.0)
Corneal AE leading to bema/placebo discontinuation ⁵	20 (26.3%)	0
AE resolved	12 (60.0%)	0
AE not resolved as of 23 Sept 2020	8 (40.0%)	0
Median time to resolution, weeks (95%CI)	27.0 (18.9, NR)	NA

¹ If any event reported, examinations were to continue every 8W until resolution, even if drug discontinued

² SMQ = Standardised MedDRA Query

³ Most common: dry eye (26.3%), keratitis (15.8%), punctate keratitis (14.5%), vision blurred (15.0%), corneal epithelium defect (10.5%)

⁴ No ≥ grade 4 event reported

⁵ Most common: dry eye (n=4), keratitis (n=4), corneal disorder (n=2), eye disorder (n=2) limbal stem cell deficiency (n=2), punctate keratitis (n=2)

Agenda

Cases from the Practice of Dr Catenacci

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Case 2: A 56-year-old man with localized adenocarcinoma of the esophagus – MSS, PD-L1 CPS 10

Case 3: A 68-year-old man with relapsed MSS adenocarcinoma of the esophagus – HER2-positive, PD-L1 CPS 0

Case 4: A 35-year-old woman with relapsed metastatic gastric cancer and disease progression on T-DXd

Case 5: A 68-year-old man with newly diagnosed metastatic GEJ cancer with an FGFR2b mutation

Case 6: A 66-year-old woman with metastatic squamous cell carcinoma of the esophagus – PD-L1 CPS 50

Case 7: A 64-year-old man with GEJ cancer and COVID-19 vaccine-associated imaging issues

Case Presentation – A 66-year-old woman with metastatic squamous cell carcinoma of the esophagus – PD-L1 CPS 50



Dr Daniel Catenacci

- Presents with dysphagia, weight loss and chronic cough
 - EGD reveals mass at the proximal/mid esophagus consistent with squamous cell esophageal cancer
 - Staging CT: Liver and bone metastases, signs of chronic aspiration superimposed on emphysematous changes
- FOLFOX + pembrolizumab (400mg q6weeks) initiated → Stable disease
- Persistent dysphagia
 - G-tube placed; palliative carboplatin/paclitaxel/RT initiated

Questions

- Do you consider definitive CRT in patients with Stage IV esophageal SCC?
- Would you resume pembrolizumab after completion of definitive CRT and what is the rationale for your decision?

Regulatory and reimbursement issues aside, in which line of therapy would you generally recommend an anti-PD-1/PD-L1 antibody (with or without chemotherapy) for a 65-year-old patient with metastatic HER2-negative, MSS squamous cell carcinoma of the esophagus with a PD-L1 CPS of 5%?

1. First line
2. Second line
3. Third line
4. Beyond third line
5. I would not recommend an anti-PD-1/PD-L1 antibody

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Case Presentation – A 64-year-old man with GEJ cancer and COVID-19 vaccine-associated imaging issues



Dr Daniel Catenacci

- Presents with localized GEJ cancer, with positive perigastric nodes
- Positive subpectoral and axillary lymph nodes identified – “hot on PET”
- At multidisciplinary tumor board, surgeon questions whether this is Stage IV disease
 - Should therapy be withheld?
- Subsequently learned that the patient received a COVID-19 vaccine on the same side as the subpectoral and axillary nodes

Appendix

Original Investigation

September 3, 2020

Efficacy and Safety of Pembrolizumab or Pembrolizumab Plus Chemotherapy vs Chemotherapy Alone for Patients With First-line, Advanced Gastric Cancer

The KEYNOTE-062 Phase 3 Randomized Clinical Trial

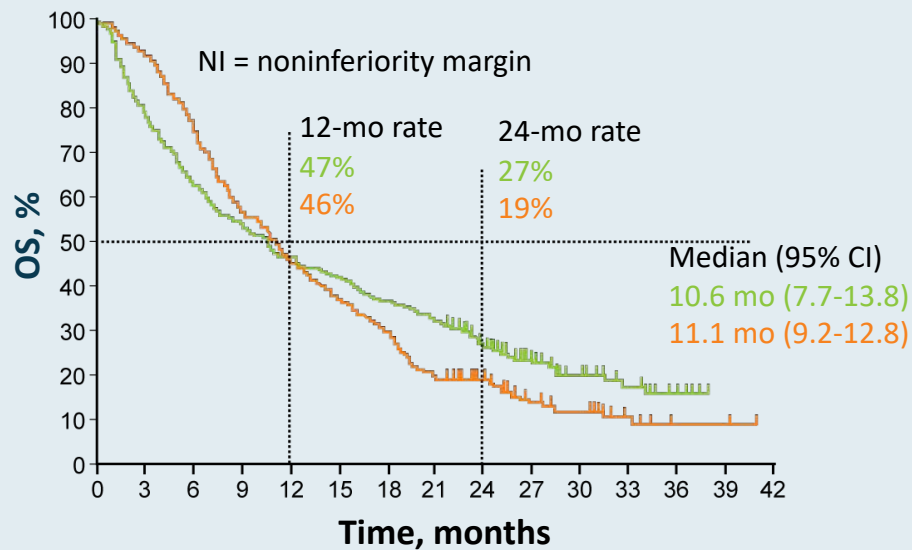
Kohei Shitara, MD¹; Eric Van Cutsem, MD²; Yung-Jue Bang, MD³; [et al](#)

» [Author Affiliations](#)

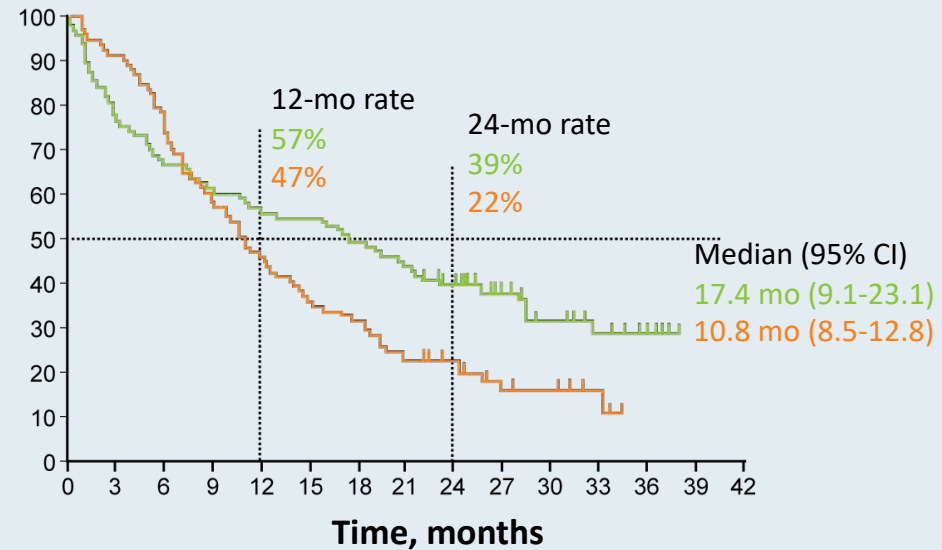
JAMA Oncol. 2020;6(10):1571-1580. doi:10.1001/jamaoncol.2020.3370

KEYNOTE-062: Overall Survival by PD-L1 CPS Score

OS: CPS ≥ 1	Events	HR	NI
Pembro alone	79%	0.91	1.2
Chemo	86%		



OS: CPS ≥ 10	Events	HR
Pembro alone	66%	0.69
Chemo	83%	



- Pembrolizumab was noninferior to chemotherapy for OS in patients with CPS ≥ 1 , and a clinically meaningful improvement in OS was reported with pembro vs chemo for patients with CPS ≥ 10 .
- Pembrolizumab + chemotherapy did not show superior OS for patients with CPS ≥ 1 or CPS ≥ 10 , and the combination did not show superior PFS for patients with CPS ≥ 1 .

