What General Medical Oncologists Want to Know About Immunotherapy and Other Nontargeted Approaches for Lung Cancer

Wednesday, July 28, 2021
5:00 PM – 6:00 PM ET

Faculty

Mark Awad, MD, PhD
David R Spigel, MD
Heather Wakelee, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Faculty

Mark Awad, MD, PhD
Clinical Director
Lowe Center for Thoracic Oncology
Dana-Farber Cancer Institute
Assistant Professor of Medicine
Harvard Medical School
Boston, Massachusetts

Heather Wakelee, MD
Professor of Medicine
Chief, Division of Oncology
Stanford University School of Medicine
Deputy Director, Stanford Cancer Institute
Stanford, California

David R Spigel, MD
Chief Scientific Officer
Program Director, Lung Cancer Research
Sarah Cannon Research Institute
Nashville, Tennessee

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP
RESEARCH
TO PRACTICE

Commercial Support

This activity is supported by educational grants from AstraZeneca Pharmaceuticals LP, Genentech, a member of the Roche Group, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc and Turning Point 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 companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, 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, Coherus BioSciences, 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, TG Therapeutics Inc, Turning Point Therapeutics Inc and Verastem Inc.

RTP
RESEARCH
TO PRACTICE

Research To Practice CME Planning Committee Members, Staff and Reviewers

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.

Dr Awad — Disclosures

Consulting Agreements	ArcherDX, AstraZeneca Pharmaceuticals LP, Blueprint Medicines, Bristol-Myers Squibb Company, EMD Serono Inc, Genentech, a member of the Roche Group, Maverick Therapeutics, Merck, Mirati Therapeutics, Nektar, NextCure, Novartis, Syndax Pharmaceuticals Inc, Takeda Oncology
Contracted Research	AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Genentech, a member of the Roche Group, Lilly
Data and Safety Monitoring Board/Committee	Apollomics Inc, Bristol-Myers Squibb Company

Dr Spigel — Disclosures

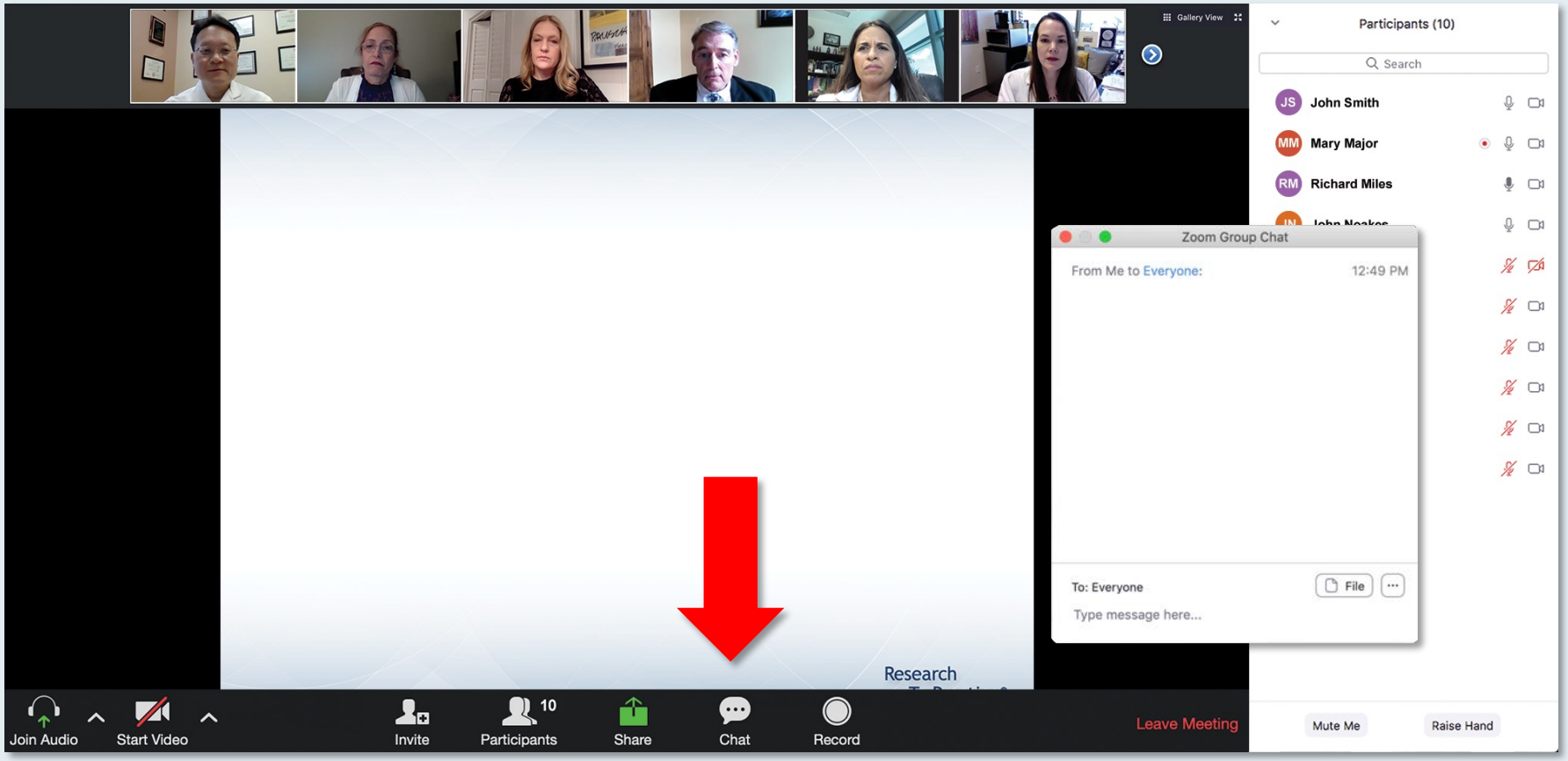
Consulting Agreements (to Institution)	Amgen Inc, Aptitude Health, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Celgene Corporation, Curio Biotech SA, Dracen Pharmaceuticals, EMD Serono Inc, Evelo Biosciences Inc, Exelixis Inc, Genentech, a member of the Roche Group, GlaxoSmithKline, Iksuda Therapeutics, Illumina, Intellisphere LLC, Ipsen Biopharmaceuticals Inc, Jazz Pharmaceuticals Inc, Merck, Mirati Therapeutics, Molecular Templates, Nektar, Novartis, Novocure, Pfizer Inc, PharmaMar, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seagen Inc, Takeda Oncology, Triptych Health Partners, TRM Oncology
Contracted Research (to Institution)	Aeglea BioTherapeutics, Agios Pharmaceuticals Inc, Apollomics Inc, Astellas, AstraZeneca Pharmaceuticals LP, BIND Therapeutics Inc, Bristol-Myers Squibb Company, Calithera Biosciences, Celgene Corporation, Celldex Therapeutics, Clovis Oncology, Cyteir Therapeutics, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology, EMD Serono Inc, G1 Therapeutics, Genentech, a member of the Roche Group, GlaxoSmithKline, Grail Inc, ImClone Systems, a wholly owned subsidiary of Eli Lilly and Company, ImmunoGen Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, Lilly, Merck, Molecular Partners, Nektar, Neon Therapeutics, Novartis, Novocure Inc, Takeda Oncology, Tesaro, A GSK Company, Transgene, University of Texas

RTP RESEARCH TO PRACTICE

Dr Wakelee — Disclosures

Advisory Board (Compensated)	AstraZeneca Pharmaceuticals LP, Blueprint Medicines, Daiichi Sankyo Inc, Helsinn Healthcare SA, Janssen Biotech Inc, Mirati Therapeutics, Xcovery
Advisory Board (Not Compensated)	Cellworks, Genentech, a member of the Roche Group, Merck, Takeda Oncology
Contracted Research Funding to Institution	ACEA Biosciences Inc, Arrys Therapeutics, a wholly owned subsidiary of Kyn Therapeutics, AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Exelixis Inc, Genentech, a member of the Roche Group, Gilead Sciences Inc, Merck, Novartis, Pharmacyclics LLC, an AbbVie Company, Seagen Inc, Xcovery

We Encourage Clinicians in Practice to Submit Questions

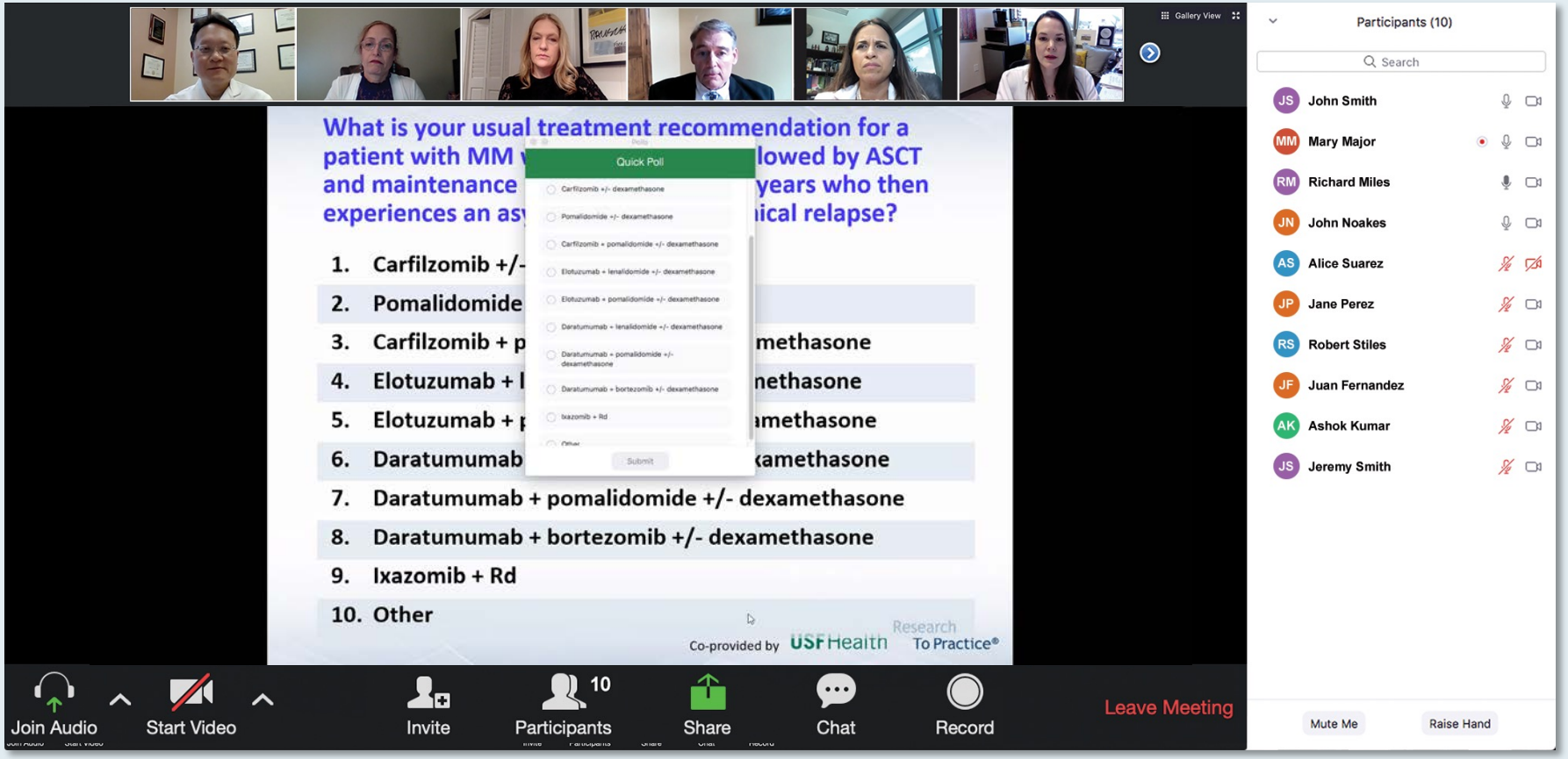


Feel free to submit questions now before the program begins and throughout the program.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

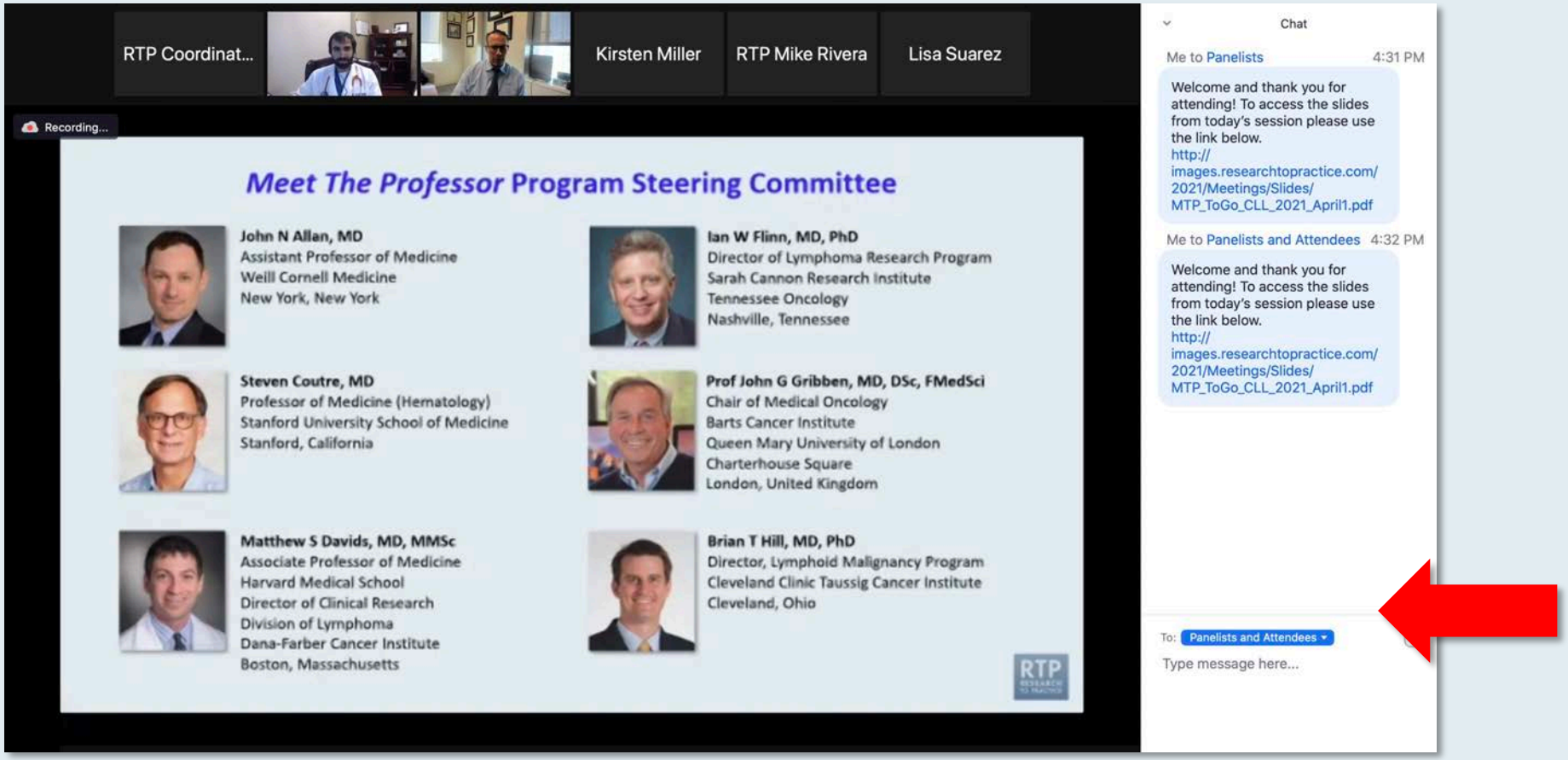
How to answer poll questions



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

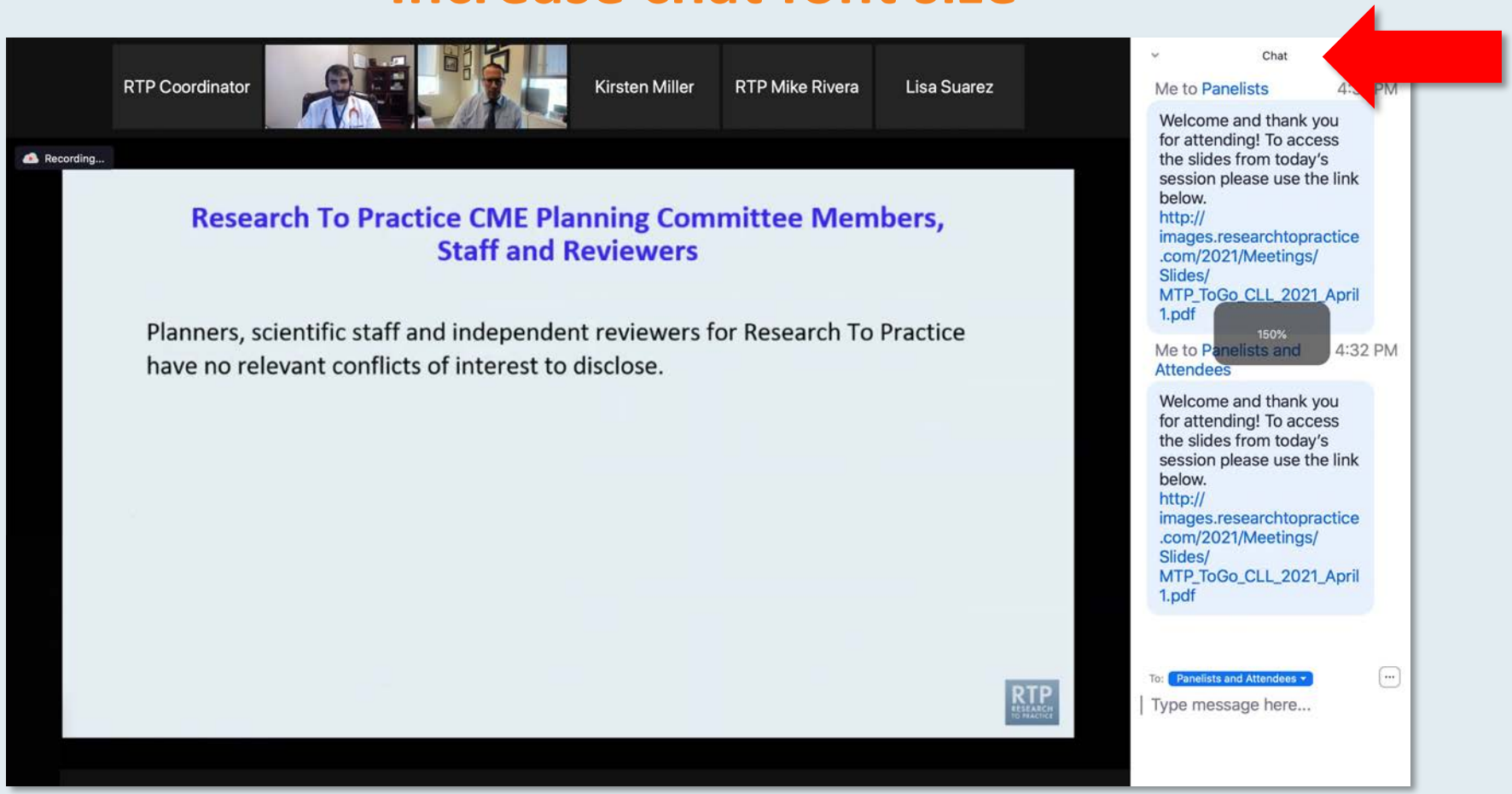


Drag the white line above the submission box up to create more space for your message.

RTP RESEARCH TO PRACTICE

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

Role of Immune Checkpoint Inhibitors in the Management of Metastatic NSCLC without Actionable Mutations

DR COREY LANGER

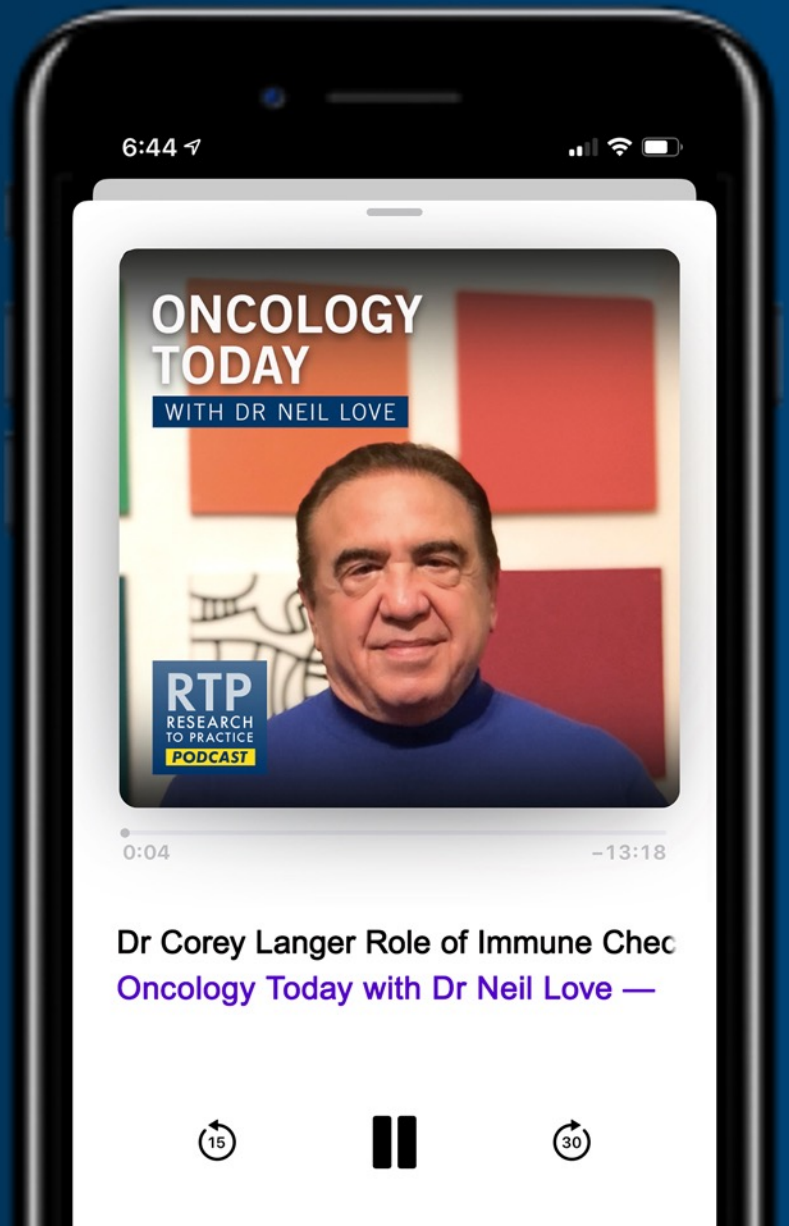
ABRAMSON CANCER CENTER

UNIVERSITY OF PENNSYLVANIA

Listen on Apple Podcasts

Spotify

Listen on Google Podcasts



5 Exciting CME/MOC Events You Do Not Want to Miss

A Live Webinar Series Held in Conjunction with the 2021 ASCO Annual Meeting

Immunotherapy and Other Nontargeted Approaches for Lung Cancer
Wednesday, July 28
5:00 PM – 6:00 PM ET

Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma
Monday, August 2
5:00 PM – 6:00 PM ET

Colorectal and Gastroesophageal Cancers
Tuesday, August 3
5:00 PM – 6:30 PM ET

Hepatocellular Carcinoma and Pancreatic Cancer
Wednesday, August 4
5:00 PM – 6:30 PM ET

Head and Neck Cancer
Wednesday, August 11
5:00 PM – 6:00 PM ET

RTP
RESEARCH TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Colorectal and Gastroesophageal Cancers

Tuesday, August 3, 2021
5:00 PM – 6:30 PM ET

Faculty

Chloe E Atreya, MD, PhD
Dustin Deming, MD
Eric Van Cutsem, MD, PhD
Zev Wainberg, MD, MSc

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Hepatocellular Carcinoma and Pancreatic Cancer

Wednesday, August 4, 2021
5:00 PM – 6:30 PM ET

Faculty

Tanios Bekaii-Saab, MD
Kim A Reiss Binder, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Three Exciting Educational Events Held in Conjunction with the 2021 Pan Pacific Lymphoma Conference

In Partnership with the University of Nebraska Medical Center

Expert Second Opinion — Acute Myeloid Leukemia and Myelodysplastic Syndromes

Monday, August 9, 2021
7:00 PM – 8:30 PM ET

Faculty
Krishna Gundabolu, MD
Richard M Stone, MD
Eunice S Wang, MD

Moderator
Harry Paul Erba, MD, PhD

Beyond the Guidelines — Chronic Lymphocytic Leukemia

Tuesday, August 10, 2021
7:00 PM – 9:00 PM ET

Faculty
Alexey V Danilov, MD, PhD
Susan O'Brien, MD
Sonali M Smith, MD
Julie M Vose, MD, MBA

Moderator
Matthew S Davids, MD, MMSc

Cases from the Community — Multiple Myeloma

Thursday, August 12, 2021
7:00 PM – 8:30 PM ET

Faculty
Muhamed Baljevic, MD
Joseph Mikhael, MD
Nina Shah, MD

Moderator
Robert Z Orlowski, MD, PhD

RTP RESEARCH TO PRACTICE

Meet The Professor

Optimizing the Selection and Sequencing of Therapy for Patients with HER2-Positive Breast Cancer

Tuesday, August 10, 2021
12:00 PM – 1:00 PM ET

Faculty

Karen A Gelmon, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

A Conversation with the Investigators: Perspectives on the Management of Head and Neck Cancer

Wednesday, August 11, 2021
5:00 PM – 6:00 PM ET

Faculty

Barbara Burtness, MD
Ezra Cohen, MD
Robert L Ferris, MD, PhD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 2-3 business days.

RTP
RESEARCH
TO PRACTICE

What General Medical Oncologists Want to Know About Immunotherapy and Other Nontargeted Approaches for Lung Cancer

Wednesday, July 28, 2021
5:00 PM – 6:00 PM ET

Faculty

Mark Awad, MD, PhD
David R Spigel, MD
Heather Wakelee, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Faculty

Mark Awad, MD, PhD
Clinical Director
Lowe Center for Thoracic Oncology
Dana-Farber Cancer Institute
Assistant Professor of Medicine
Harvard Medical School
Boston, Massachusetts

Heather Wakelee, MD
Professor of Medicine
Chief, Division of Oncology
Stanford University School of Medicine
Deputy Director, Stanford Cancer Institute
Stanford, California

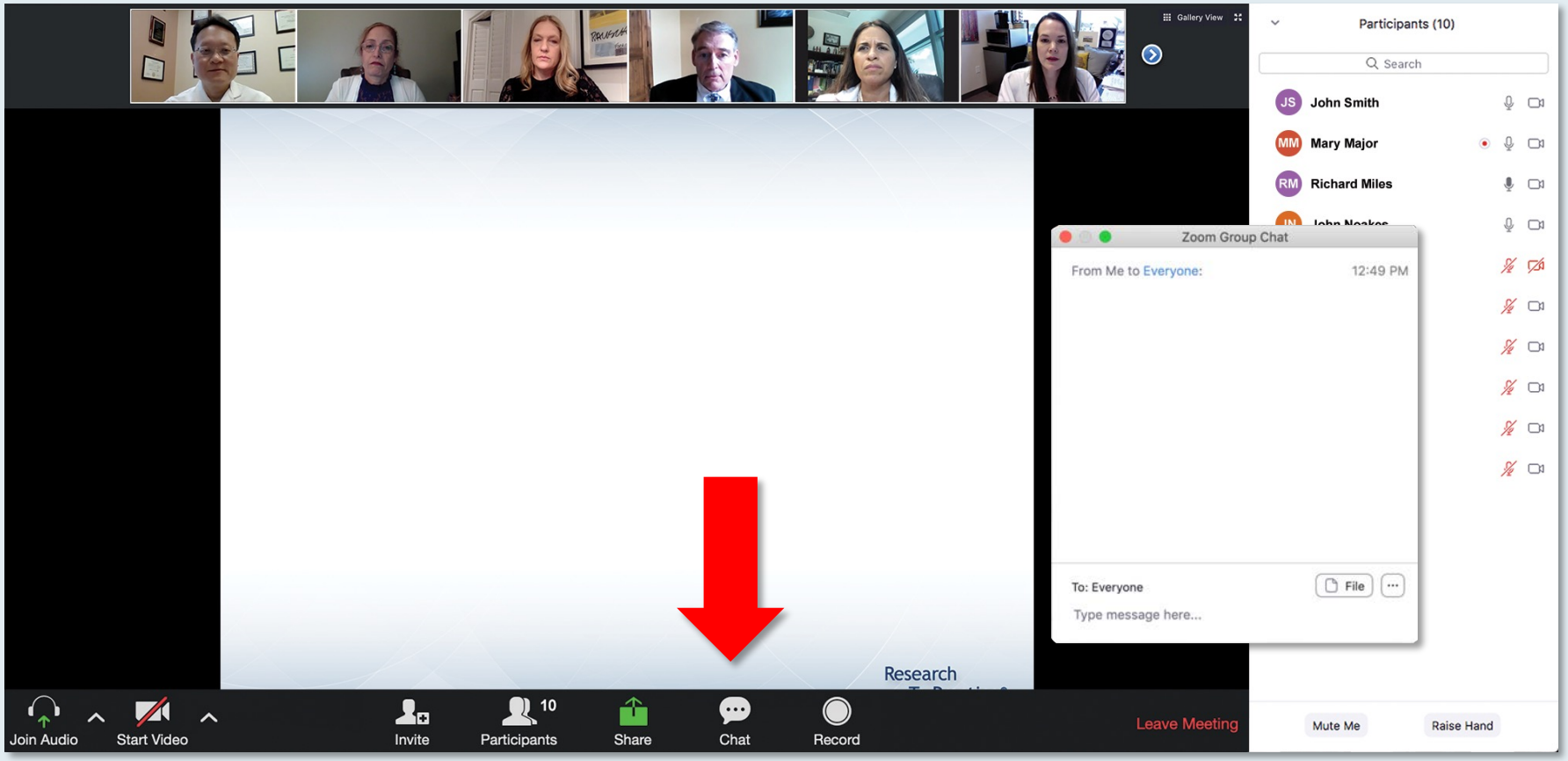
David R Spigel, MD
Chief Scientific Officer
Program Director, Lung Cancer Research
Sarah Cannon Research Institute
Nashville, Tennessee

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP
RESEARCH
TO PRACTICE

We Encourage Clinicians in Practice to Submit Questions

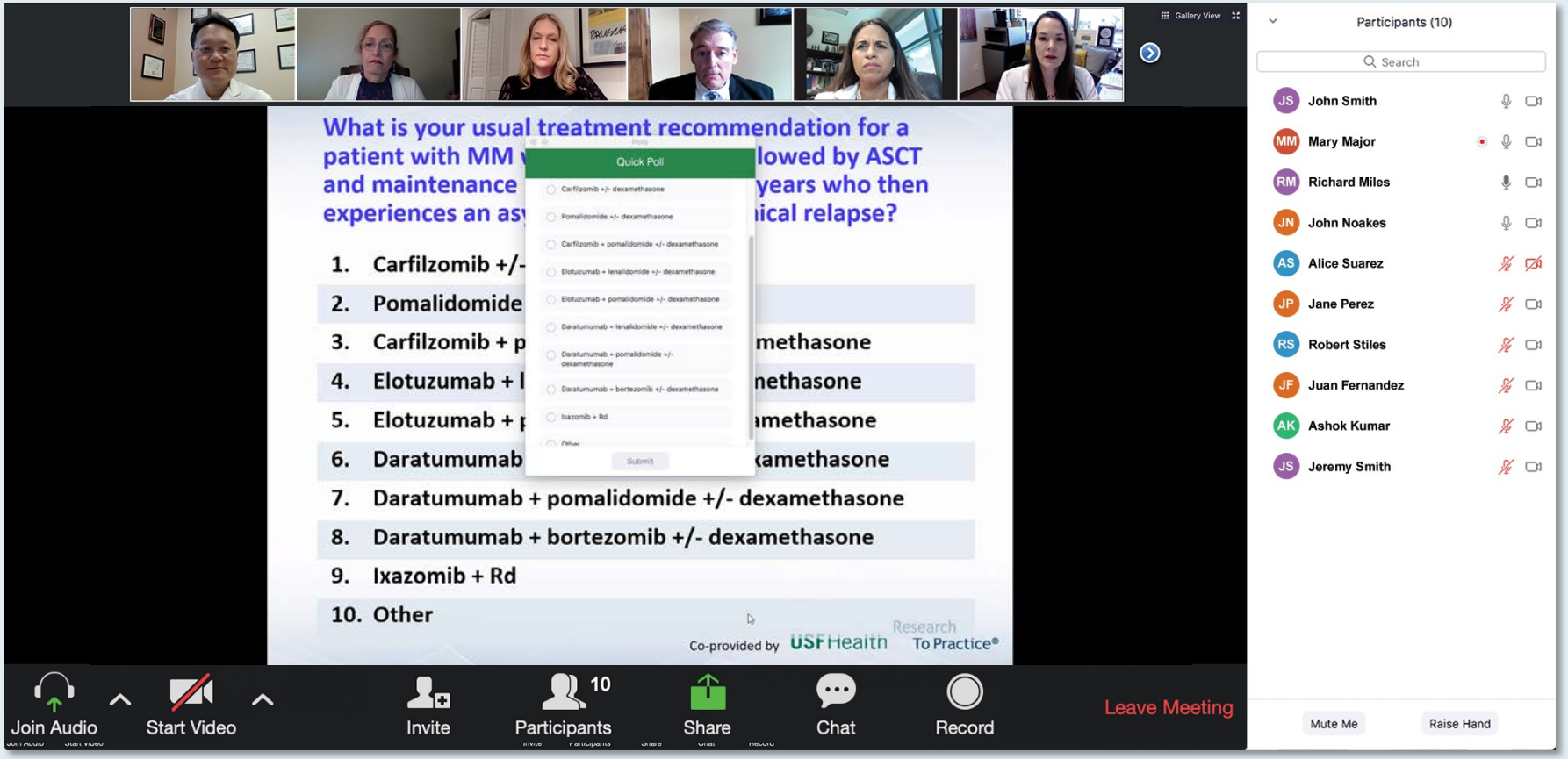


Feel free to submit questions now before the program begins and throughout the program.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

How to answer poll questions



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

ONCOLOGY TODAY

WITH DR NEIL LOVE

Role of Immune Checkpoint Inhibitors in the Management of Metastatic NSCLC without Actionable Mutations

DR COREY LANGER

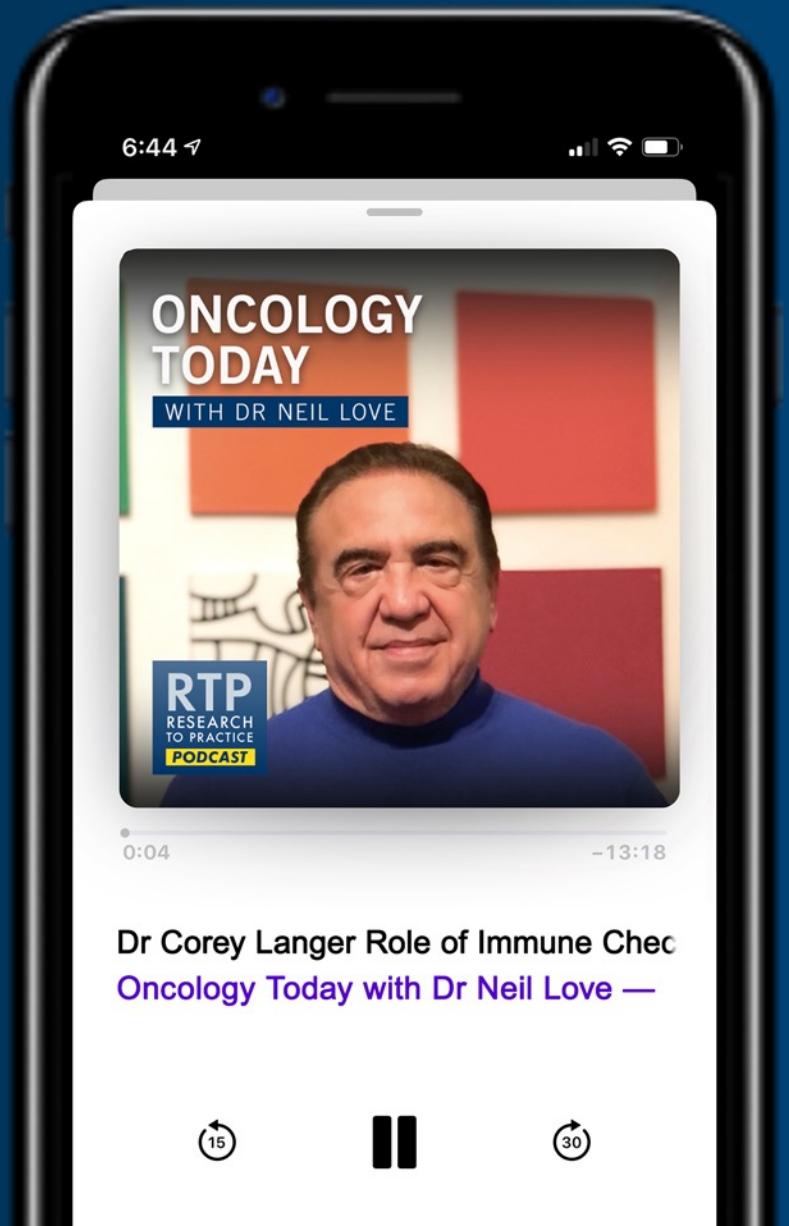
ABRAMSON CANCER CENTER

UNIVERSITY OF PENNSYLVANIA

Listen on Apple Podcasts

Spotify

Listen on Google Podcasts



5 Exciting CME/MOC Events You Do Not Want to Miss

A Live Webinar Series Held in Conjunction with the 2021 ASCO Annual Meeting

Immunotherapy and Other Nontargeted Approaches for Lung Cancer
Wednesday, July 28
5:00 PM – 6:00 PM ET

Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma
Monday, August 2
5:00 PM – 6:00 PM ET

Colorectal and Gastroesophageal Cancers
Tuesday, August 3
5:00 PM – 6:30 PM ET

Hepatocellular Carcinoma and Pancreatic Cancer
Wednesday, August 4
5:00 PM – 6:30 PM ET

Head and Neck Cancer
Wednesday, August 11
5:00 PM – 6:00 PM ET

RTP
RESEARCH TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Colorectal and Gastroesophageal Cancers

Tuesday, August 3, 2021
5:00 PM – 6:30 PM ET

Faculty

Chloe E Atreya, MD, PhD
Dustin Deming, MD
Eric Van Cutsem, MD, PhD
Zev Wainberg, MD, MSc

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Hepatocellular Carcinoma and Pancreatic Cancer

Wednesday, August 4, 2021
5:00 PM – 6:30 PM ET

Faculty

Tanios Bekaii-Saab, MD
Kim A Reiss Binder, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Three Exciting Educational Events Held in Conjunction with the 2021 Pan Pacific Lymphoma Conference

In Partnership with the University of Nebraska Medical Center

Expert Second Opinion — Acute Myeloid Leukemia and Myelodysplastic Syndromes

Monday, August 9, 2021
7:00 PM – 8:30 PM ET

Faculty
Krishna Gundabolu, MD
Richard M Stone, MD
Eunice S Wang, MD

Moderator
Harry Paul Erba, MD, PhD

Beyond the Guidelines — Chronic Lymphocytic Leukemia

Tuesday, August 10, 2021
7:00 PM – 9:00 PM ET

Faculty
Alexey V Danilov, MD, PhD
Susan O'Brien, MD
Sonali M Smith, MD
Julie M Vose, MD, MBA

Moderator
Matthew S Davids, MD, MMSc

Cases from the Community — Multiple Myeloma

Thursday, August 12, 2021
7:00 PM – 8:30 PM ET

Faculty
Muhamed Baljevic, MD
Joseph Mikhael, MD
Nina Shah, MD

Moderator
Robert Z Orlowski, MD, PhD

RTP RESEARCH TO PRACTICE

Meet The Professor

Optimizing the Selection and Sequencing of Therapy for Patients with HER2-Positive Breast Cancer

Tuesday, August 10, 2021
12:00 PM – 1:00 PM ET

Faculty

Karen A Gelmon, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

A Conversation with the Investigators: Perspectives on the Management of Head and Neck Cancer