Phase 3 KEYNOTE-181 Study (NCT02564263)

Key Eligibility Criteria

- Advanced/metastatic adenocarcinoma or squamous-cell carcinoma of the esophagus or Siewert type 1 adenocarcinoma of the GEJ
- Measurable disease per RECIST v1.1
- Progression on or after first-line therapy
- ECOG PS 0-1

R (1:1)
N = 628

N = 314

Pembrolizumab
200 mg IV Q3W for up to 35 cycles

N = 314

Investigator's choice of 1 of the following:

- Paclitaxel 80-100 mg/m² on days 1, 8, 15 Q4W
- Docetaxel 75 mg/m² Q3W
- Irinotecan 180 mg/m² Q2W

Stratification by

- Histology: squamous-cell carcinoma /adenocarcinoma
- Region: Asia/Rest-of-world

Primary end points

OS in patients

- In the ITT group
- With SCC
- Whose tumor had a PD-L1 CPS ≥ 10

Secondary end points

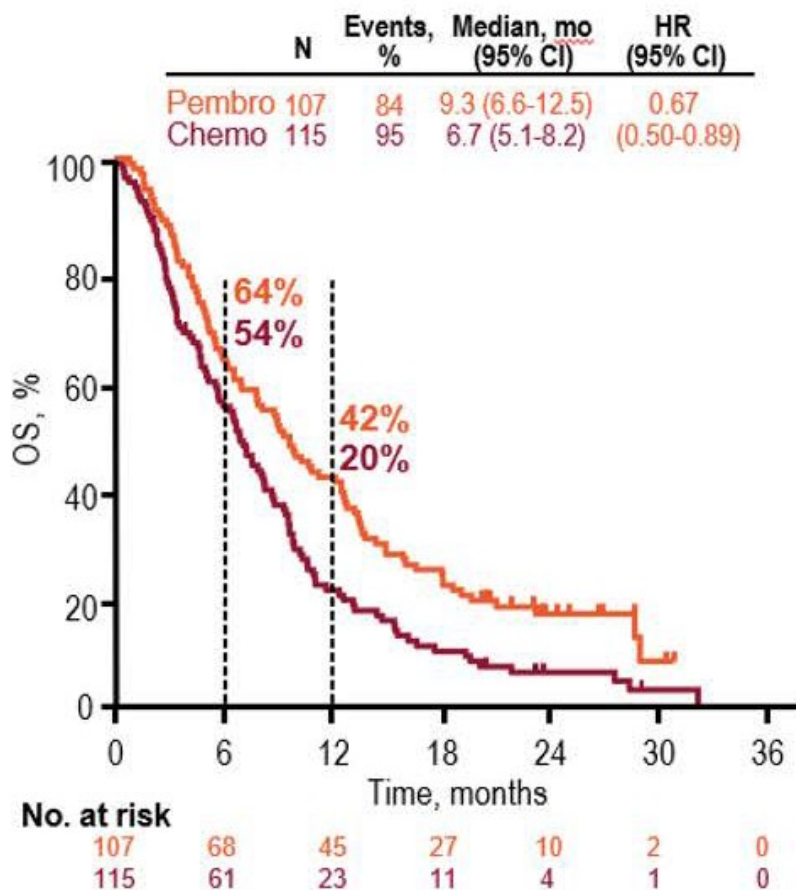
- PFS
- ORR
- Safety

Exploratory end points

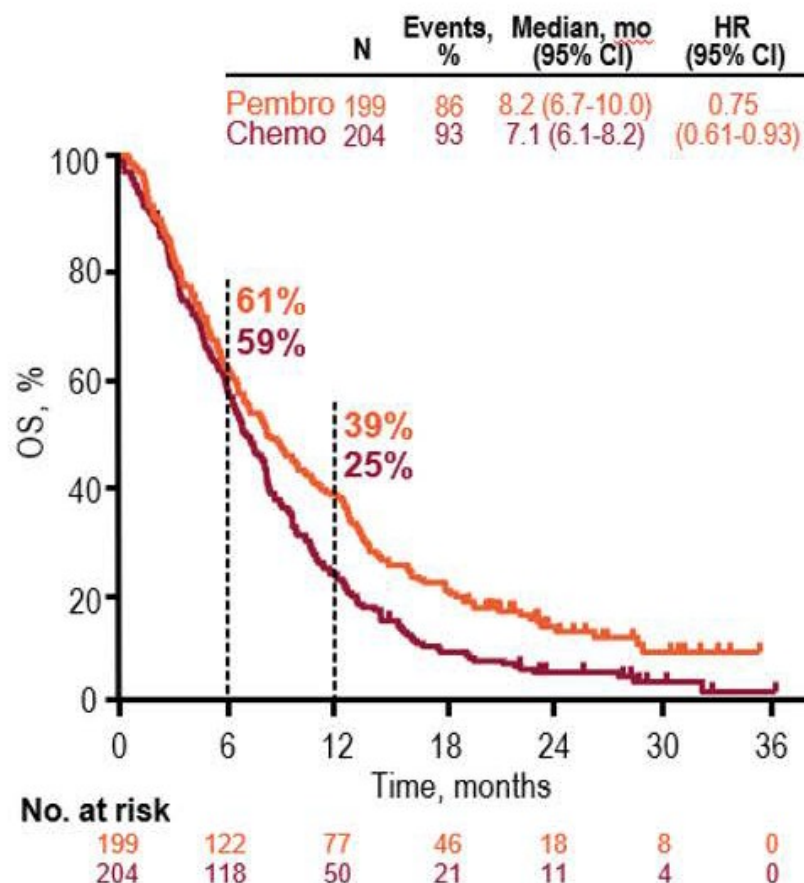
- HRQoL in patients whose tumor had a PD-L1 CPS ≥ 10

KEYNOTE-181: Overall Survival in the Global Population

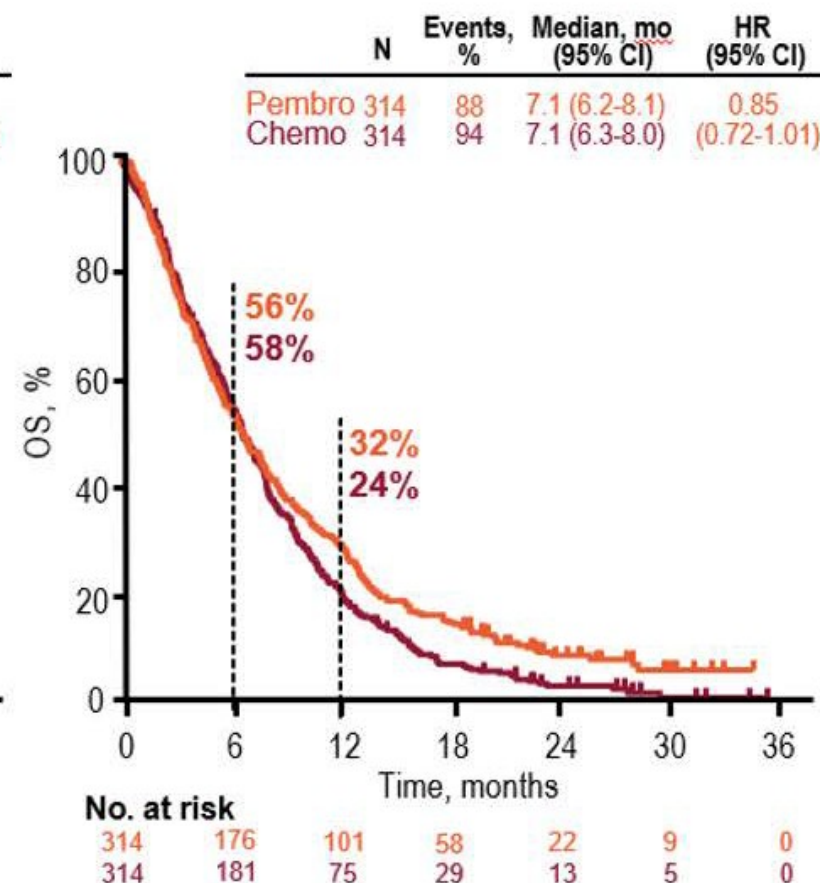
PD-L1 CPS ≥ 10 (n = 222)