Wednesday, August 11, 2021
5:00 PM – 6:00 PM ET

Faculty

Barbara Burtness, MD
Ezra Cohen, MD
Robert L Ferris, MD, PhD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

What General Medical Oncologists Want to Know About Immunotherapy and Other Nontargeted Approaches for Lung Cancer

Wednesday, July 28, 2021
5:00 PM – 6:00 PM ET

Faculty

Mark Awad, MD, PhD
David R Spigel, MD
Heather Wakelee, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

ASCO 2021 Nontargeted Approaches for Lung Cancer Presentation Library

Current Treatment Paradigms for Small Cell Lung Cancer

Mark Awad, MD, PhD

Download Slides

Current and Potential Future Role of Immune Checkpoint Inhibition in the Management of Nonmetastatic Non-Small Cell Lung Cancer (NSCLC)

Heather Wakelee, MD

Download Slides

First-Line Management of Metastatic NSCLC without a Targetable Tumor Mutation

David R Spigel, MD

Download Slides

RTP RESEARCH TO PRACTICE

Contributing Oncologists

Margaret Deutsch, MD
Duke Raleigh Cancer
Center Raleigh
Raleigh, North Carolina

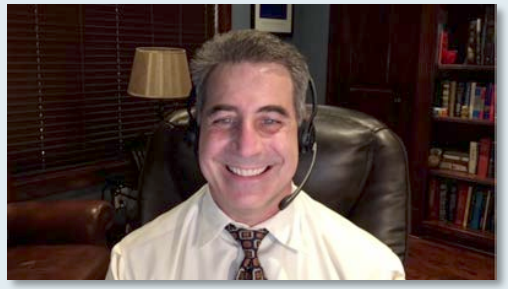
Maria Regina Flores, MD
Advent Health Orlando
Orlando Regional Hospital
HCA Oviedo Medical Center
UCF Lake Nona
Orlando, Florida

Rohit Gosain, MD
Medical Hematology/Oncology
UPMC Hillman Cancer Center at
UPMC Chautauqua
Jamestown, New York

Ranju Gupta, MD
Attending Physician
Co-Director, Cardio-Oncology Program
LVPG Hematology Oncology Associates
Lehigh Valley Health Network
Bethlehem, Pennsylvania

Sulfi Ibrahim, MD
Hematology/Oncology
Reid Health
Richmond, Indiana

Raymond Lobins, DO
Hematology/Oncology
Lake County University
Hospitals
Mentor, Ohio



Joseph Martins, MD
Associate Professor of Medicine
UT Health Science Center
Tyler, Texas

RTP
RESEARCH
TO PRACTICE

Agenda

Introduction: Immunotherapy in the (Neo) Adjuvant Setting

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Key relevant data sets

Module 1: First-Line Treatment of Metastatic NSCLC without a Targetable Tumor Mutation

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%
- Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%
- Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations
- Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C
- Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%
- Key relevant data sets

Module 2: Role of Immune Checkpoint Inhibition in the Management of Locally Advanced NSCLC

- Key relevant data sets

Module 3: Current Treatment Paradigm for Small Cell Lung Cancer (SCLC)

- Dr Gosain: A 59-year-old man with extensive-stage SCLC
- Dr Gupta: A 65-year-old woman with limited-stage SCLC
- Key relevant data sets

Agenda

Introduction: Immunotherapy in the (Neo) Adjuvant Setting

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Key relevant data sets

Module 1: First-Line Treatment of Metastatic NSCLC without a Targetable Tumor Mutation

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%
- Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%
- Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations
- Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C
- Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%
- Key relevant data sets

Module 2: Role of Immune Checkpoint Inhibition in the Management of Locally Advanced NSCLC

- Key relevant data sets

Module 3: Current Treatment Paradigm for Small Cell Lung Cancer (SCLC)

- Dr Gosain: A 59-year-old man with extensive-stage SCLC
- Dr Gupta: A 65-year-old woman with limited-stage SCLC
- Key relevant data sets

Case Presentation – Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0

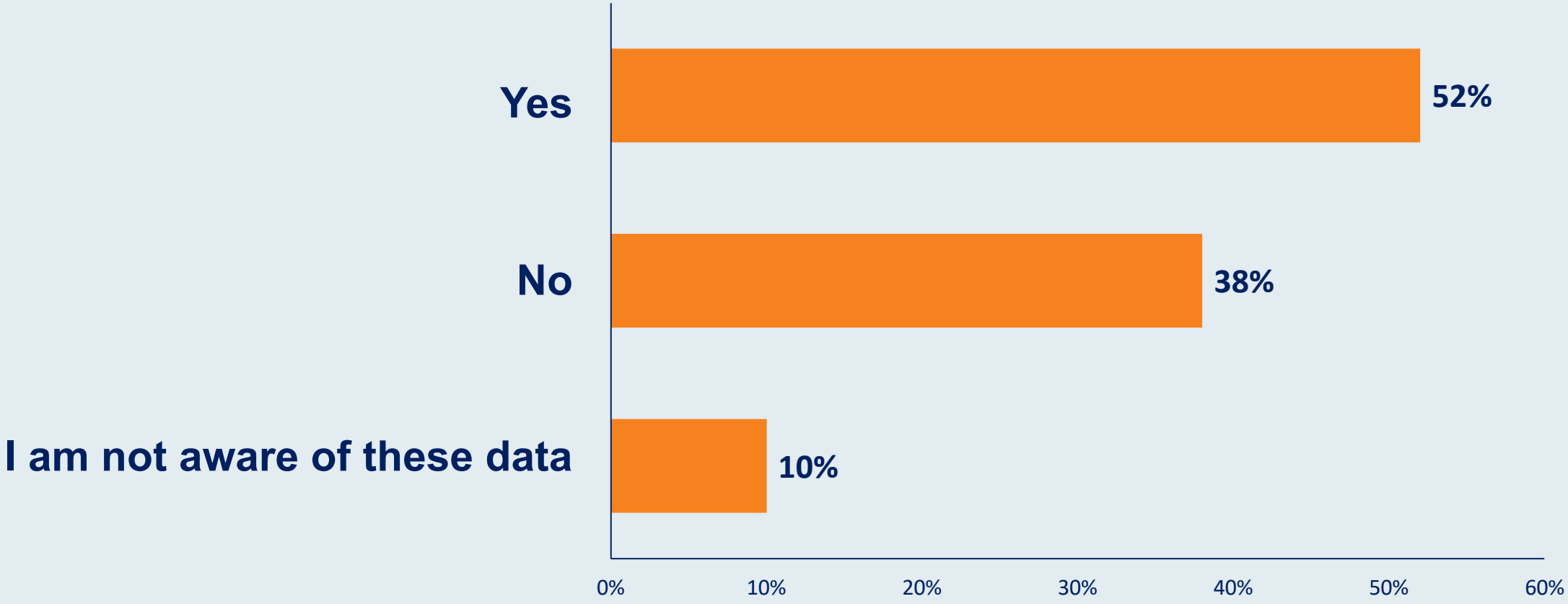
Dr Sulfi Ibrahim

- Presented with stage 3 adenocarcinoma of the right lower lobe → right lower lobe lobectomy
- Treated with four cycles of adjuvant cisplatin/pemetrexed
- NGS: PD-L1 = 0, no targetable mutations

Question

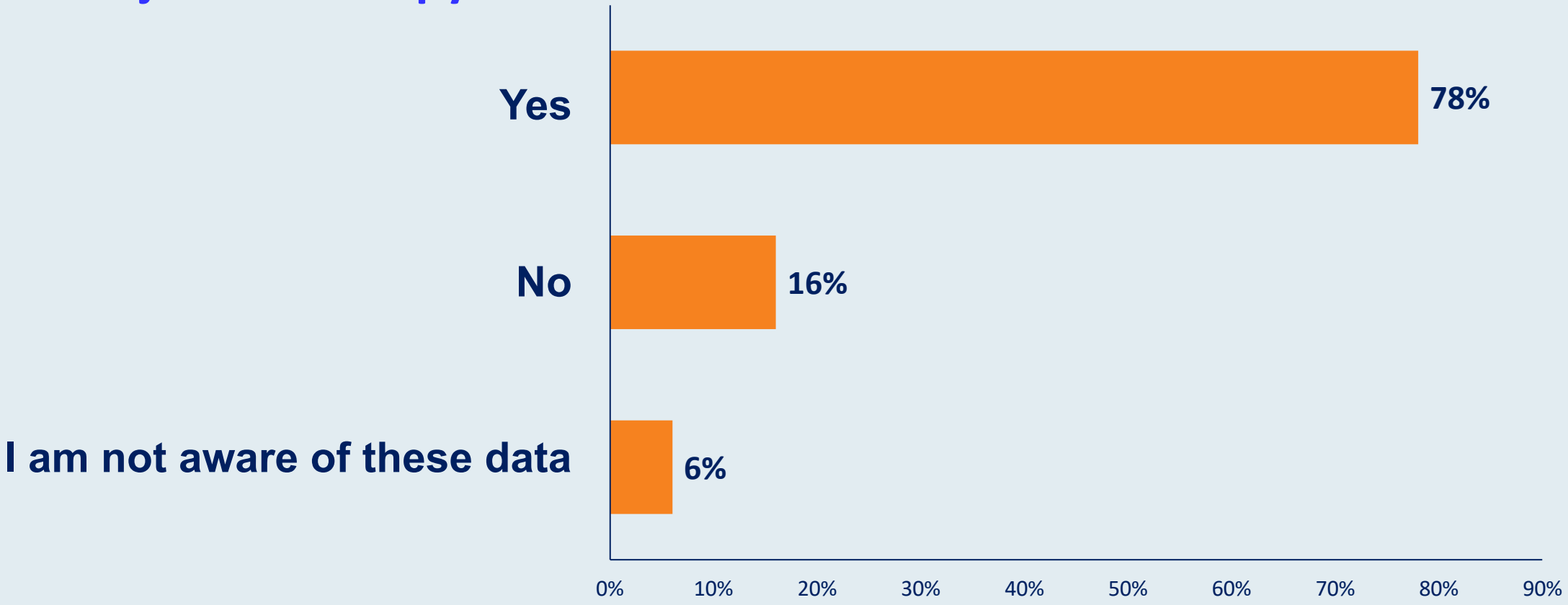
- Regulatory and reimbursement issues aside, would you offer this patient atezolizumab?
- What would be your approach if the PD-L1 was 5%?

The Phase III Impower010 study showed that the administration of adjuvant atezolizumab after complete resection and adjuvant platinum-based chemotherapy for Stage II to IIIA non-small cell lung cancer and PD-L1 ≥1% led to a hazard rate of 0.66 for disease-free survival but the data are immature for overall survival. Considering this, would you want to use atezolizumab as part of adjuvant therapy?



Premeeting survey: July 2021

The Phase III CheckMate 816 study showed that the addition of nivolumab to platinum-based neoadjuvant chemotherapy for patients with resectable non-small cell lung cancer led to a pathologic complete response (pCR) rate of 24% and improvement in surgical outcomes. Considering this, would you want to use nivolumab as part of neoadjuvant therapy?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

Regulatory and reimbursement issues aside, in addition to platinum-based chemotherapy, what would you most likely recommend as adjuvant treatment for a patient who is a smoker s/p resection of Stage IIIA adenocarcinoma of the lung with a BRAF V600E mutation and PD-L1 50%?

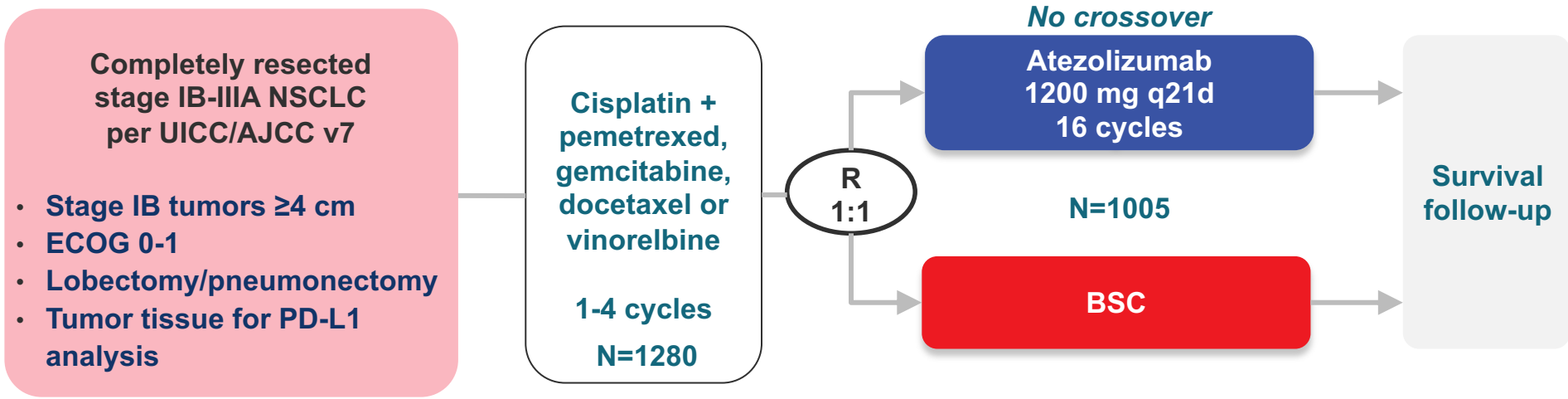
1. Atezolizumab
2. Dabrafenib + trametinib
3. Both 1 and 2
4. Neither 1 nor 2
5. Other

In the past year, to approximately how many patients with NSCLC have you administered neoadjuvant immunotherapy outside of a clinical trial setting?

1. 0
2. 1
3. 2
4. 3-5
5. More than 5

RTP
RESEARCH
TO PRACTICE

IMpower010 Phase III Study Design



Stratification factors
- Male/female
- Stage (IB vs II vs IIIA)
- Histology
- PD-L1 tumor expression status[a]: TC2/3 and any IC vs TC0/1 and IC2/3 vs TC0/1 and IC0/1

Primary endpoints
- Investigator-assessed DFS tested hierarchically:
  - **PD-L1 TC ≥1% (per SP263) stage II-IIIA population**
  - **All-randomized stage II-IIIA population**
  - **ITT population (stage IB-IIIA)**

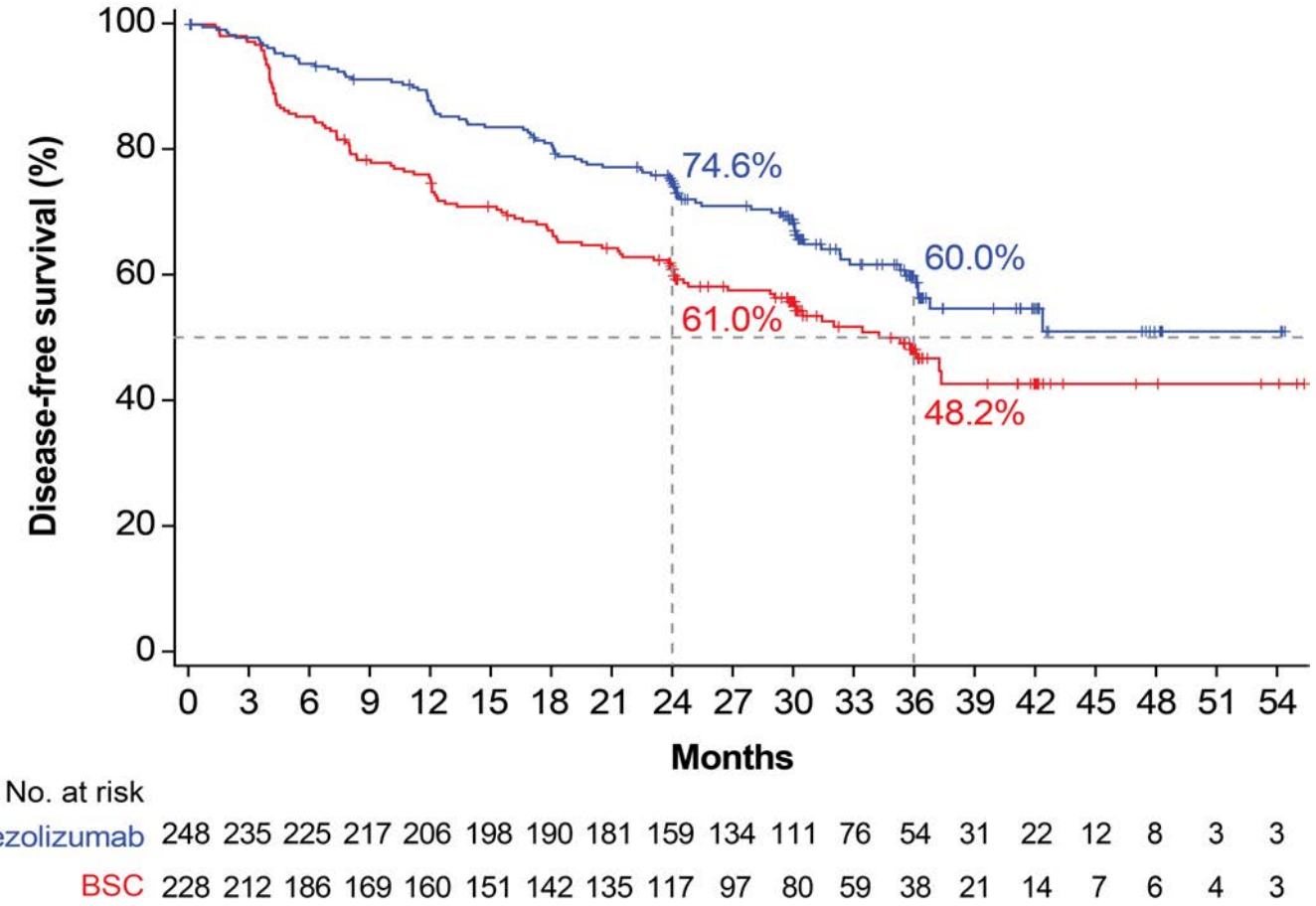
Key secondary endpoints
- OS in ITT population
- DFS in PD-L1 TC ≥50% (per SP263) stage II-IIIA population
- 3-y and 5-y DFS in all 3 populations

Both arms included observation and regular scans for disease recurrence on the same schedule.
ECOG, Eastern Cooperative Oncology Group; IC, tumor-infiltrating immune cells; ITT, intent to treat; TC, tumor cells. [a] Per SP142 assay.

Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

Courtesy of Heather Wakelee, MD

IMpower010: DFS in the PD-L1 TC ≥1%[a] stage II-IIIA population (primary endpoint)



	Atezolizumab (n=248)	BSC (n=228)
Median DFS (95% CI), mo	NE (36.1, NE)	35.3 (29.0, NE)
Stratified HR (95% CI)	0.66 (0.50, 0.88)	
P value[b]	0.004[c]	

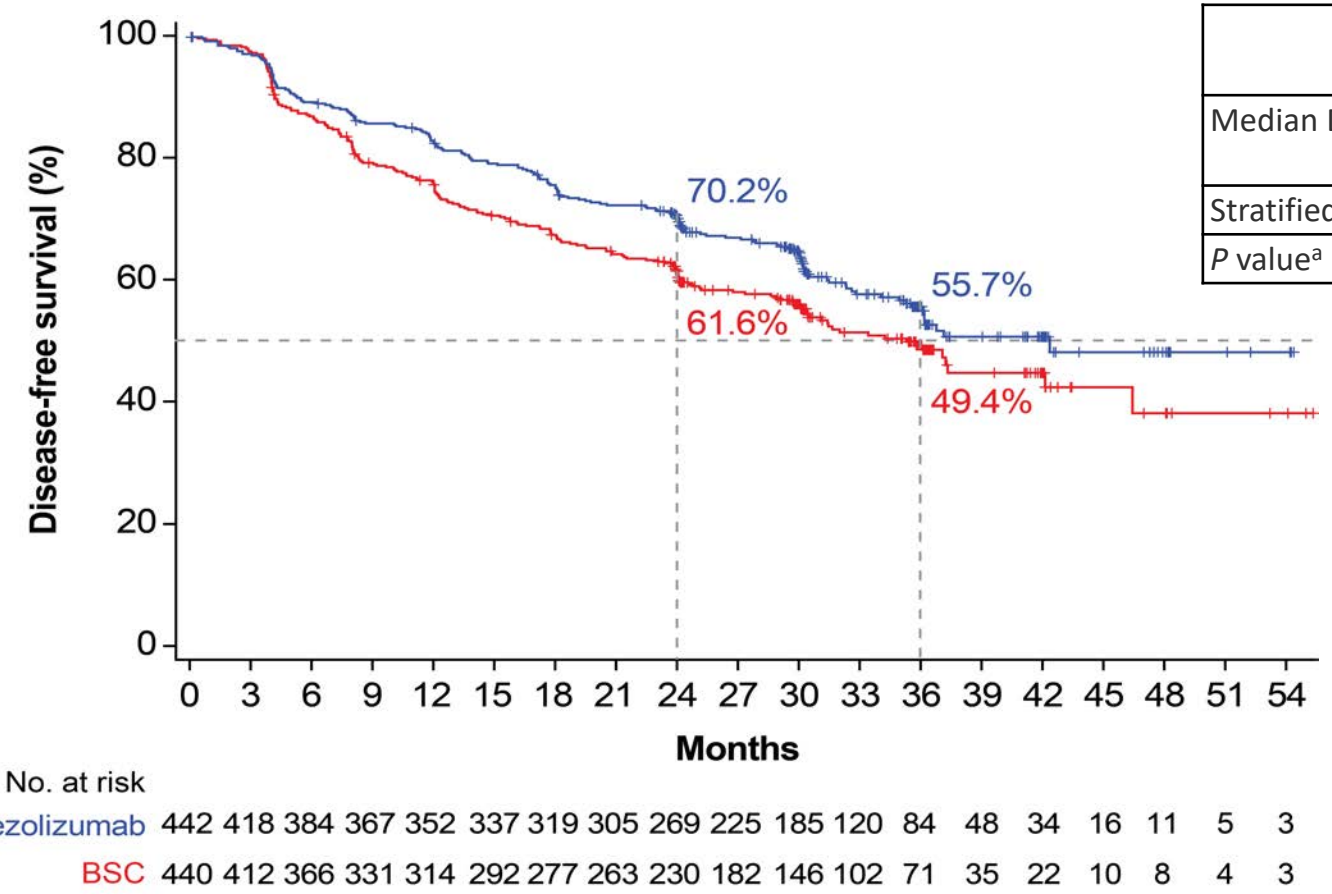
Median follow-up: 32.8 mo (range, 0.1-57.5)

Clinical cutoff: January 21, 2021. CI, confidence interval; HR, hazard ratio; NE, not evaluable. [a] Per SP263 assay. [b] Stratified log-rank. [c] Crossed the significance boundary for DFS.

Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

Courtesy of Heather Wakelee, MD

IMpower010: DFS in the all-randomized stage II-IIIA population (primary endpoint)



	Atezolizumab (n=442)	BSC (n=440)
Median DFS (95% CI), mo	42.3 (36.0, NE)	35.3 (30.4, 46.4)
Stratified HR (95% CI)	0.79 (0.64, 0.96)	
P value[a]	0.02[b]	

Median follow-up: 32.2 mo (range, 0-57.5)

Clinical cutoff: January 21, 2021. [a] Stratified log-rank. [b] Crossed the significance boundary for DFS.

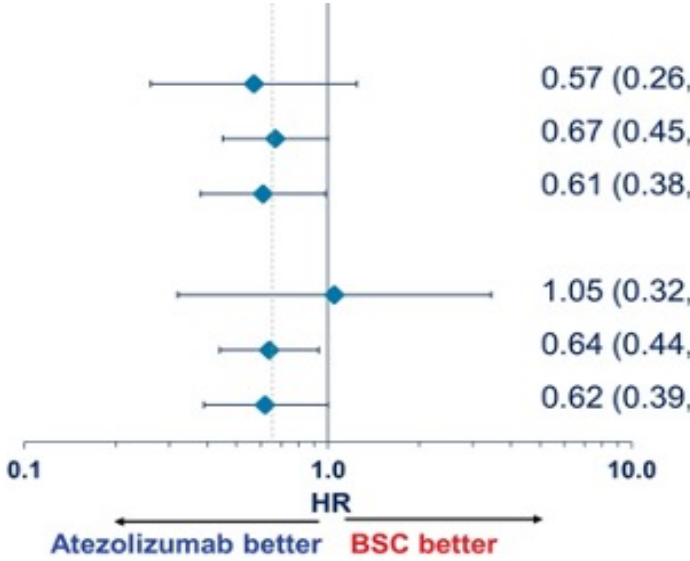
Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

Courtesy of Heather Wakelee, MD

IMpower010: DFS in key subgroups

PD-L1 TC ≥1% stage II-IIIA population

Subgroup	N	HR (95% CI)[b]
***EGFR* mutation status**		
Yes	43	0.57 (0.26, 1.24)
No	248	0.67 (0.45, 1.00)
Unknown[c]	185	0.61 (0.38, 0.98)
***ALK* rearrangement status**		
Yes	23	1.05 (0.32, 3.45)
No	254	0.64 (0.44, 0.93)
Unknown[c]	199	0.62 (0.39, 1.00)

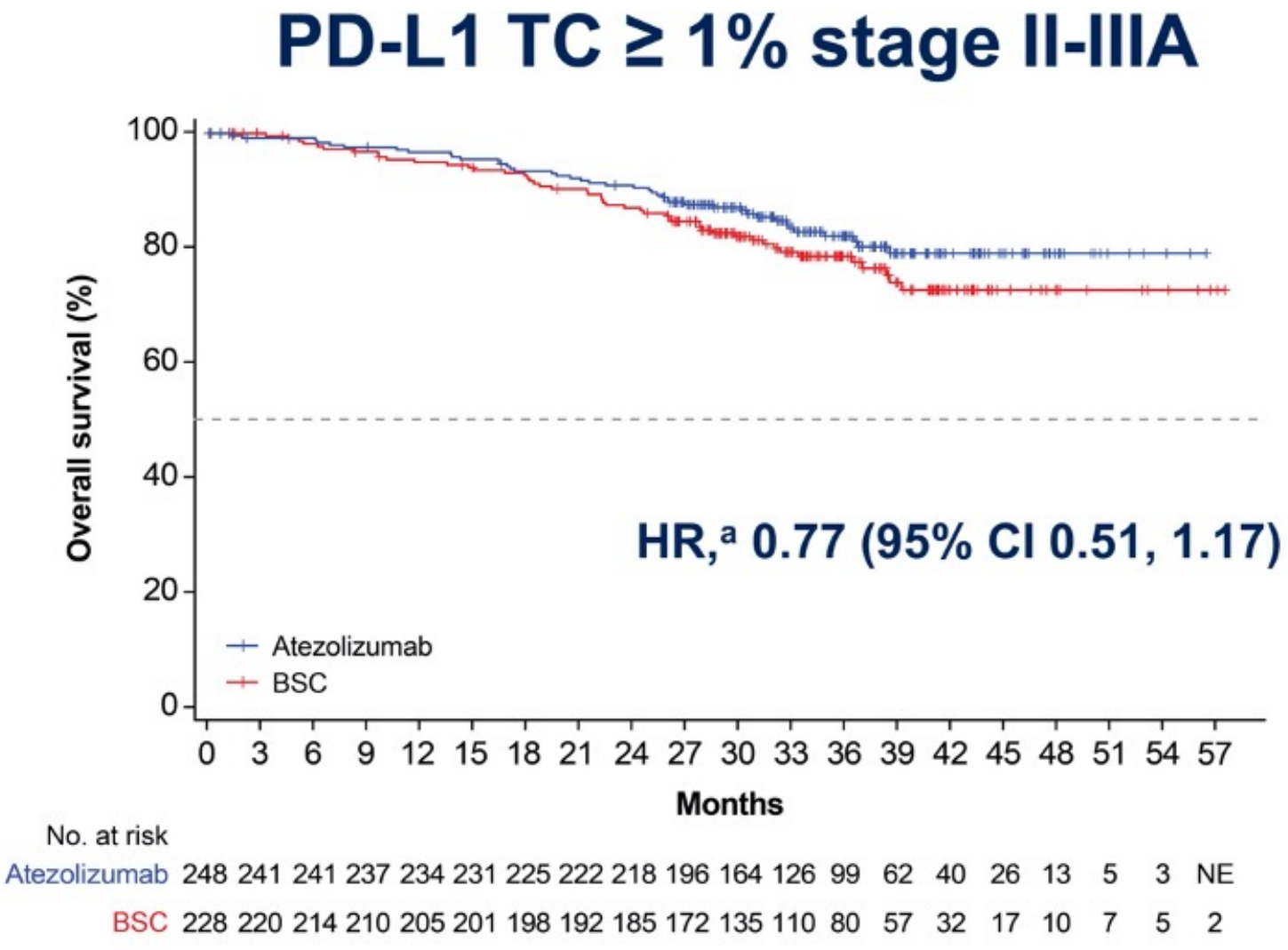


All-randomized stage II-IIIA population

SP263 PD-L1 status		
TC≥50%	229	0.43 (0.27, 0.68)
TC≥1%	476	0.66 (0.49, 0.87)
TC<1%	383	0.97 (0.72, 1.31)

Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

IMpower010: early OS data at interim DFS analysis



Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

IMpower010: safety summary[a]

n (%)	Atezolizumab (n=495)	BSC (n=495)
Any-cause AE	459 (92.7)	350 (70.7)
Treatment-related AE	335 (67.7)	–
Grade 3-4 AE	108 (21.8)	57 (11.5)
Treatment-related grade 3-4 AE	53 (10.7)	–
Serious AE	87 (17.6)	42 (8.5)
Treatment-related serious AE	37 (7.5)	–
Grade 5 AE	8 (1.6)[b]	3 (0.6)[c]
Treatment-related grade 5 AE	4 (0.8)	–
AE leading to dose interruption of atezolizumab	142 (28.7)	–
AE leading to atezolizumab discontinuation	90 (18.2)	–
Immune-mediated AEs	256 (51.7)	47 (9.5)
Grade 3-4 immune-mediated AEs	39 (7.9)	3 (0.6)
Immune-mediated AEs requiring the use of systemic corticosteroids	60 (12.1)	4 (0.8)

Clinical cutoff: January 21, 2021. AE, adverse event; [a] Data are from the safety population (all randomized patients who received ≥1 atezolizumab dose or for BSC, had ≥1 post-baseline assessment).
[b] Interstitial lung disease*; pneumothorax; multiple organ dysfunction syndrome*; cerebrovascular accident; arrhythmia; myocarditis*; acute myeloid leukemia*; acute cardiac failure. [c] Pneumonia; pulmonary embolism; cardiac tamponade and septic shock in the same patient. *, Treatment related per investigator.

Dr. Heather A. Wakelee ASCO 2021, abstr 8500
IMpower010 Interim Analysis
https://bit.ly/33t6JJP

Courtesy of Heather Wakelee, MD

Ongoing Adjuvant PD-1/PD-L1 IO Trials

Drug/Trial	Description	Stages entered	Description	Primary endpoint
Nivolumab	US, NCI (ECOG), Observational control	IB (4cm)-IIIA After Adj Chemo +/- radiation	Phase 3 Allows PD-L1 +/-	OS/DFS
Atezolizumab	Global, Placebo controlled	IB (4cm)-IIIA After Adj Chemo	Phase 3 Allows PD-L1 +/-	DFS
Durvalumab	Global, Placebo controlled	IB (4cm)-IIIA After Adj Chemo	Phase 3 Allows PD-L1 +/-	DFS
Pembrolizumab	ETOP/EORTC, Placebo Controlled	IB (4cm)-IIIA After Adj Chemo	Phase 3 Allows PD-L1 +/-	DFS

Courtesy of Heather Wakelee, MD

CheckMate 816 Phase III study design[a,1]

Key eligibility criteria

- Newly diagnosed, resectable, stage IB (≥ 4 cm)–IIIA NSCLC (per TNM 7th edition)
- ECOG PS 0–1
- No known sensitizing *EGFR* mutations or *ALK* alterations

Stratified by stage (IB/II vs IIIA), PD-L1[b] (≥ 1% vs < 1%[c]), and sex

N = 358

R 1:1

- NIVO 360 mg Q3W + chemo[d] Q3W (3 cycles)
- Chemo[e] Q3W (3 cycles)

Radiologic restaging → Surgery (within 6 weeks post-treatment) → Optional adjuvant chemo ± RT → Follow-up

Primary endpoints

- pCR by BIPR
- EFS by BICR

Key secondary endpoints

- MPR by BIPR
- OS
- Time to death or distant metastases

Key exploratory endpoints included

- ORR by BICR
- **Feasibility of surgery; peri- and post-operative surgery-related AEs**

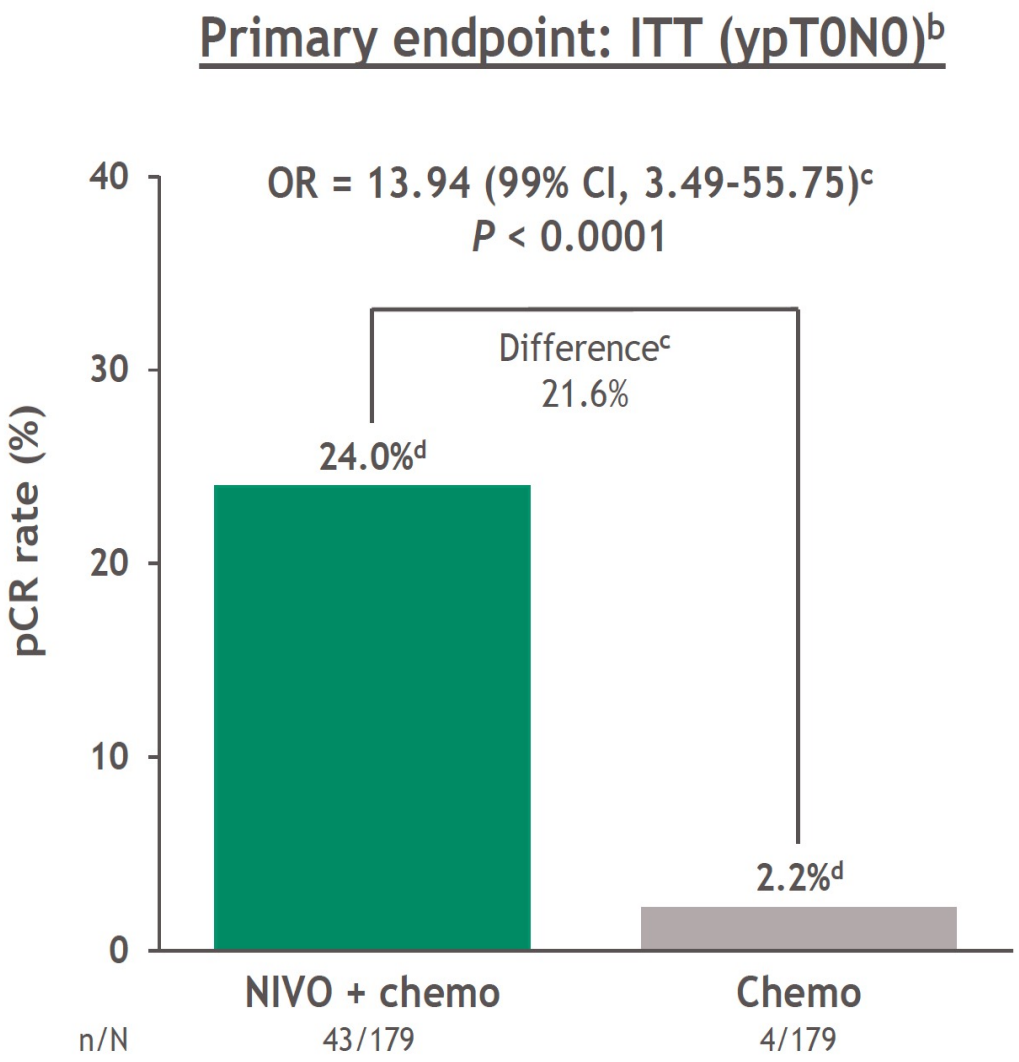
Database lock: September 16, 2020; minimum follow-up: 7.6 months for NIVO + chemo and chemo arms.

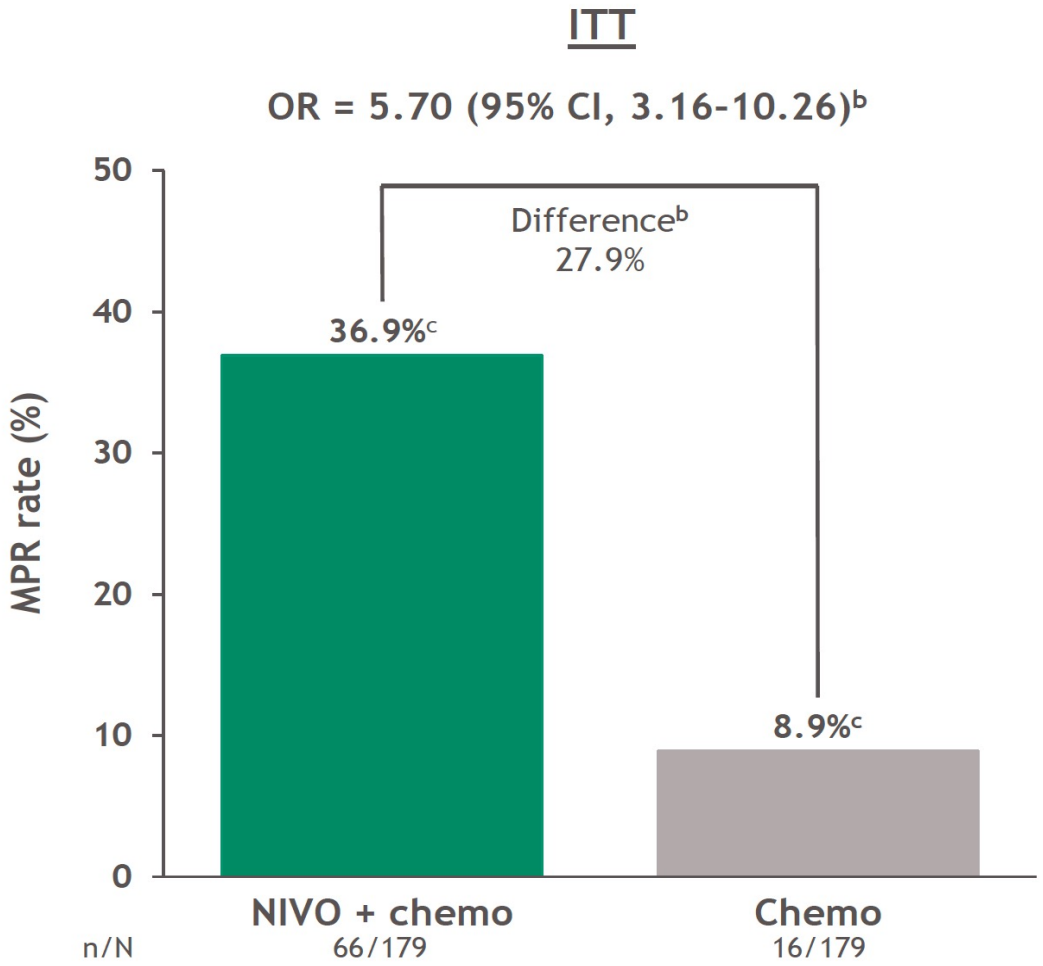
[a]NCT02998528; this study included an exploratory arm: NIVO 3 mg/kg Q2W (3 cycles) + ipilimumab 1 mg/kg (cycle 1 only). Data from this arm are not included in this presentation; [b]Determined by the PD-L1 IHC 28-8 pharmDx assay (Dako); [c]Included patients with PD-L1 expression status not evaluable and indeterminate; [d]NSQ: pemetrexed + cisplatin or paclitaxel + carboplatin; SQ: gemcitabine + cisplatin or paclitaxel + carboplatin; [e]Vinorelbine + cisplatin, docetaxel + cisplatin, gemcitabine + cisplatin (SQ only), pemetrexed + cisplatin (NSQ only), or paclitaxel + carboplatin.

1. Forde PM, et al. Oral presentation at the AACR Annual Meeting; April 8–10, 2021; virtual. Abstract 5218.

Courtesy of Heather Wakelee, MD

CheckMate 816 – Forde et al. AACR 2021

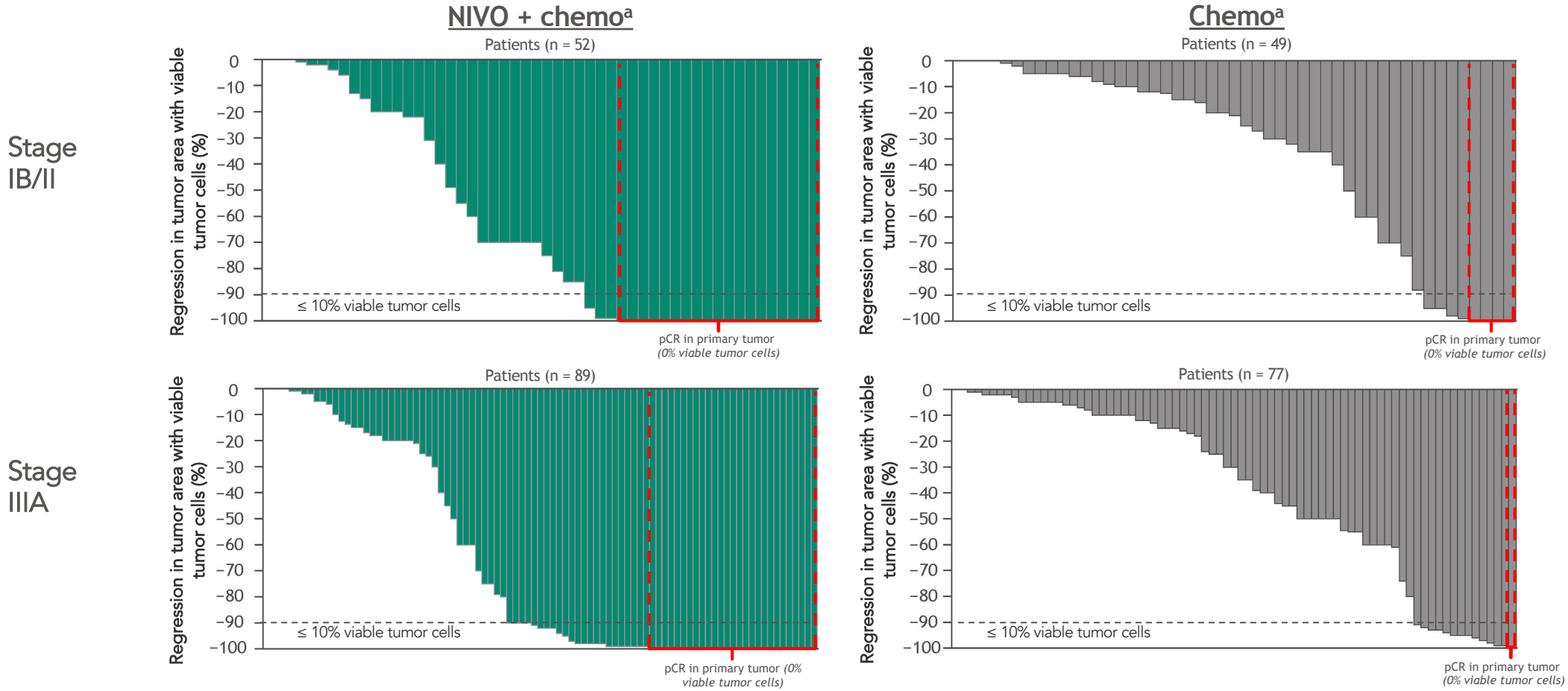




- pCR rate in the exploratory NIVO + IPI arm (ITT) was 20.4% (95% CI, 13.4-29.0)

Courtesy of Heather Wakelee, MD

CheckMate 816: Depth of pathological regression in primary tumor by stage[a]



- The median residual viable tumor percentage in stage IB/II and IIIA was 28% and 8% with NIVO + chemo vs 79% and 70% with chemo, respectively

[a]Response-evaluable patients.

Spicer ASCO 2021

Courtesy of Heather Wakelee, MD

Ongoing Phase 3 NEO-Adj PD-(L)1 NSCLC IO

Drug	N	Stages	Description	Primary Endpoint
Nivo + platinum Chemo (ipi/nivo closed) CheckMate 816	350	Stage IB–IIIA, resectable NSCLC	Neo-adjuvant, no adjuvant	MPR / RFS
Atezo + platinum Chemo IMpower030	374	Stage II–IIIB (T3N2), resectable NSCLC	Neo-adjuvant chemo-ICI, then adjuvant IO	MPR / RFS
Pembro + platinum-doublet Chemo KEYNOTE-671	786	Stage IIB–IIIA, resectable NSCLC	Neo-adjuvant chemo-ICI then adjuvant IO	RFS / OS
Durva + platinum-doublet Chemo	300	Stage II–IIIA, resectable NSCLC	Neo-adjuvant chemo-ICI then adjuvant IO	MPR

Courtesy of Heather Wakelee, MD

Agenda

Introduction: Immunotherapy in the (Neo) Adjuvant Setting

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Key relevant data sets

Module 1: First-Line Treatment of Metastatic NSCLC without a Targetable Tumor Mutation

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%
- Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%
- Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations
- Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C
- Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%
- Key relevant data sets

Module 2: Role of Immune Checkpoint Inhibition in the Management of Locally Advanced NSCLC

- Key relevant data sets

Module 3: Current Treatment Paradigm for Small Cell Lung Cancer (SCLC)

- Dr Gosain: A 59-year-old man with extensive-stage SCLC
- Dr Gupta: A 65-year-old woman with limited-stage SCLC
- Key relevant data sets

Case Presentation – Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0 (continued)

Dr Sulfi Ibrahim

- Presented with stage 3 adenocarcinoma of the right lower lobe → right lower lobe lobectomy
- Treated with four cycles of adjuvant cisplatin/pemetrexed
- NGS: PD-L1 = 0, no targetable mutations
- Patient developed metastatic disease a few months after the completion of adjuvant chemotherapy
  - Rapidly reaccumulating pleural effusion, a pericardial effusion and in severe distress
- Patient anxious for immediate treatment

Case Presentation – Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0 (continued)

Dr Sulfi Ibrahim

- Presented with stage 3 adenocarcinoma of the right lower lobe → right lower lobe lobectomy
- Treated with four cycles of adjuvant cisplatin/pemetrexed
- NGS: PD-L1 = 0, no targetable mutations
- Patient developed metastatic disease a few months after the completion of adjuvant chemotherapy
  - Rapidly reaccumulating pleural effusion, a pericardial effusion and in severe distress
- Patient anxious for immediate treatment
- **Underwent treatment with the IMpower150 regimen (carboplatin/paclitaxel/atezolizumab/bevacizumab)**
  - **Patient was feeling much better within 1 week (near complete response)**

Question

- Is this the best regimen to use in a patient with large malignant effusions as the predominant disease related feature?

RTP RESEARCH TO PRACTICE

Case Presentation – Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%

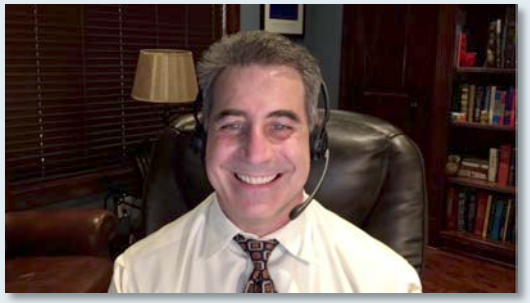
Dr Margaret Deutsch

- October 2020: Presented with a several-month history of nausea, anorexia, weight loss, progressive dyspnea with severe and intractable hypercalcemia
- CT: Large right subhilar mass and subcarinal lymphadenopathy, multiple hepatic metastatic deposits
- Biopsy of left supraclavicular lymph node: Poorly differentiated squamous cell carcinoma
- PET: Large left upper lobe mass, left pleural effusion, extensive pleural disease, lymphadenopathy
- Treated with nivolumab/ipilimumab
  - Significant response to therapy, improvement in hepatic metastases, hypercalcemia resolved

Question

- How do the faculty choose between nivo/ipi and other front line treatment options in this setting?

Case Presentation – Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%



Dr Joseph Martins

- December 2018: Presented with metastatic adenocarcinoma of the lung s/p resection of brain metastases
- May 2019: Carboplatin/pemetrexed/pembrolizumab x 4 completed
- Patient remains on pembrolizumab maintenance; complete response to date

Questions

- Do the faculty change their approach to whether they need to include chemotherapy with immune therapy if the patient has symptomatic disease? In other words, do you need a "rapid, responsive" chemotherapy or are you satisfied with the benefit of immune therapy and that even patients who are symptomatic will fare well with immune therapy if their PD-L1 is strongly positive?

Case Presentation – Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations

Dr Raymond Lobins

- Feb 2016: Initially diagnosed with Stage I (T1a, N0) NSCLC
- Feb 2018: Patient developed recurrence, localized to the chest and mediastinum
- Patient achieved CR with neoadjuvant chemoradiation and was started on durvalumab on 07/05/18
- Aug 2018: Disease progression in left kidney proven by biopsy
- Aug 2018: Molecular analysis results:
  - KRAS p.Gly12Asp mutation | TP53 p.Lys351 mutation | PD-L1: Unknown (insufficient tumor remaining)
- Patient subsequently experienced disease progression on multiple lines of chemotherapy
- May 2019: Nivolumab/ipilimumab treatment initiated
- May 2021: Patient completed immune therapy, no evidence of disease

RTP RESEARCH TO PRACTICE

Case Presentation – Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations

Dr Raymond Lobins

OnkoSight NGS Lung Tumor Sequencing Report
+ ALK & ROS1 FISH

Markers Identified: **KRAS p.Gly12Asp, TP53 p.Lys351***

Testing includes sequencing of: AKT1, ALK, BRAF, DDR2, EGFR, EPHA2, ERBB2, FGFR1, FGFR2, FGFR3, KRAS, MAP2K1, MET, NRAS, PIK3CA, RET, ROS1, TP53.

ALK-2p23 FISH: No evidence of gene rearrangement or deletion.
XT ROS1 FISH: Negative for gene rearrangement.

PD-L1 (22C3) Immunohistochemistry

Result: Test cancelled due to insufficient tumor remaining for testing.

RTP RESEARCH TO PRACTICE

Case Presentation – Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C

Dr Regina Flores

- Diagnosed with adenocarcinoma of the lung with bilateral lung metastases
- PMH: Untreated hepatitis C
- He is not interested in chemotherapy, and is excluded from clinical trial participation due to his hepatitis C

Questions

- Are there concerns about using immunotherapy in a patient with untreated hepatitis C?
- If he needed treatment for hepatitis C first, would you hold off administering immunotherapy?

Case Presentation – Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%

Dr Sulfi Ibrahim

- Initially diagnosed with stage III adenocarcinoma of the right lung
- Concurrent chemoradiation with CR, followed by consolidation durvalumab x 1 year

Question

- In patients with stage III adenocarcinoma of the lung who have achieved a complete or good response to chemoradiation, if their PD-L1 level is 0 but they had an actionable mutation, would you offer those patients durvalumab? Or would you offer them adjuvant targeted therapy?

RTP
RESEARCH
TO PRACTICE

Case Presentation – Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1% (continued)

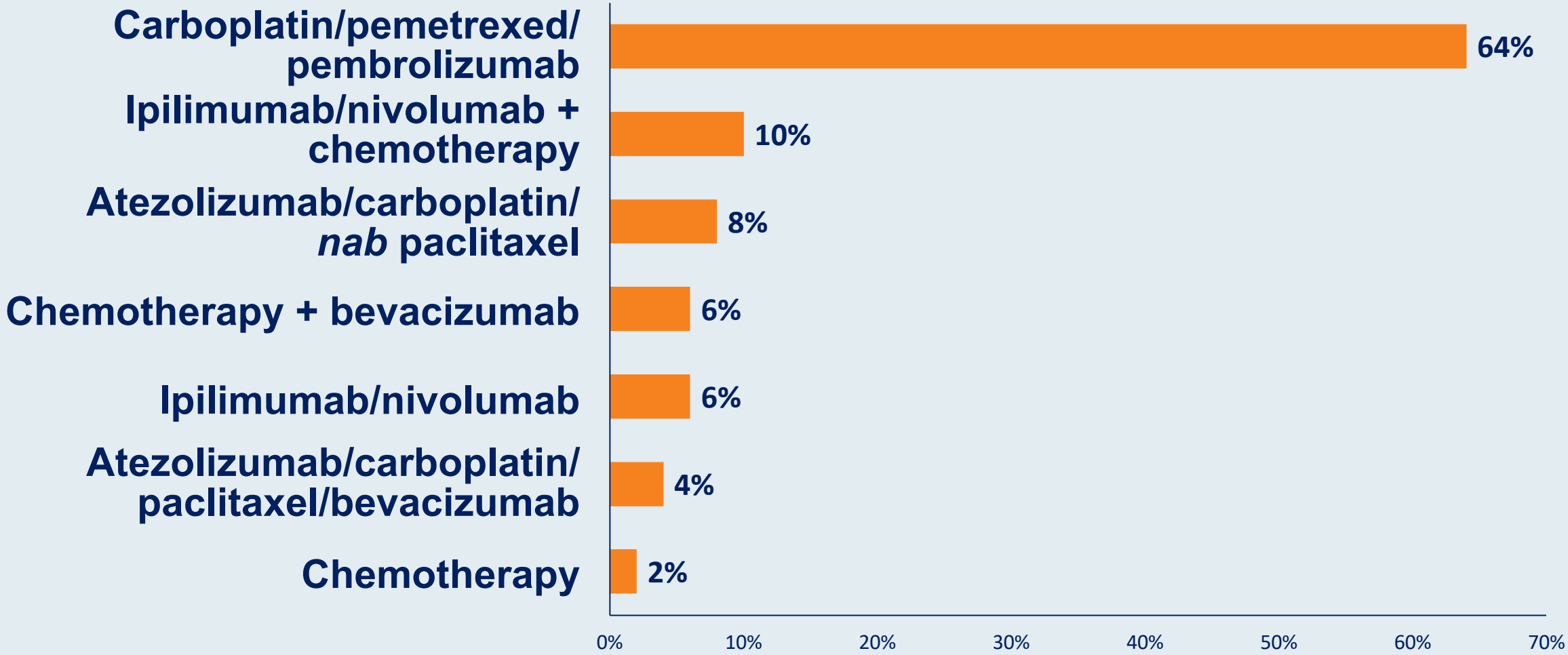
Dr Sulfi Ibrahim

- Initially diagnosed with stage III adenocarcinoma of the right lung
  - Concurrent chemoradiation with CR, followed by consolidation durvalumab x 1 year
- ***Develops PD about 8 months after completion of durvalumab with biopsy-proven metastasis to the liver***
- ***Molecular studies: PD-L1 1%, TMB > 10 muts/Mb***
- ***Carboplatin/pemetrexed/pembrolizumab initiated***

Questions

- What treatment would you have recommended to this patient? Is there an optimal timeframe after the completion of adjuvant durvalumab therapy where it is reasonable to rechallenge with pembrolizumab?
- Is there data regarding the use of ipilimumab and nivolumab in patients who previously had adjuvant durvalumab therapy?
- This patient had a TMB > 10. Does that influence your choice of what treatment you would give him?

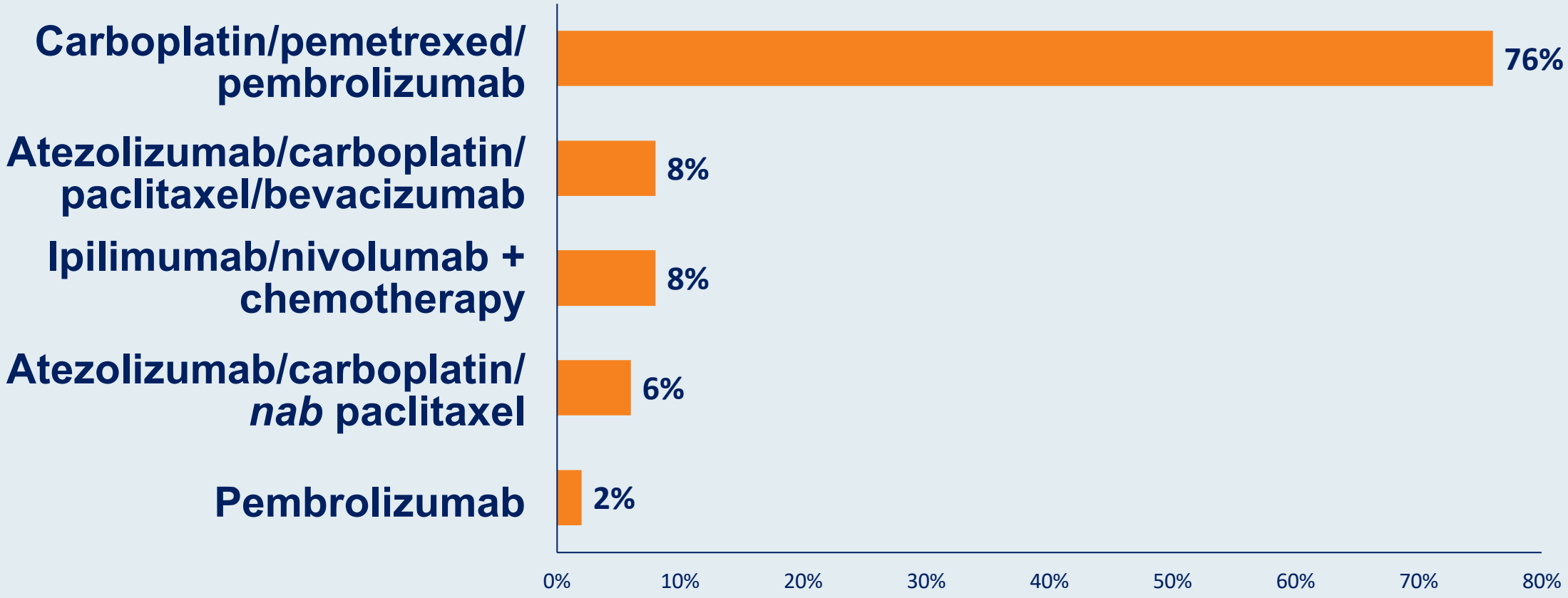
Which first-line treatment regimen would you recommend for a 65-year-old patient with metastatic nonsquamous lung cancer, no identified targetable mutations and a PD-L1 TPS of 0%?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

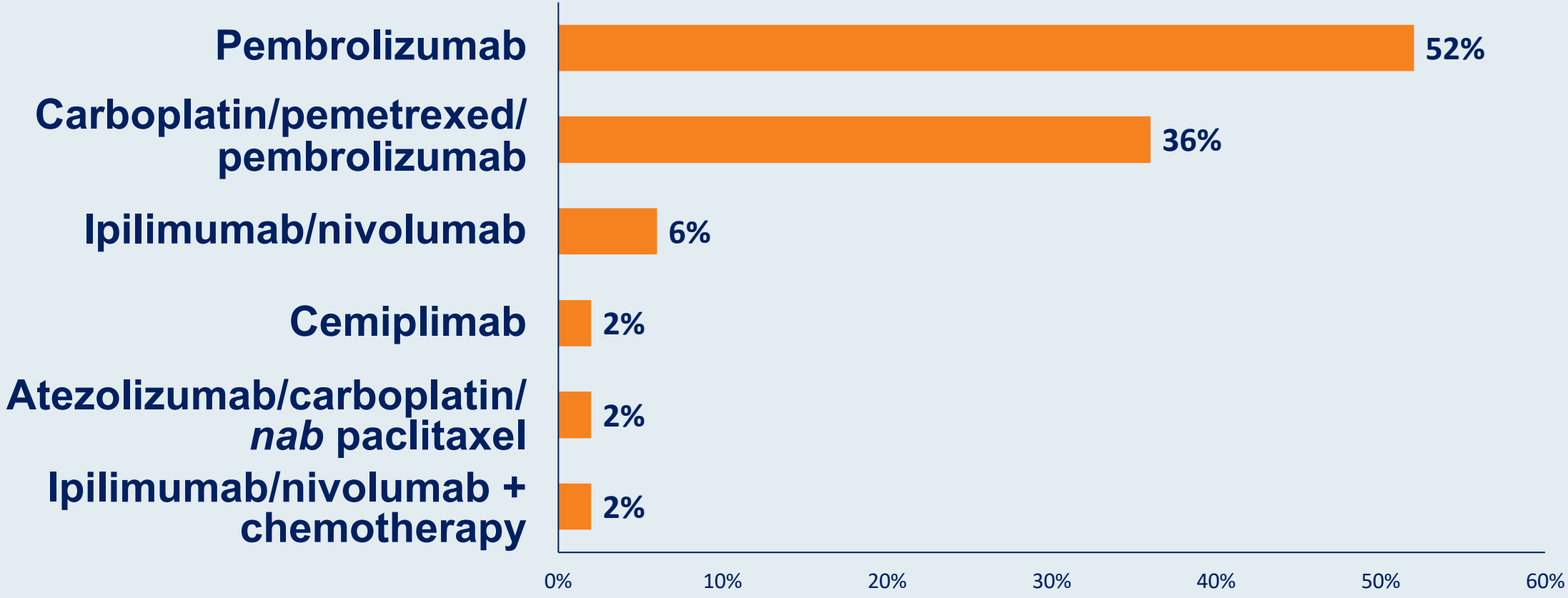
Which first-line treatment regimen would you recommend for a 65-year-old patient with metastatic nonsquamous lung cancer, no identified targetable mutations and a PD-L1 TPS of 10%?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