SCC (n = 403)

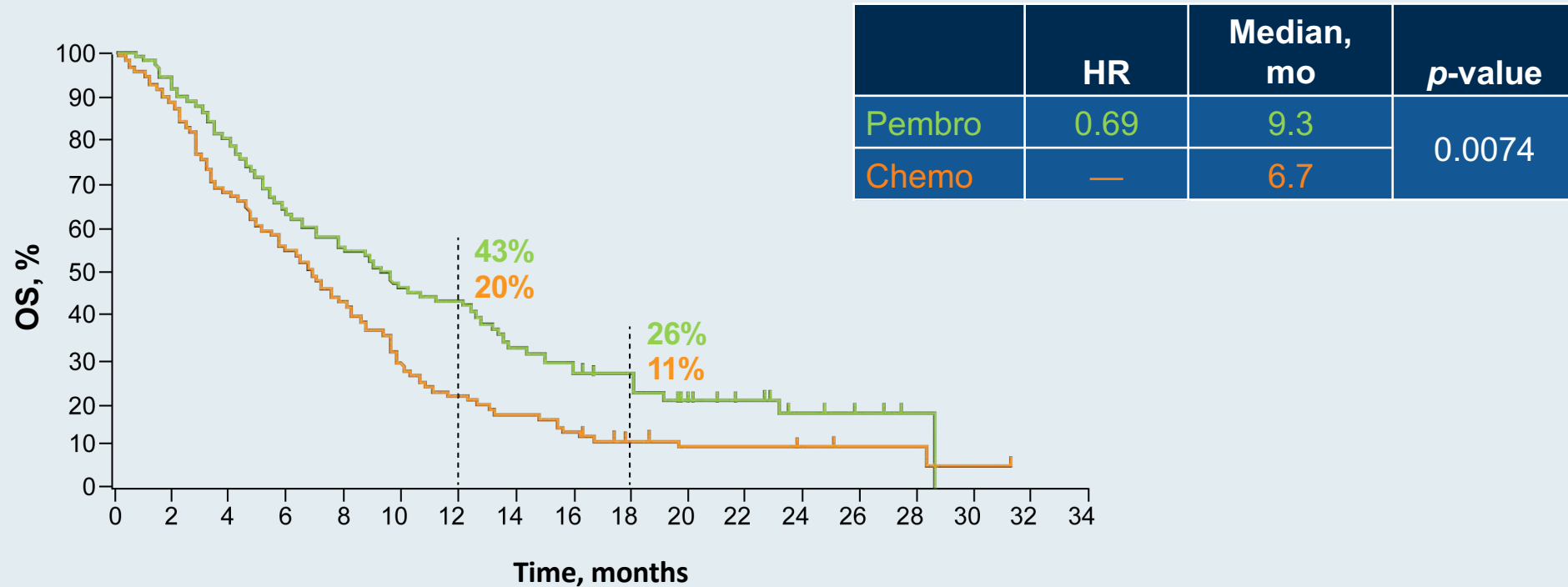


ITT (N = 628)



Data cutoff: February 13, 2019; these data represent an additional 4 months of follow up data from the October 15, 2018 cutoff.

KEYNOTE-181: Overall Survival (PD-L1 CPS ≥ 10) for Patients with Squamous Cell Carcinoma



- ORR higher with pembrolizumab than with chemotherapy for patients with CPS ≥ 10 (21.5% vs 6.1%)
- Lower frequency of Grade 3-5 treatment-related adverse events with pembrolizumab than with chemotherapy (18.2% vs 40.9%); no new safety signals observed

Kojima T et al. Gastrointestinal Cancers Symposium 2019;Abstract 2; Metges J et al. *Proc ESMO World GI Congress* 2019;Abstract O-012.

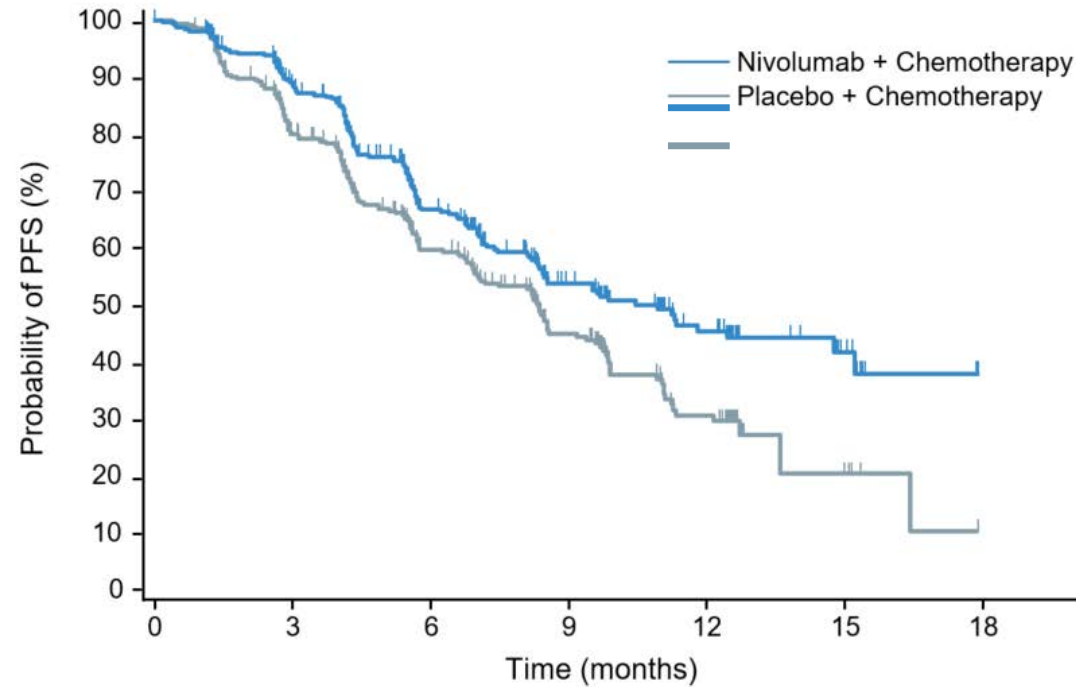
Courtesy of Zev Wainberg, MD, MSc

Nivolumab plus Chemotherapy versus Chemotherapy Alone in Patients with Previously Untreated Advanced or Recurrent Gastric/Gastroesophageal Junction (G/GEJ) Cancer: ATTRACTION-4 (ONO-4538-37) Study

Boku N et al.

ESMO 2020;Abstract LBA7_PR.