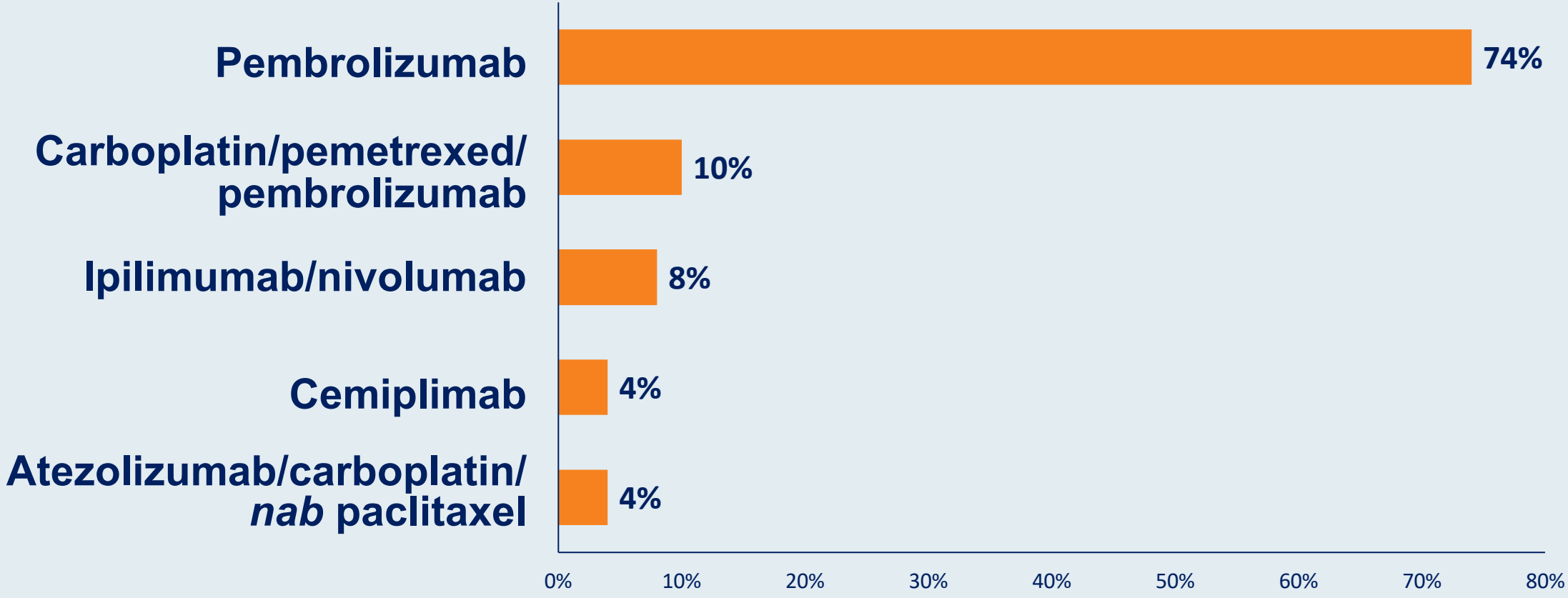
Which first-line treatment regimen would you recommend for a 65-year-old patient with metastatic nonsquamous lung cancer, no identified targetable mutations and a PD-L1 TPS of 50%?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

Which first-line treatment regimen would you recommend for a 65-year-old patient with metastatic nonsquamous lung cancer, no identified targetable mutations and a PD-L1 TPS of 95%?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

Summary: Management of Metastatic NSCLC without a Targetable Tumor Mutation

- **Patients with Newly Diagnosed Metastatic NSCLC who do not have Targeted Therapy Options – are candidates for:**

  Mono-Immunotherapy (Pembrolizumab, Atezolizumab, Cemiplimab)

  Doublet-Immunotherapy (Nivolumab/Ipilimumab)

  Chemotherapy and Immunotherapy (Pembrolizumab, Atezolizumab, Nivolumab/Ipilimumab)

- **Immune Regimen Selection should be based on Clinical Factors and PD-L1 Expression**

- **Newer Immune Strategies are in Development**

  (Durvalumab/Tremelimumab, Tiragolumab, etc)

Courtesy of David R Spigel, MD

SOC: Mono v. Doublet v. Chemo-IO

Mono-Immunotherapy	Doublet-Immunotherapy	Chemotherapy and Immunotherapy
• Pembrolizumab • Atezolizumab • Cemiplimab	• Nivolumab and Ipilimumab	• Histology-Based Chemotherapy and Immunotherapy

Courtesy of David R Spigel, MD

FDA-Approved Immunotherapy Monotherapy Options for First-Line Therapy

Monotherapy	FDA approval	Pivotal study	Histologic type	HR (OS)
Pembrolizumab[1,2]	4/11/19 10/24/16	KEYNOTE-042 KEYNOTE-024	PD-L1 TPS ≥1%	0.63
Atezolizumab[3]	5/18/20	IMpower110	PD-L1 TPS ≥50, EGFR and/or ALK wt	0.59
Cemiplimab[4]	2/22/2021	EMPOWER-Lung 1 (Study 1624)	PD-L1 TPS ≥50, EGFR and/or ALK and/or ROS1 wt	0.57

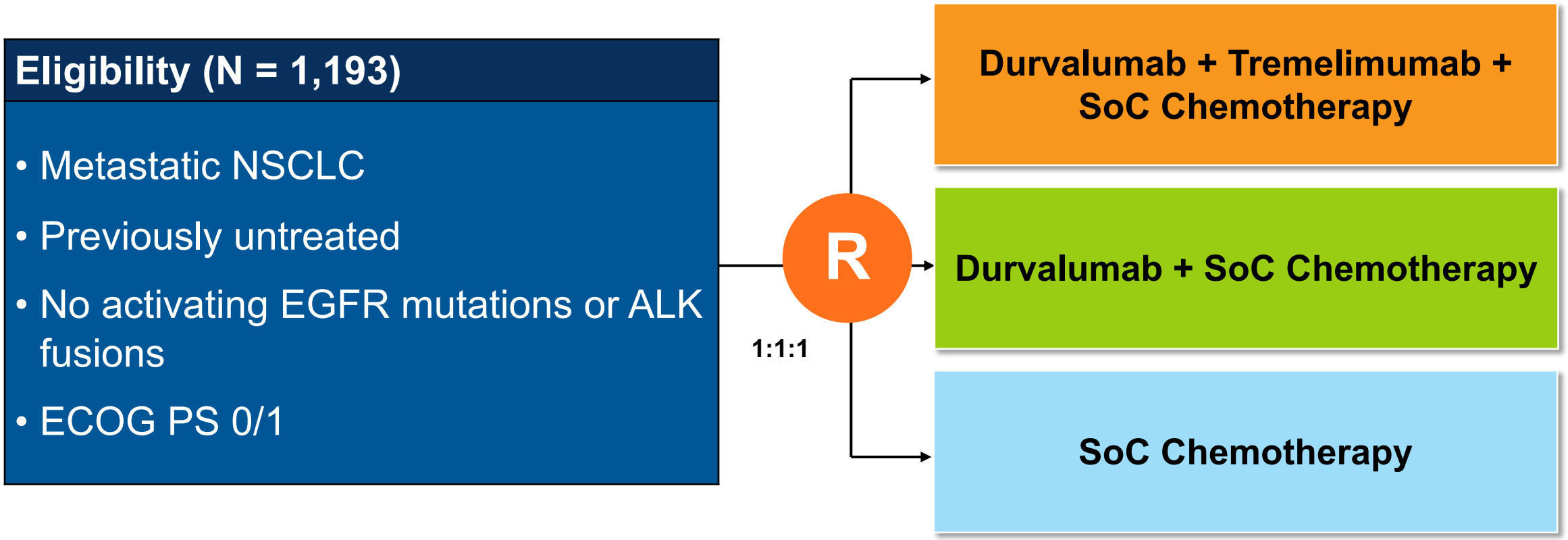
[1] Mok. *Lancet* 2019. [2] Reck. *J Clin Oncol* 2019. [3] Herbst. *N Engl J Med* 2020. [4] Sezer. *Lancet* 2021.

FDA-Approved Immunotherapy Combination Options for First-Line Therapy

Combination regimen	FDA approval	Pivotal study	Histologic type	HR (OS)
Pembrolizumab + Platinum and pemetrexed[1]	8/20/18	KEYNOTE-189	Nonsquamous	0.56
Pembrolizumab + Carboplatin, paclitaxel or *nab* paclitaxel[2]	10/30/18	KEYNOTE-407	Squamous	0.64
Atezolizumab + Carboplatin and paclitaxel and bevacizumab[3]	12/6/18	IMpower150	Nonsquamous	0.78
Atezolizumab + Carboplatin and *nab* paclitaxel[4]	12/3/19	IMpower130	Nonsquamous	0.79
Nivolumab + Ipilimumab[5]	5/15/20	CheckMate-227	PD-L1 TPS ≥1, EGFR and/or ALK wt	0.76
Nivolumab + Ipilimumab and chemotherapy[6]	5/26/20	CheckMate-9LA	EGFR and/or ALK wt	0.72

[1] Gadgeel. *J Clin Oncol* 2020. [2] Paz-Ares. *NEJM* 2018. [3] Socinski *NEJM* 2018. [4] West. *Lancet Oncol* 2019. [5] Paz-Ares. *ASCO* 2021; Ab 9016. [6] Reck. ASCO 2021;Ab 9000.

Ongoing Phase III POSEIDON Trial Design



Co-primary endpoints: Overall survival and Progression-free survival

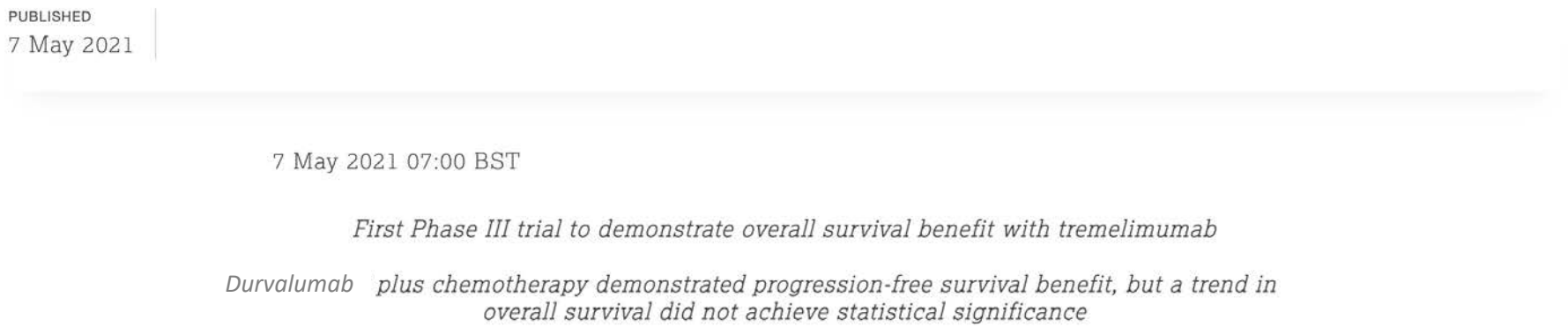
Secondary endpoints include: Objective response rate, health-related quality of life and Safety

www.clinicaltrials.gov (NCT03164616). Accessed July 2021.

Courtesy of David R Spigel, MD

Chemotherapy and Immunotherapy: Durvalumab and Tremelimumab

Durvalumab and tremelimumab with chemotherapy demonstrated overall survival benefit in POSEIDON trial for 1st-line Stage IV non-small cell lung cancer



PUBLISHED
7 May 2021

7 May 2021 07:00 BST

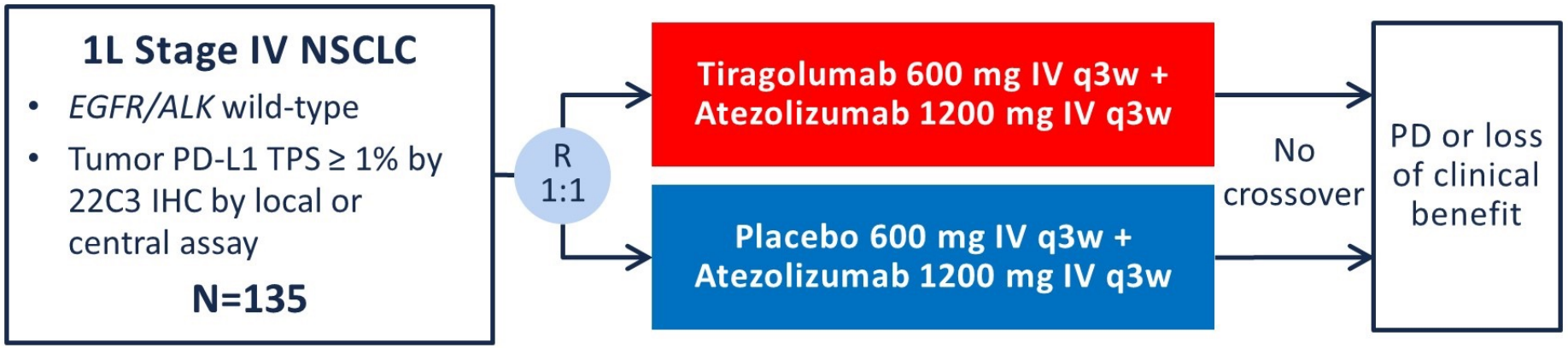
First Phase III trial to demonstrate overall survival benefit with tremelimumab

Durvalumab plus chemotherapy demonstrated progression-free survival benefit, but a trend in overall survival did not achieve statistical significance

Courtesy of David R Spigel, MD

Targeting the TIGIT Checkpoint

CITYSCAPE Study Design



Stratification Factors:

- PD-L1 TPS (1-49% vs ≥ 50%)
- Histology (Non-Squamous vs Squamous)
- Tobacco use (yes vs no)

- **Co-Primary Endpoints: ORR** and **PFS**
- **Key Secondary Endpoints: Safety**, DOR, OS, Patient-reported outcomes (PROs)
- **Exploratory Endpoints:** Efficacy analysis by PD-L1 status

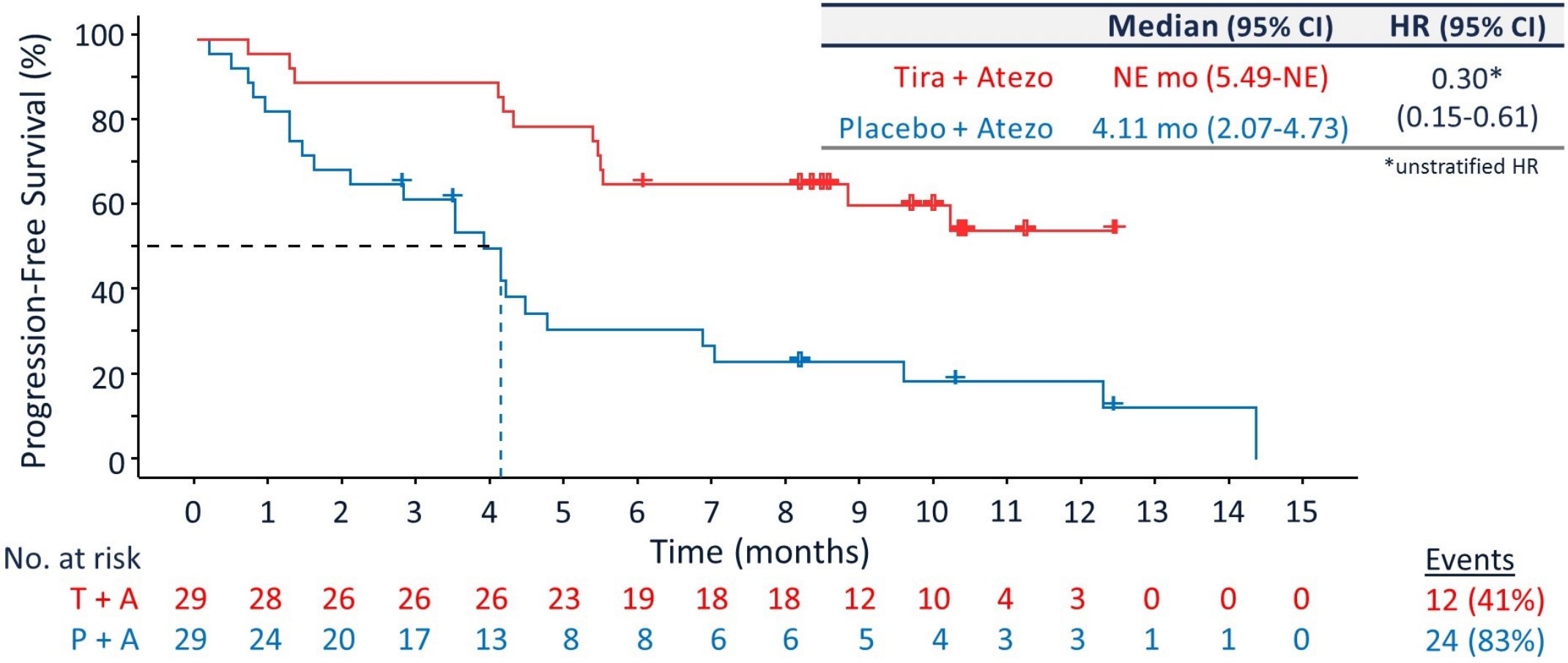
DOR = duration of response; IHC = immunohistochemistry; ORR = confirmed overall response rate; OS = overall survival; PD = progressive disease; PFS = progression free survival ; q3w = every 3 weeks; R = randomized; TPS = tumor proportion score

Courtesy of David R Spigel, MD

Johnson, ASCO Annual Meeting Abstract 9503 2020

CITYSCAPE

Updated Investigator-Assessed PFS: PD-L1 TPS ≥ 50%



	Median (95% CI)	HR (95% CI)
Tira + Atezo	NE mo (5.49-NE)	0.30* (0.15-0.61)
Placebo + Atezo	4.11 mo (2.07-4.73)	

*unstratified HR

No. at risk																Events
T + A	29	28	26	26	26	23	19	18	18	12	10	4	3	0	0	0	12 (41%)
P + A	29	24	20	17	13	8	8	6	6	5	4	3	3	1	1	0	24 (83%)

NE = non-evaluable; P+A = placebo + atezolizumab; T+A = tiragolumab + atezolizumab; TPS = tumor proportion score

Follow data cutoff: 02 December 2019

Courtesy of David R Spigel, MD

Johnson, ASCO Annual Meeting Abstract 9503 2020

Immunotherapy Duration

Mono-Immunotherapy	Doublet-Immunotherapy	Chemotherapy and Immunotherapy
• Pembrolizumab (2 years) • Atezolizumab (indefinite) • Cemiplimab (2 years)	• Nivolumab and Ipilimumab (2 years)	• Histology-Based Chemotherapy and Immunotherapy: Pembrolizumab Nivolumab/Ipilimumab (2yrs) Atezolizumab Durvalumab (indefinite)

Courtesy of David R Spigel, MD

Agenda

Introduction: Immunotherapy in the (Neo) Adjuvant Setting

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Key relevant data sets

Module 1: First-Line Treatment of Metastatic NSCLC without a Targetable Tumor Mutation

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%
- Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%
- Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations
- Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C
- Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%
- Key relevant data sets

Module 2: Role of Immune Checkpoint Inhibition in the Management of Locally Advanced NSCLC