ATTRACTION-4: Progression-Free Survival (Interim Analysis)



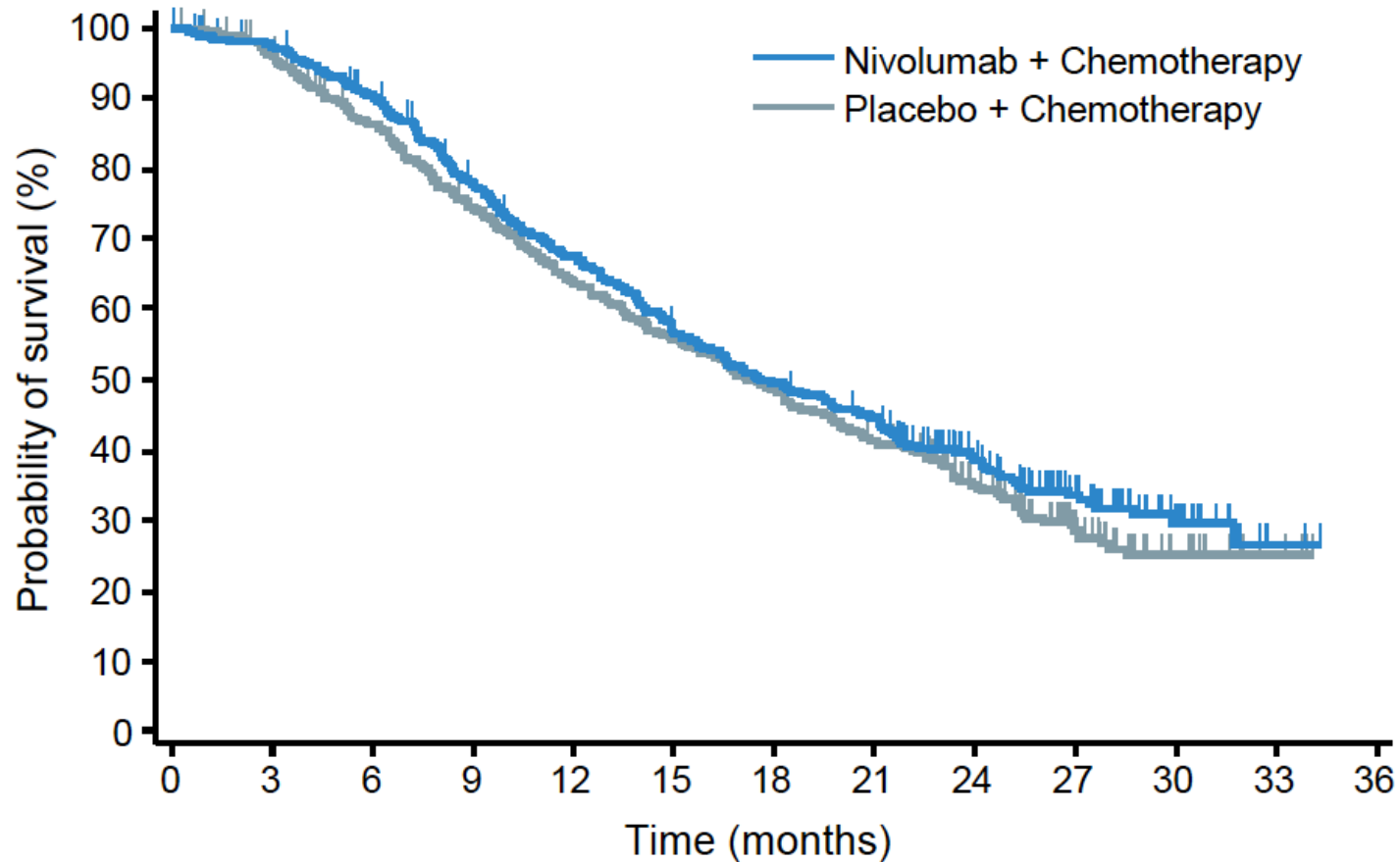
At Risk							
Nivolumab + Chemotherapy	362	274	168	94	46	13	0
Placebo + Chemotherapy	362	259	160	80	30	5	0

	Nivolumab + chemotherapy N = 362	Placebo + chemotherapy N = 362
Median PFS, months (95% CI)	10.45 (8.44-14.75)	8.34 (6.97-9.40)
Hazard ratio (98.51% CI)	0.68 (0.51 – 0.90)	
P value	0.0007	
1yr PFS rate (%)	45.4	30.6

Cut off: 31 Oct 2018 for Interim analysis

- PFS was continuously longer in NIVO + Chemo than in Chemo at the final analysis (NIVO+Chemo vs. Chemo: HR 0.70; mPFS 10.9 vs. 8.4 mo)

ATTRACTION-4: Final Analysis of OS



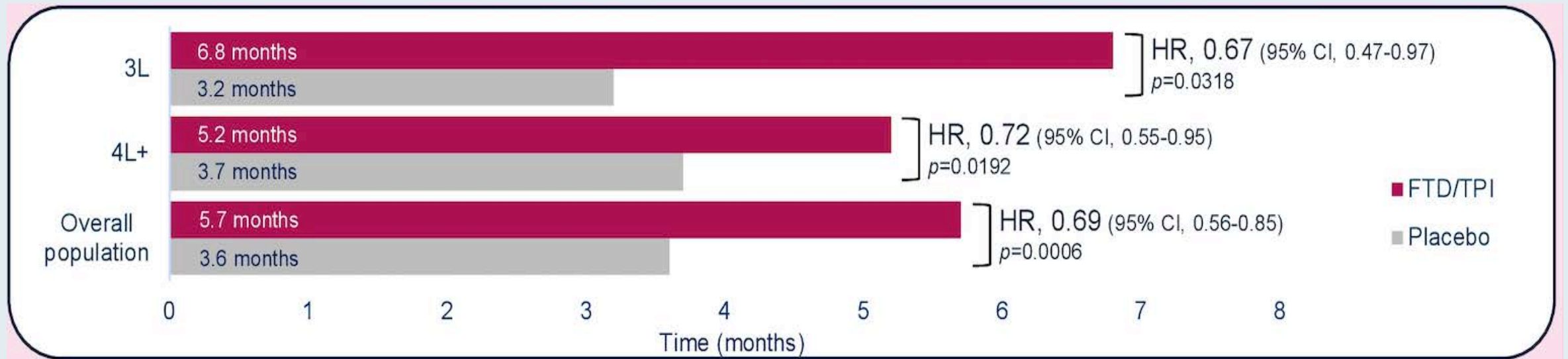
	Nivo + chemo (n = 362)	Placebo + chemo (n = 362)	HR (<i>p</i> -value)
Median OS	17.45 mo	17.15 mo	0.90 (0.257)

Trifluridine/Tipiracil Outcomes in Third or Later Lines versus Placebo in Metastatic Gastric Cancer Treatment: An Exploratory Subgroup Analysis from the TAGS Study

Tabernero J et al.

Gastrointestinal Cancers Symposium 2021;Abstract 229.