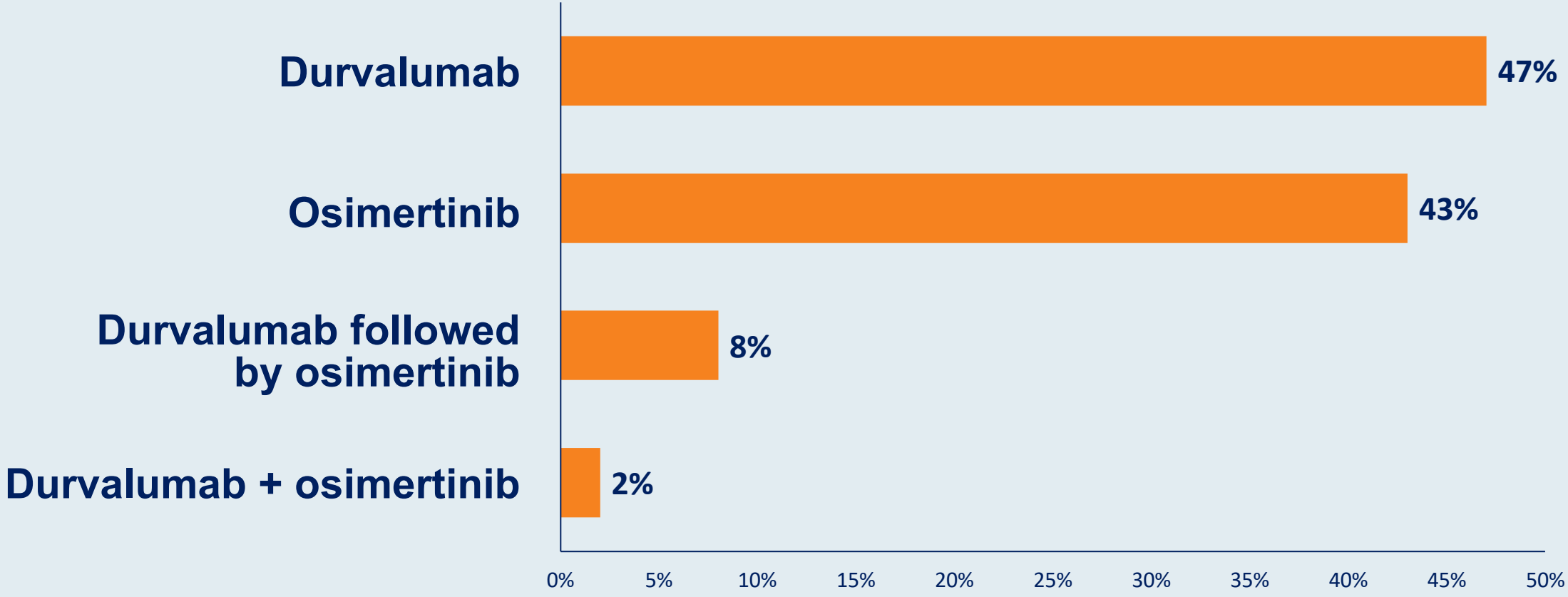
- Key relevant data sets

Module 3: Current Treatment Paradigm for Small Cell Lung Cancer (SCLC)

- Dr Gosain: A 59-year-old man with extensive-stage SCLC
- Dr Gupta: A 65-year-old woman with limited-stage SCLC
- Key relevant data sets

RTP
RESEARCH
TO PRACTICE

What would you most likely recommend as consolidation treatment for a patient with locally advanced NSCLC who has completed chemoradiation therapy and is found to have an EGFR activating mutation?

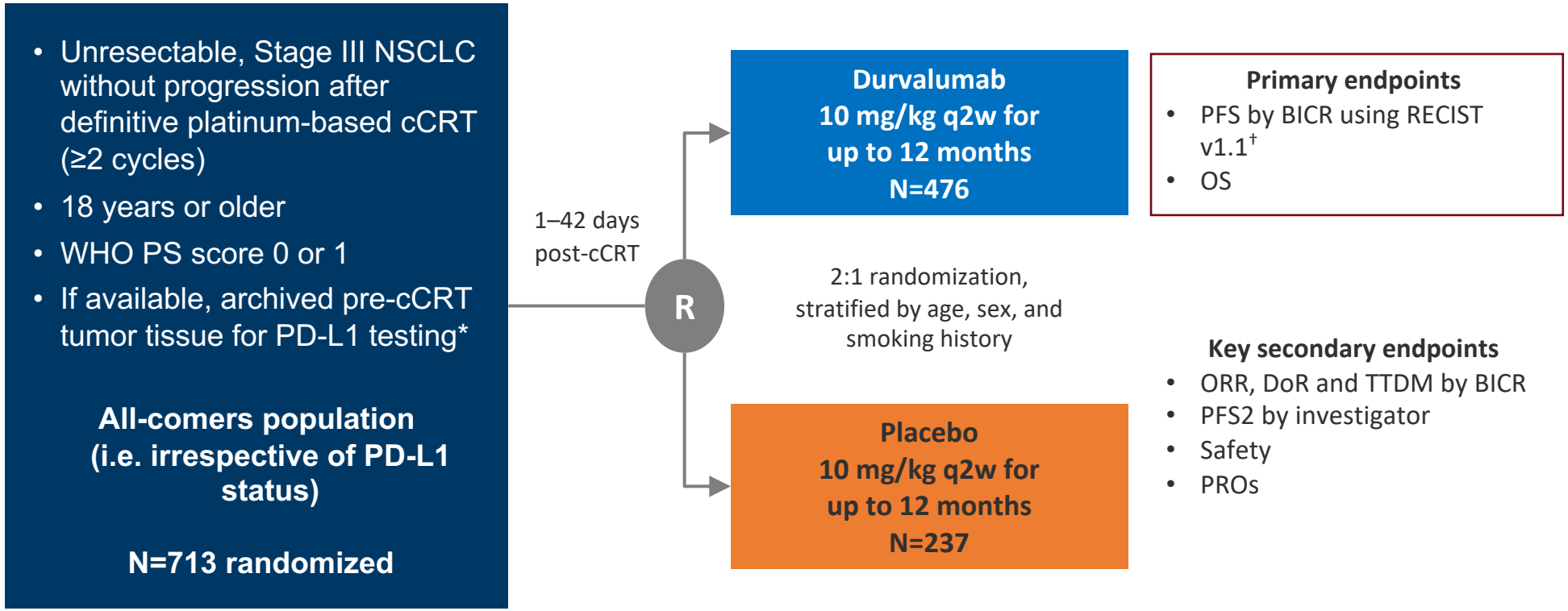


Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

PACIFIC: Study Design

Phase 3, Randomized, Double-blind, Placebo-controlled, Multicenter, International Study[1]



*Using the SP263 immunohistochemistry assay

†Defined as the time from randomization until the date of objective disease progression or death by any cause in the absence of progression.

BICR, blinded independent central review; cCRT, concurrent CRT; PFS2, time to second progression; RECIST, Response Evaluation Criteria in Solid Tumors; TTDM, time to death or distant metastasis. ClinicalTrials.gov number: NCT02125461

Antonio NEJM 2017; WCLC 2018 , ASCO2021

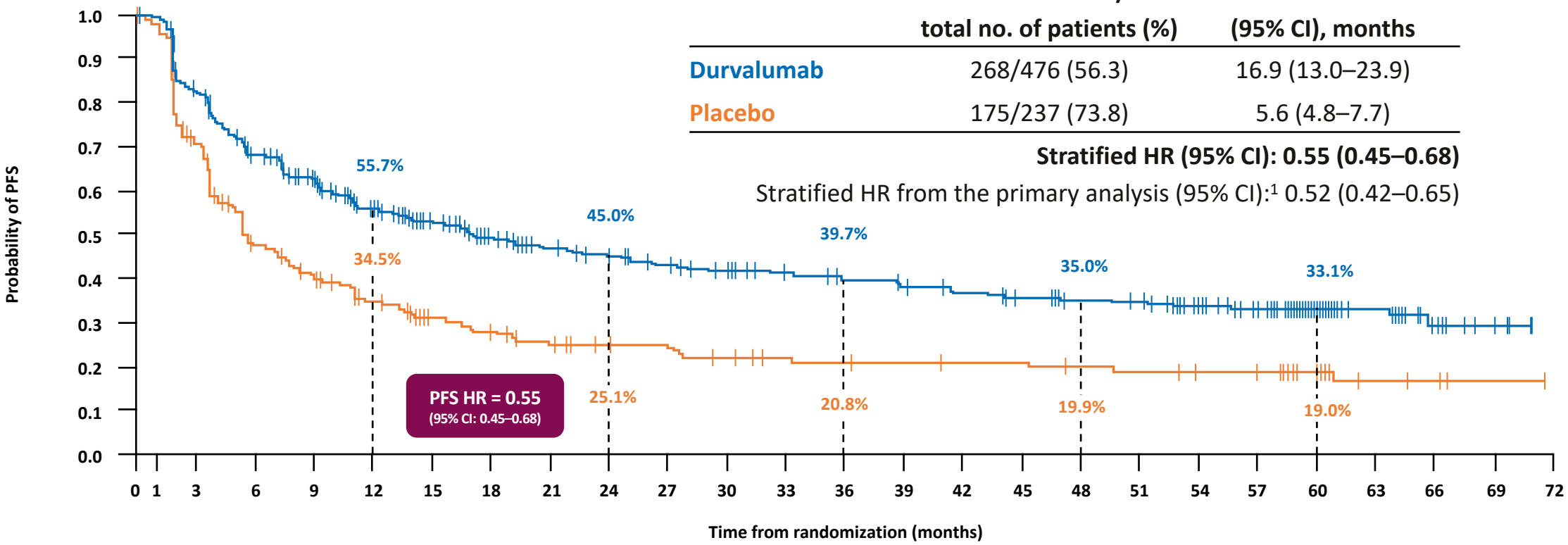
Courtesy of Heather Wakelee, MD

PACIFIC: ASCO 21 Updated PFS (ITT; BICR)

	No. of events/ total no. of patients (%)	Median PFS (95% CI), months
Durvalumab	268/476 (56.3)	16.9 (13.0–23.9)
Placebo	175/237 (73.8)	5.6 (4.8–7.7)

Stratified HR (95% CI): 0.55 (0.45–0.68)

Stratified HR from the primary analysis (95% CI):[1] 0.52 (0.42–0.65)



No. at risk

Durvalumab	47	37	30	26	21	19	16	14	13	12	11	11	10	97	92	85	81	78	67	57	34	22	11	5	0
Placebo	6	7	1	7	5	0	5	7	7	8	9	0	3	25	24	24	22	21	19	19	14	6	4	1	0
	23	16	10	87	68	56	48	41	37	36	30	27	26												
	7	4	5																						

Data cutoff: 11 January 2021 (median follow-up: all patients, 34.2 months [range, 0.2–74.7]; censored patients, 61.6 months [range, 0.4–74.7]).

1. Antonia SJ, et al. New Engl J Med 2017;377:1919–29

BICR, blinded independent central review; CI, confidence interval; HR, hazard ratio; ITT, intent-to-treat; PFS, progression-free survival

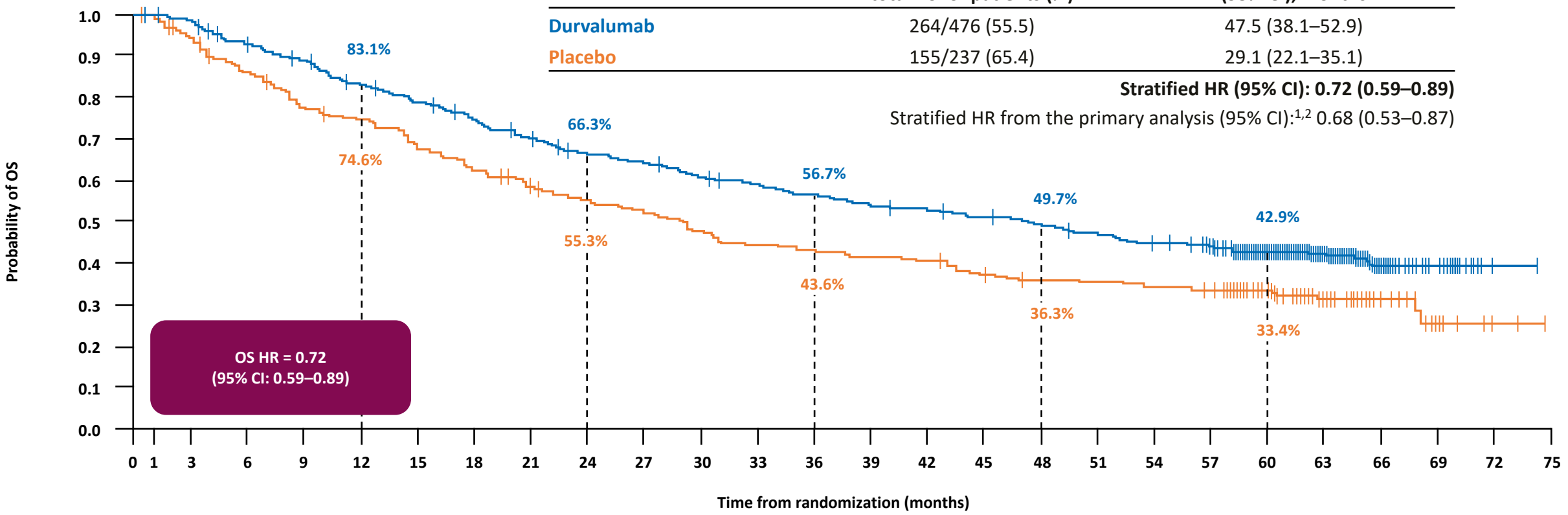
Courtesy of Heather Wakelee, MD

PACIFIC: ASCO21 Updated OS (ITT)

	No. of events/ total no. of patients (%)	Median OS (95% CI), months
Durvalumab	264/476 (55.5)	47.5 (38.1–52.9)
Placebo	155/237 (65.4)	29.1 (22.1–35.1)

Stratified HR (95% CI): 0.72 (0.59–0.89)

Stratified HR from the primary analysis (95% CI):[1,2] 0.68 (0.53–0.87)



No. at risk

Durvalumab	47	46	43	41	38	36	34	31	29	28	27	26	25	24	23	22	21	20	19	18	13	91	40	18	2	0
Placebo	6	4	1	4	5	4	3	9	8	9	3	4	2	1	6	7	8	7	6	3	4	33	16	7	2	0
	23	22	19	17	17	15	14	13	12	11	10	99	97	93	91	83	78	77	74	72	56					
	7	0	9	9	1	6	3	3	3	6	7															

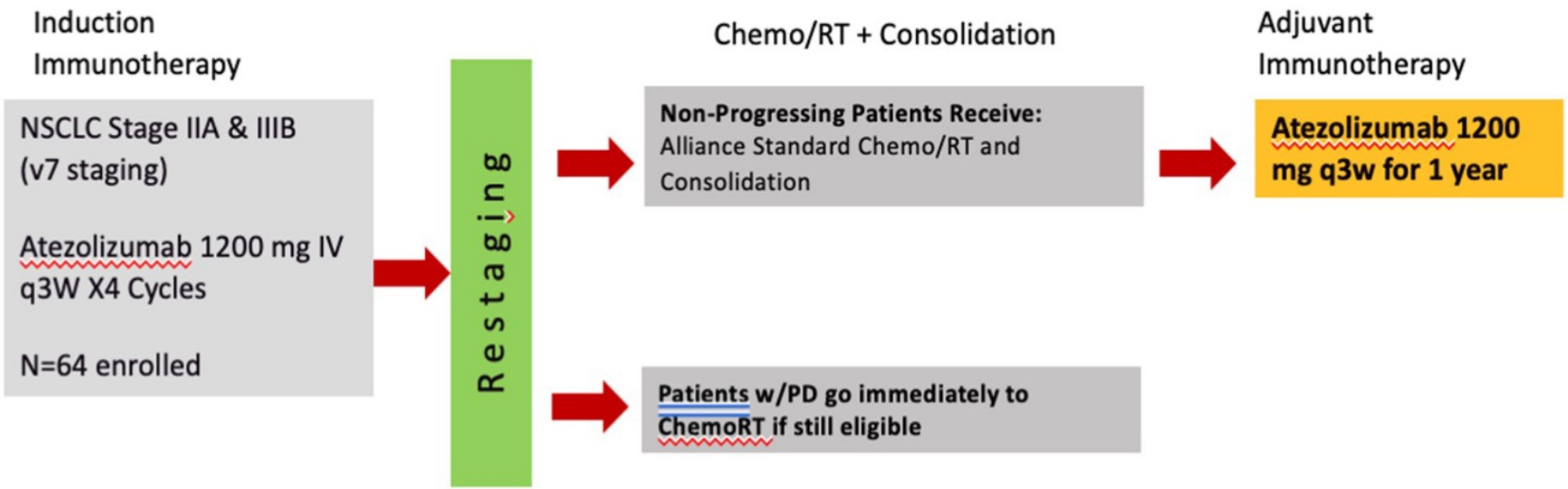
Courtesy of Heather Wakelee, MD

CI, confidence interval; HR, hazard ratio; ITT, intent-to-treat; OS, overall survival

Data cutoff: 11 January 2021 (median follow-up: all patients, 34.2 months [range, 0.2–74.7]; censored patients, 61.6 months [range, 0.4–74.7]).

1. Antonia SJ, et al. New Engl J Med 2018;379:2342–50; 2. European Medicines Agency. Durvalumab. Summary of product characteristics 2020. Available from: https://www.ema.europa.eu/en/documents/product-information/imfinzi-epar-product-information_en.pdf 5. [Accessed April 2021]

AFT-16 Phase II Trial



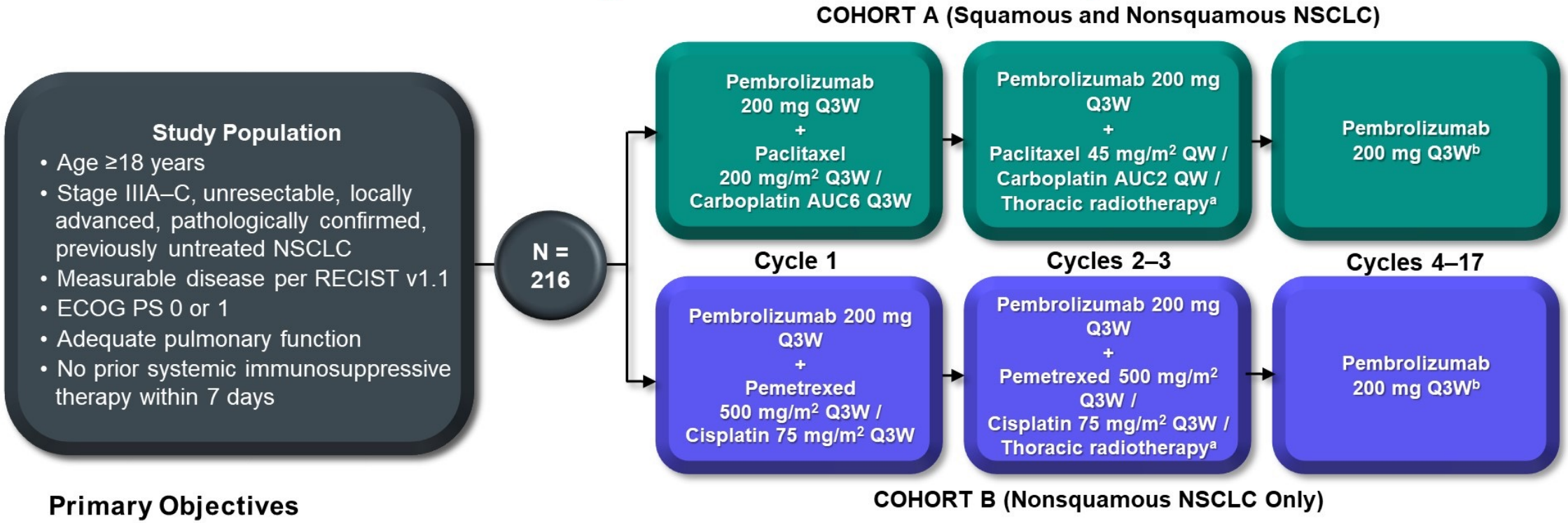
- Median PFS = 23.7 mo
- OS at 18 mo = 84%
- 1 pt each with Gr 3 pneumonitis/pneumonia/colitis, Gr 4 Guillain Barre
- PFS 12 and 18 mo from end CRT was 78% and 72% vs 56% and 44% in PACIFIC

Ross, ASCO 2021 abstr 8513

Courtesy of Heather Wakelee, MD

KEYNOTE-799 Phase II Trial

KEYNOTE-799 (NCT03631784)



Primary Objectives
- ORR per RECIST v1.1 by BICR
- Patients who develop grade ≥3 pneumonitis

Secondary Objectives
- PFS per RECIST v1.1 by BICR, OS, safety

Statistical Analysis Details
- Efficacy and safety assessed in all patients as-treated

AUC, area under the concentration-time curve; BICR, blinded independent central review.
[a]60 Gy in 30 daily 2-Gy fractions. [b]Treatment continued until cycle 17 was completed or until documented disease progression, unacceptable AEs, intercurrent illness that prevents further administration of treatment, or study withdrawal. Pembrolizumab therapy was discontinued permanently in patients who develop grade ≥3 or recurrent grade 2 pneumonitis.