TAGS Exploratory Subgroup Analysis: Median OS in the ITT Population

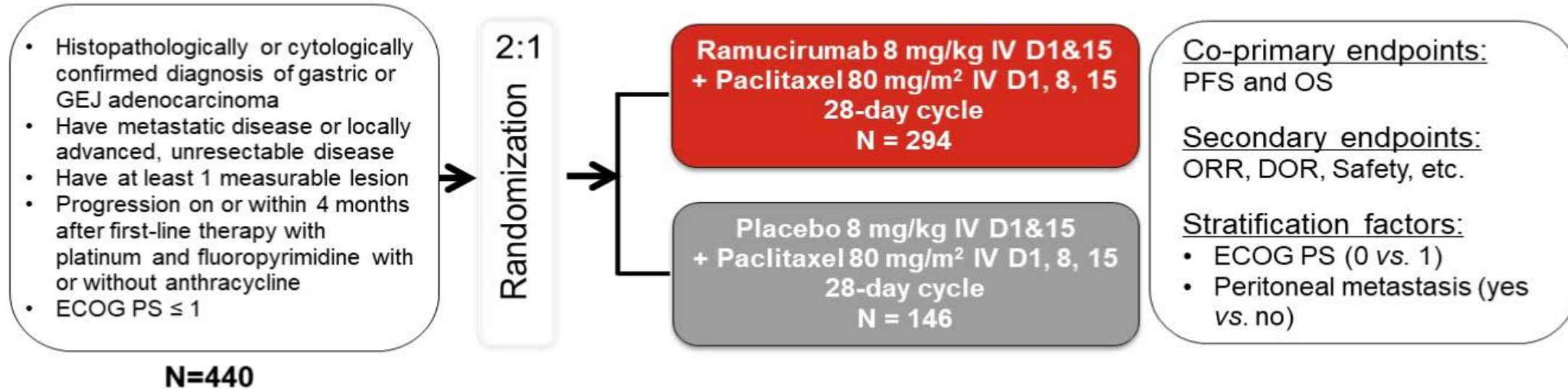


Rainbow-Asia: A Randomized, Multicenter, Double-Blind, Phase III Study of Ramucirumab plus Paclitaxel versus Placebo plus Paclitaxel in the Treatment of Advanced Gastric or Gastroesophageal Junction (GEJ) Adenocarcinoma Following Disease Progression on First-Line Chemotherapy with Platinum and Fluoropyrimidine

Xu R et al.

Gastrointestinal Cancers Symposium 2021;Abstract 199.

STUDY DESIGN

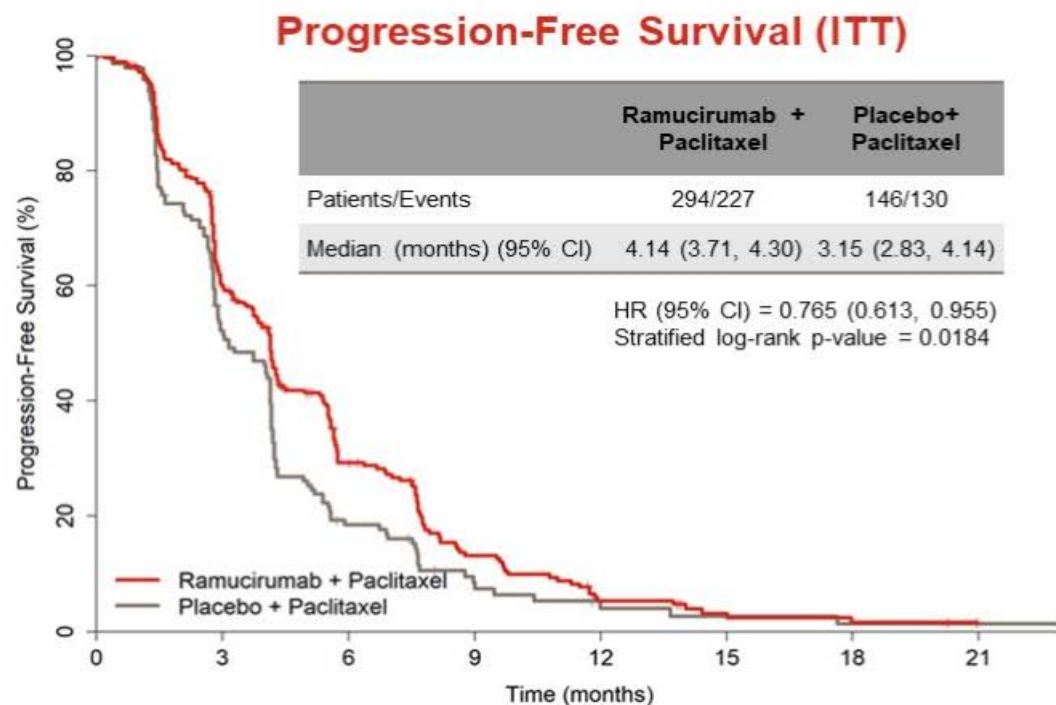


Statistical consideration: 336 deaths will provide at least 80% probability to assure that the treatment effect observed in this study is consistent with the global study.

Abbreviations: DOR = duration of response; ECOG PS = Eastern Cooperative Oncology Group performance status; GEJ = gastroesophageal junction; IV = intravenous; N = number of patients; PFS = progression-free survival; ORR = objective response rate; OS = overall survival; TTP = time to progression.

KEY RESULT

Efficacy Co-Primary Endpoints

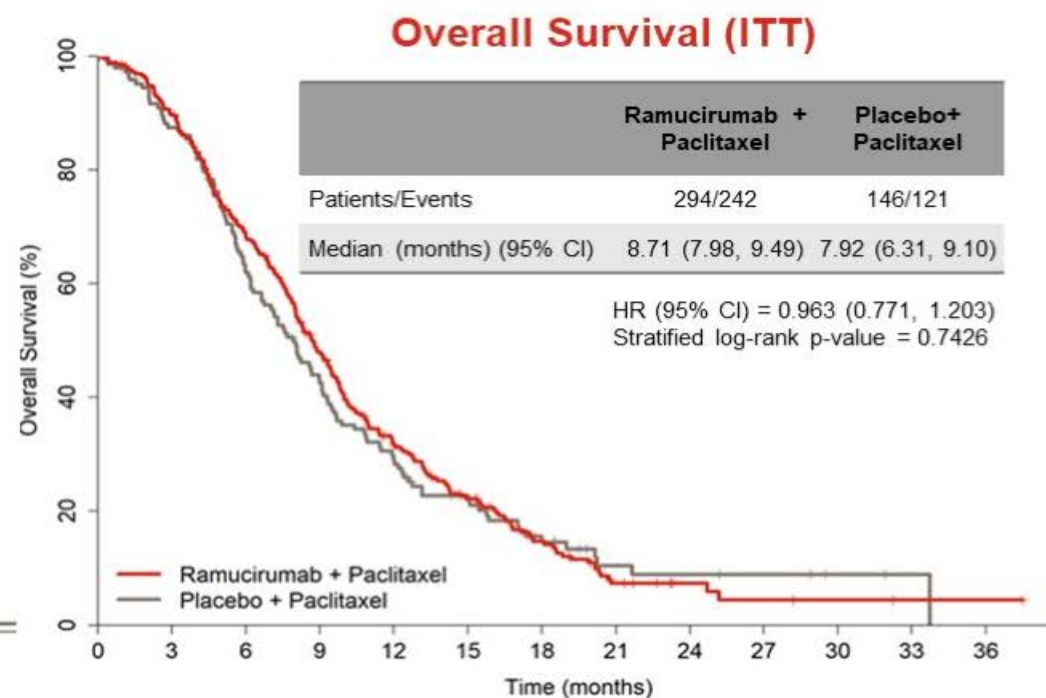


Patients at risk:
Ramucirumab + Paclitaxel

294 153 59 24 9 4 2 0

Placebo + Paclitaxel

146 70 23 8 3 2 1 1



Patients at risk:
Ramucirumab + Paclitaxel

294 259 196 128 77 48 28 11 5 3 2 1 1

Placebo + Paclitaxel

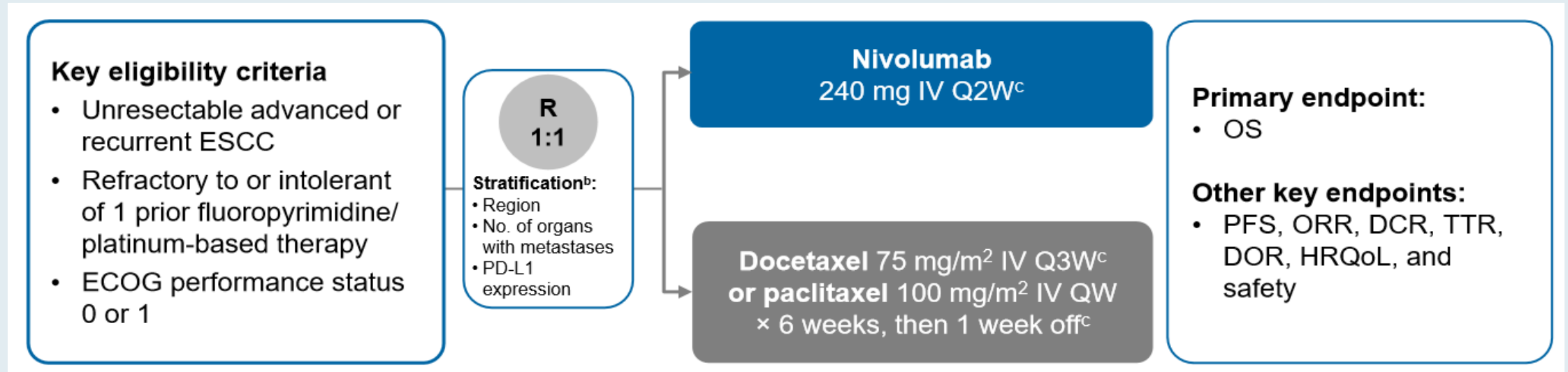
146 125 87 59 38 26 15 7 6 5 2 1 0

Three-Year Follow-Up of ATTRACTION-3: A Phase III Study of Nivolumab (Nivo) in Patients with Advanced Esophageal Squamous Cell Carcinoma (ESCC) That Is Refractory or Intolerant to Previous Chemotherapy

Chin K et al.

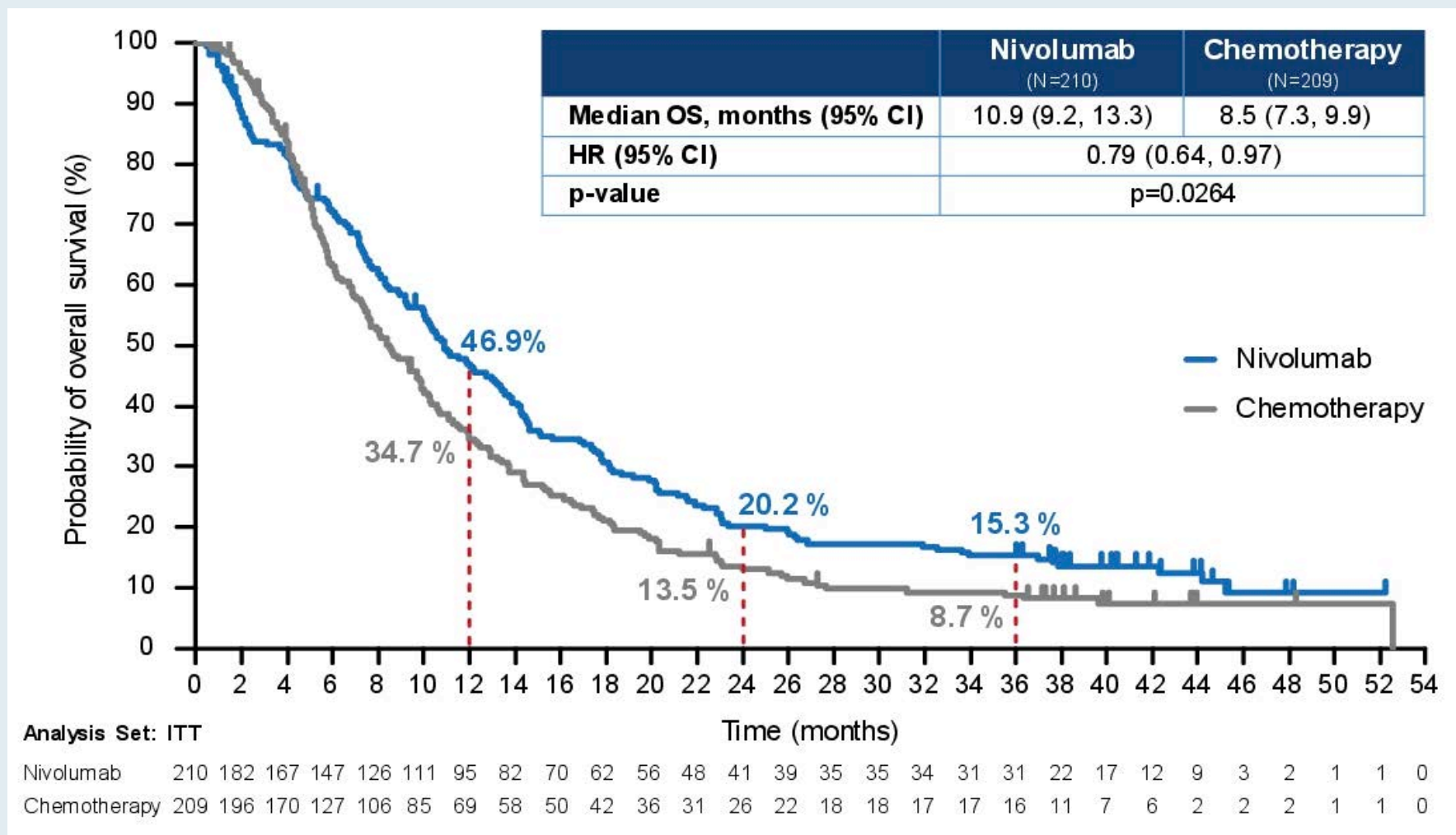
Gastrointestinal Cancers Symposium 2021;Abstract 204.

ATTRACTION-3: Nivolumab for Esophageal Squamous Cell Carcinoma (ESCC)



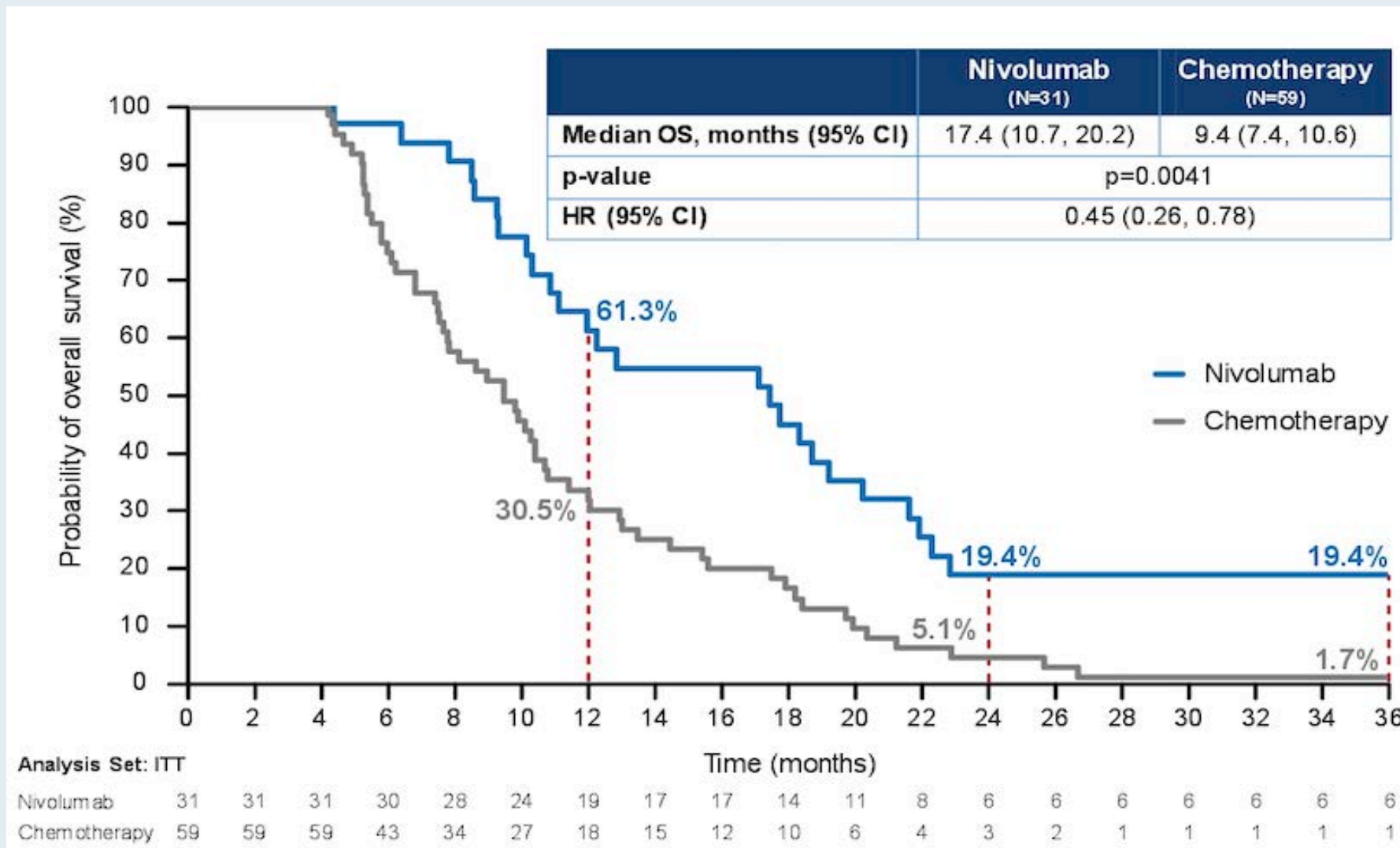
	Nivolumab	Chemotherapy	P value
Overall Response Rate	19%	22%	0.63
Disease Control Rate	37%	63%	
Median Time to Response	2.6 months	1.5 months	
Duration of Response	6.9 months	3.9 months	
Treatment-Related Adverse Events	66%	95%	
Dose delays due to Adverse Events	39%	50%	

ATTRACTION-3: Overall Survival (3-Year Follow-Up)

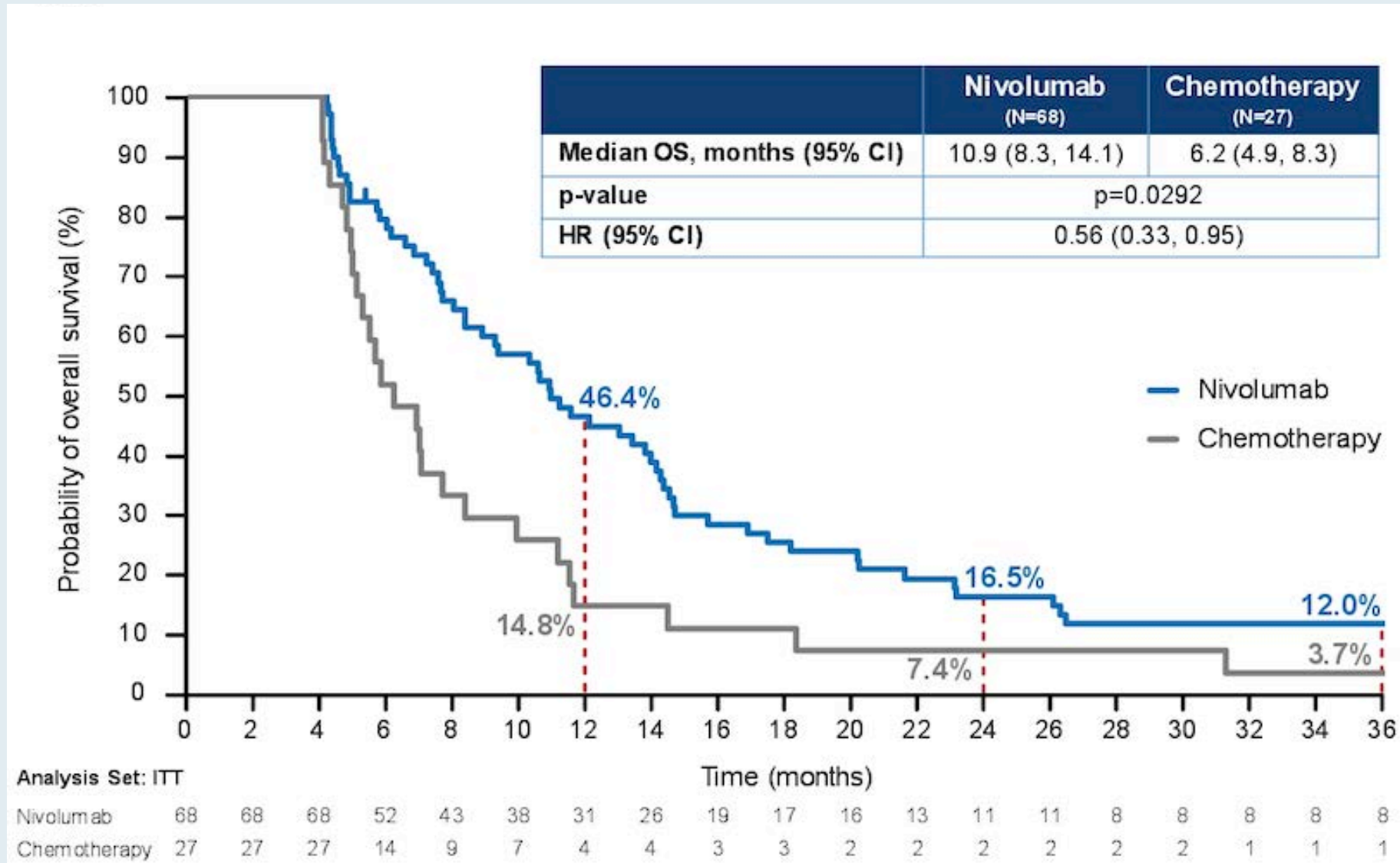


- No new safety signal was identified with 3 years follow-up and no major late-onset TRAEs were observed

ATTRACTION-3: OS Landmark Analysis at 4 Months by Best Overall Response – Stable Disease



ATTRACTION-3: OS Landmark Analysis at 4 Months by Best Overall Response – Progressive Disease



Nivolumab in advanced esophageal squamous cell carcinoma (ATTRACTION-1/ONO-4538-07): Minimum of 5-year follow-up

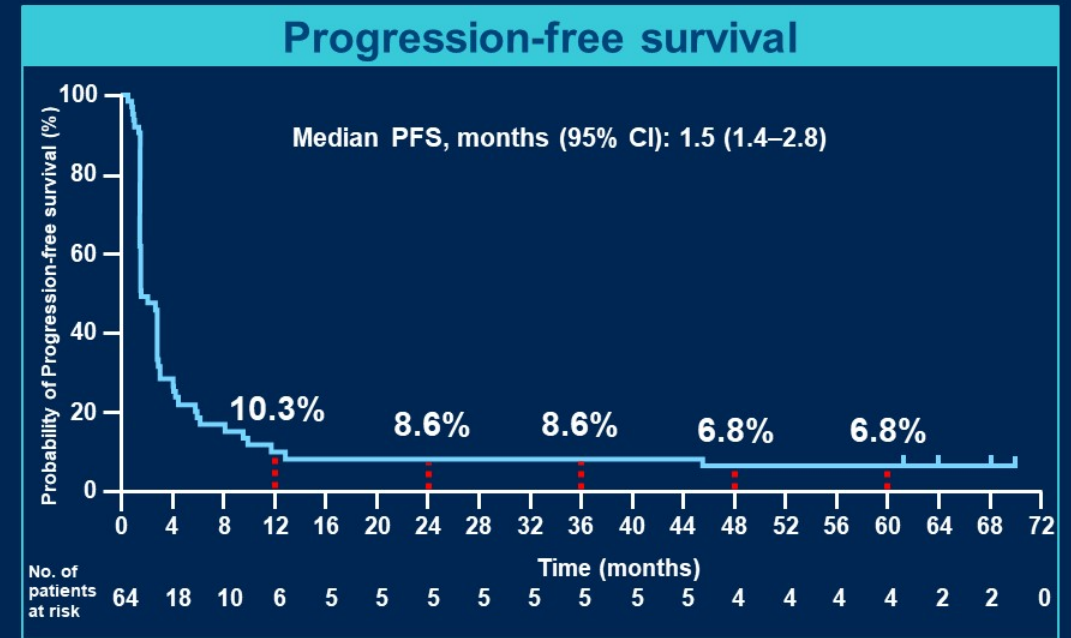
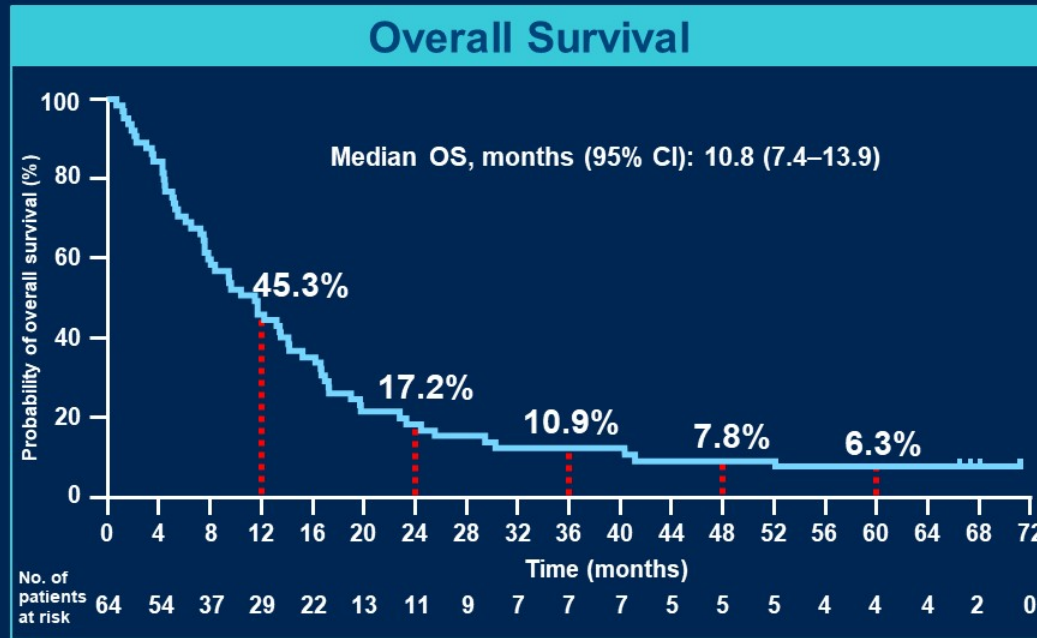
Ken Kato¹, Yuichiro Doki², Takashi Ura³, Yasuo Hamamoto⁴, Takashi Kojima⁵, Takahiro Tsushima⁶, Shuichi Hironaka⁷, Hiroki Hara⁸, Taroh Satoh⁹, Satoru Iwasa¹, Kei Muro¹⁰, Hirofumi Yasui⁶, Keiko Minashi¹¹, Kensei Yamaguchi¹², Atsushi Ohtsu¹³, Yuko Kitagawa¹⁴

¹Department of Gastrointestinal Medical Oncology, National Cancer Center Hospital, Tokyo, Japan; ²Department of Gastroenterological Surgery, Osaka University Graduate School of Medicine, Osaka, Japan; ³Department of Clinical Oncology, Aichi Cancer Center Hospital, Nagoya, Japan (current affiliation: Department of Clinical Oncology, National Hospital Organization Kyoto Medical Center, Kyoto, Japan); ⁴Keio Cancer Center, Keio University School of Medicine, Tokyo, Japan; ⁵Department of Gastroenterology and Gastrointestinal Oncology, National Cancer Center Hospital East, Kashiwa, Japan; ⁶Division of Gastrointestinal Oncology, Shizuoka Cancer Center, Shizuoka, Japan; ⁷Clinical Trial Promotion Department, Chiba Cancer Center, Chiba, Japan (current affiliation: Department of Medical Oncology and Hematology, Oita University Faculty of Medicine, Oita, Japan); ⁸Department of Gastroenterology, Saitama Cancer Center, Saitama, Japan; ⁹Department of Frontier Science for Cancer and Chemotherapy, Osaka University Graduate School of Medicine, Osaka, Japan; ¹⁰ Department of Clinical Oncology, Aichi Cancer Center Hospital, Nagoya, Japan; ¹¹ Clinical Trial Promotion Department, Chiba Cancer Center, Chiba, Japan; ¹² Department of Gastroenterology, Saitama Cancer Center, Saitama, Japan (current affiliation: Department of Gastroenterological Chemotherapy, The Cancer Institute Hospital of Japanese Foundation for Cancer Research, Tokyo, Japan); ¹³ National Cancer Center Hospital East, Kashiwa, Japan; ¹⁴ Department of Surgery, Keio University School of Medicine, Tokyo, Japan



ATTRACTION-1: Efficacy

- At a minimum follow-up of five years, the median duration of OS and PFS were 10.8 and 1.5 months, respectively.



N = 64, one patient had multiple primary cancers and was excluded from the analysis of primary and secondary endpoints
OS, overall survival; PFS, progression-free survival

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Conclusions

- Nivolumab demonstrated durable efficacy in patients with advanced ESCC based on a minimum of 5-year update of ATTRACTION-1 study.
- No new safety signals with nivolumab were identified.
- Long-term survivors tended to show the deeper response (e.g., complete response) of nivolumab in this study.

For additional information, see poster # 207

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Meet The Professor

Management of Chronic Lymphocytic Leukemia

**Thursday, April 15, 2021
5:00 PM – 6:00 PM ET**

Faculty

John N Allan, MD

Moderator

Neil Love, MD

Thank you for joining us!

CME credit information will be emailed to each participant within 3 business days.