Jabbour ASCO2021

Courtesy of Heather Wakelee, MD

KEYNOTE-799

Efficacy Outcomes

Total Population	Cohort A (Squamous and Nonsquamous) n = 112		Cohort B (Nonsquamous) n = 102	
ORR, % (95% CI)	**70.5 (61.2–78.8)**		**70.6 (60.7–79.2)**	
CR	4 (3.6)		5 (4.9)	
PR	75 (67.0)		67 (65.7)	
SD	20 (17.9)		23 (22.5)	
PD	1 (0.9)		0	
Not evaluable[a]/No assessment[b]	2 (1.8) / 10 (8.9)		0 / 7 (6.9)	
DOR, median (range),[c] mo	NR (1.7+ to 19.7+)		NR (1.8+ to 21.4+)	
DOR ≥12 mo,[c] %	79.7		75.6	
PFS,[c] median (95% CI), mo	NR (16.6–NR)		NR (NR–NR)	
12-mo PFS rate, %	67.1		71.6	
OS,[c] median (95% CI), mo	NR (NR–NR)		NR (21.9–NR)	
12-mo OS rate, %	81.3		87.0	
PD-L1 Status	**TPS <1% (n = 21)**	**TPS ≥1% (n = 66)**	**TPS <1% (n = 28)**	**TPS ≥1% (n = 40)**
ORR, n (%)	14 (66.7)	50 (75.8)	20 (71.4)	29 (72.5)
Histology	**Nonsquamous (n = 39)**	**Squamous (n = 73)**	**Nonsquamous (n = 102)**	**Squamous (n = 0)**
ORR, n (%)	27 (69.2)	52 (71.2)	72 (70.6)	NA

DOR, duration of response; NR, not reached; TPS, tumor proportion score. "+" indicates no PD by the time of last disease assessment.
[a]Postbaseline assessment available but not evaluable or CR/PR/SD <6 weeks from first dose. [b]No postbaseline assessment available for response evaluation. [c]Kaplan-Meier estimate.
Data cutoff date: October 28, 2020.

Courtesy of Heather Wakelee, MD

First-in-Class Registrational Clinical Trial of Sugemalimab Met its Primary Endpoint in Stage III NSCLC and Plans to Submit a New Drug Application

Press Release – May 28, 2021

"The registrational clinical trial (GEMSTONE-301 study) of the anti-PD-L1 monoclonal antibody sugemalimab in patients with stage III NSCLC met its primary endpoint at a planned interim analysis reviewed by the independent Data Monitoring Committee. The findings showed that sugemalimab as a consolidation therapy brought statistically significant and clinically meaningful improvement in the Blinded Independent Central Review assessed PFS in patients with locally advanced/unresectable NSCLC without disease progression after concurrent or sequential chemoradiotherapy. Investigator assessed PFS showed consistent results as those of the primary endpoint. Sugemalimab was well-tolerated with no new safety signals. Subgroup analyses demonstrated that sugemalimab was associated with clinical benefit regardless of whether patients received concurrent or sequential chemoradiotherapy prior to sugemalimab."

https://www.prnewswire.com/in/news-releases/cstone-announces-the-first-in-class-registrational-clinical-trial-of-sugemalimab-met-its-primary-endpoint-in-stage-iii-nsclc-and-plans-to-submit-a-new-drug-application-861921807.html

Agenda

Introduction: Immunotherapy in the (Neo) Adjuvant Setting

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Key relevant data sets

Module 1: First-Line Treatment of Metastatic NSCLC without a Targetable Tumor Mutation

- Dr Ibrahim: A 66-year-old woman with adenocarcinoma of the lung – PD-L1 of 0
- Dr Deutsch: A 63-year-old woman with metastatic squamous cell carcinoma of the lung – PD-L1 75%
- Dr Martins: A 65-year-old woman with metastatic adenocarcinoma of the lung and brain metastases – PD-L1 90%
- Dr Lobins: A 70-year-old man with recurrent metastatic adenocarcinoma of the lung – TP53 and KRAS G12A mutations
- Dr Flores: A 63-year-old man with metastatic adenocarcinoma of the lung and active hepatitis C
- Dr Ibrahim: A 73-year-old man with metastatic adenocarcinoma of the lung – PD-L1 1%
- Key relevant data sets

Module 2: Role of Immune Checkpoint Inhibition in the Management of Locally Advanced NSCLC

- Key relevant data sets

Module 3: Current Treatment Paradigm for Small Cell Lung Cancer (SCLC)

- Dr Gosain: A 59-year-old man with extensive-stage SCLC
- Dr Gupta: A 65-year-old woman with limited-stage SCLC
- Key relevant data sets

RTP
RESEARCH
TO PRACTICE

Case Presentation – Dr Gosain: A 59-year-old man with extensive-stage small cell lung cancer

Dr Rohit Gosain

- PMH: RCC with nephrectomy 2 years ago
- Presents with increased shortness of breath and CT scan reveals mediastinal mass with multiple liver and bone metastases
- Biopsy: small cell lung cancer
- Carboplatin/etoposide/atezolizumab → atezolizumab maintenance
  - Several scans concerning for disease progression during maintenance atezolizumab
- Lurbinectedin initiated x 6 months → stable disease
- Tolerating therapy well except for extreme fatigue and grade 1 peripheral neuropathy

Question

- If his disease were to progress, what treatment would you recommend for him given that he already progressed on atezolizumab previously?

RTP RESEARCH TO PRACTICE

Case Presentation – Dr Gupta: A 65-year-old woman with limited-stage small cell lung cancer

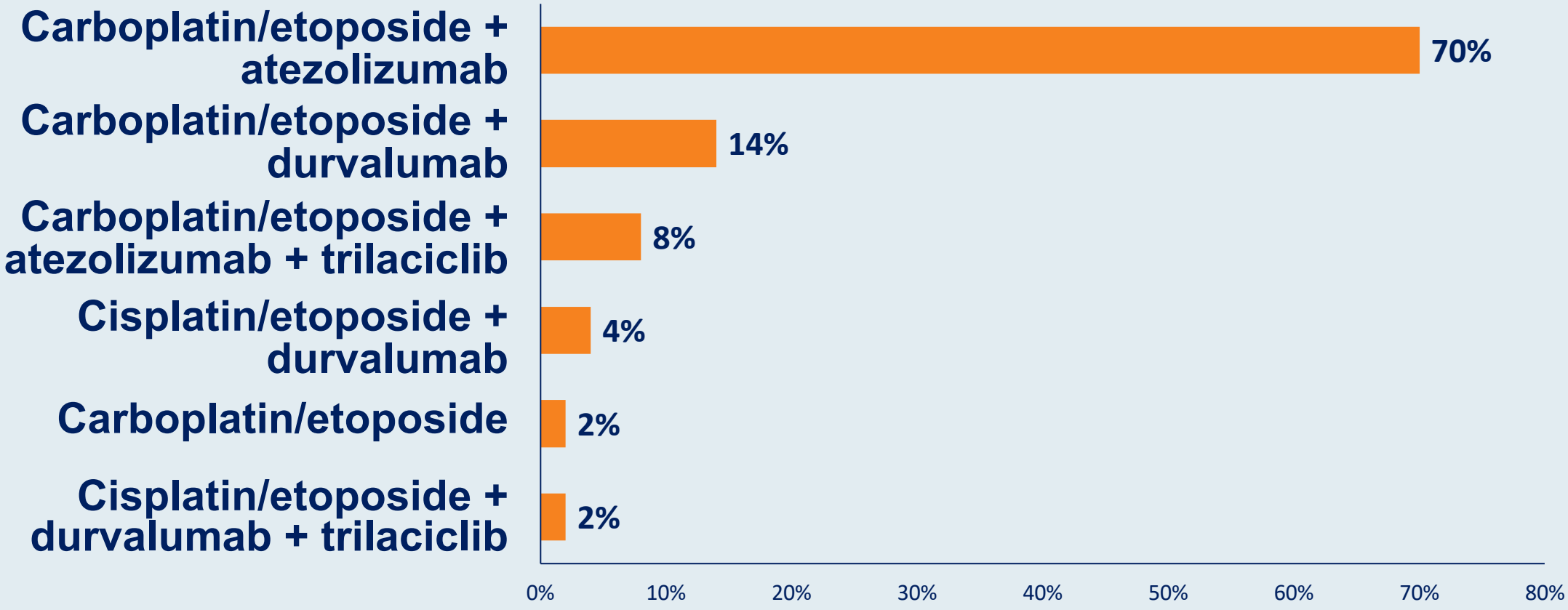
Dr Ranju Gupta

- September 2020: Diagnosed with limited stage small cell lung cancer, symptomatic with shortness of breath
- Cisplatin/etoposide with radiation added in second cycle of chemotherapy
- Admitted with dysphagia after 20/30 doses of RT
- Refused RT after that but completed 4 cycles of chemotherapy
- Recent scan shows she has responded well; currently being observed

Question

- What is the role of immunotherapy for the treatment of limited stage small cell lung cancer?

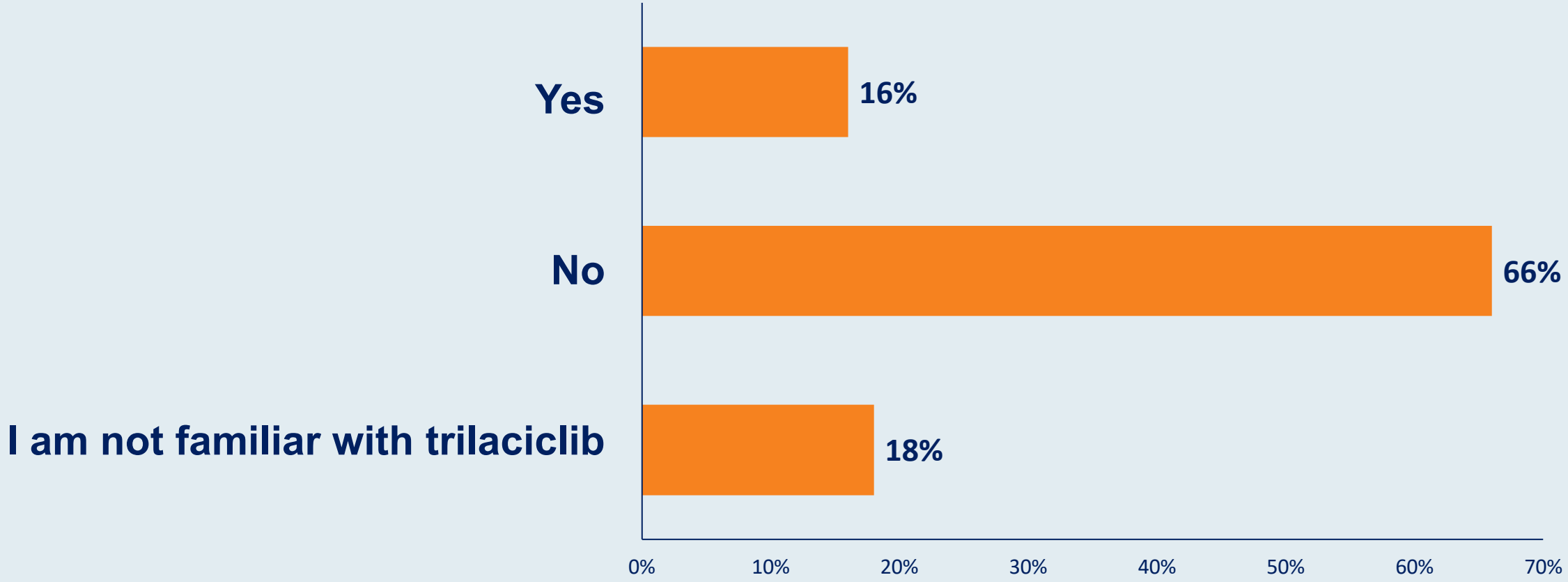
In general, what would be your preferred first-line treatment regimen for a 65-year-old patient with extensive-stage small cell lung cancer (SCLC)?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

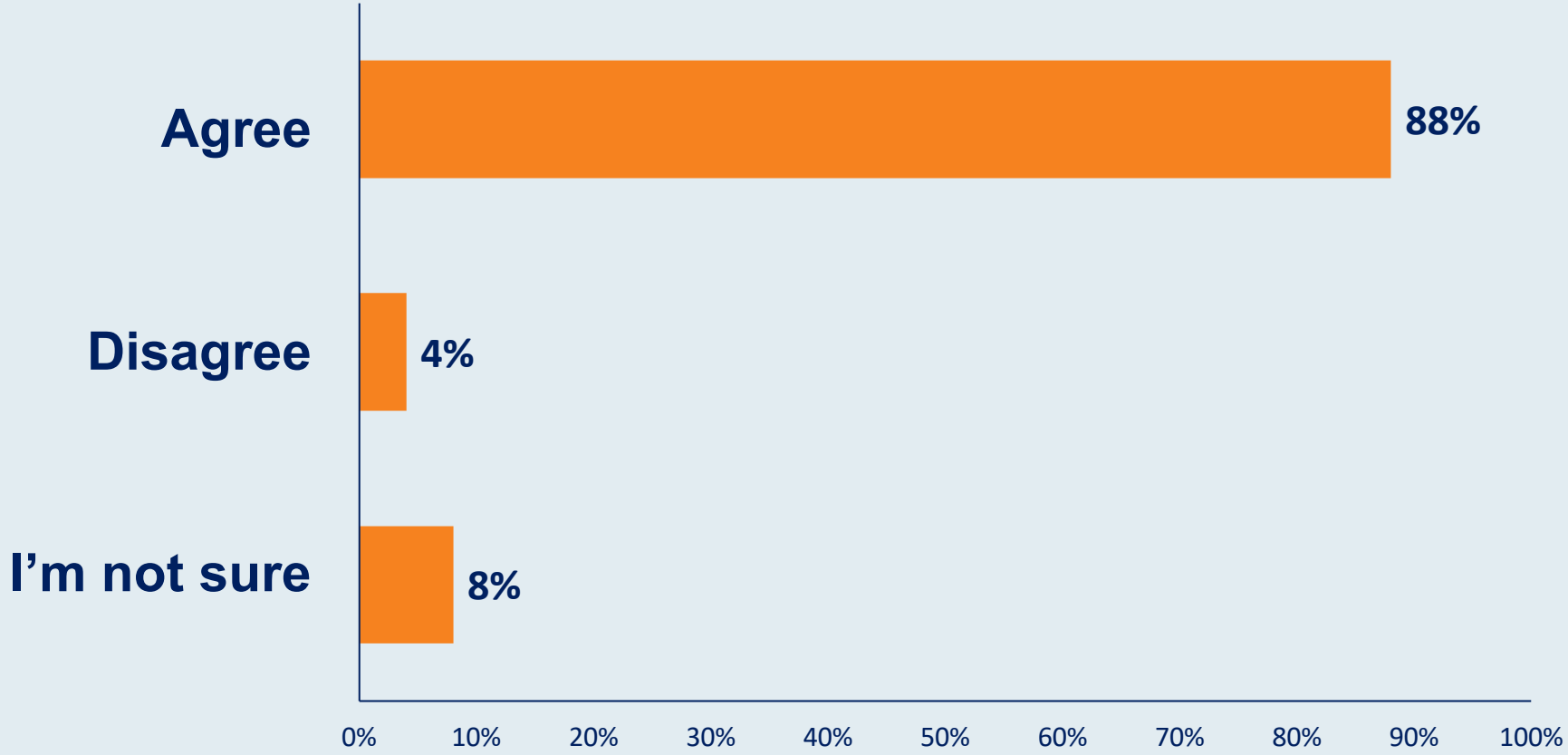
In general, do you administer trilaciclib to patients with extensive-stage SCLC who are receiving platinum/etoposide- or topotecan-containing regimens to reduce the incidence of chemotherapy-induced myelosuppression?



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

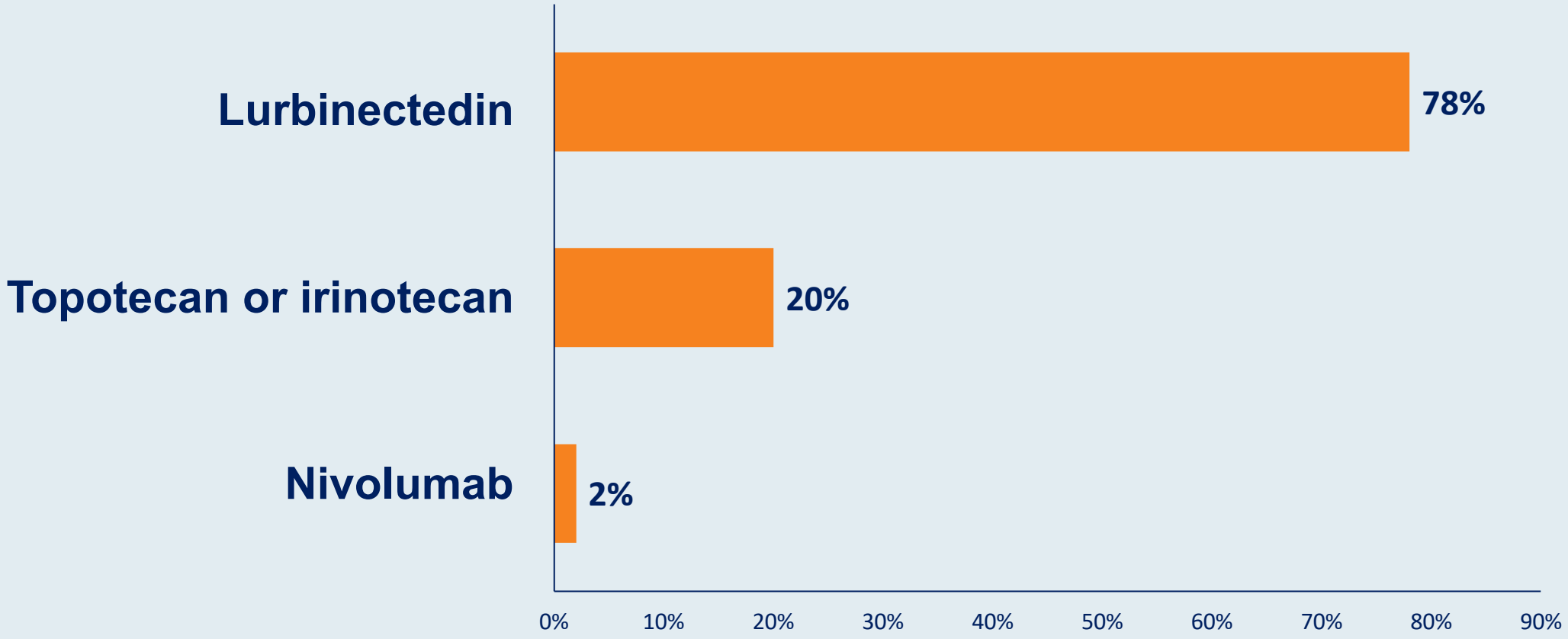
The benefits and risks of adding durvalumab to platinum/etoposide and of adding atezolizumab to carboplatin/etoposide are very similar, and from a clinical point of view selecting between the 2 regimens as first-line treatment for a patient with extensive-stage SCLC can be considered a “coin flip.”



Premeeting survey: July 2021

RTP RESEARCH TO PRACTICE

In general, what is your preferred second-line treatment for a patient with extensive-stage small cell cancer of the lung with metastases and disease progression on chemotherapy/atezolizumab?

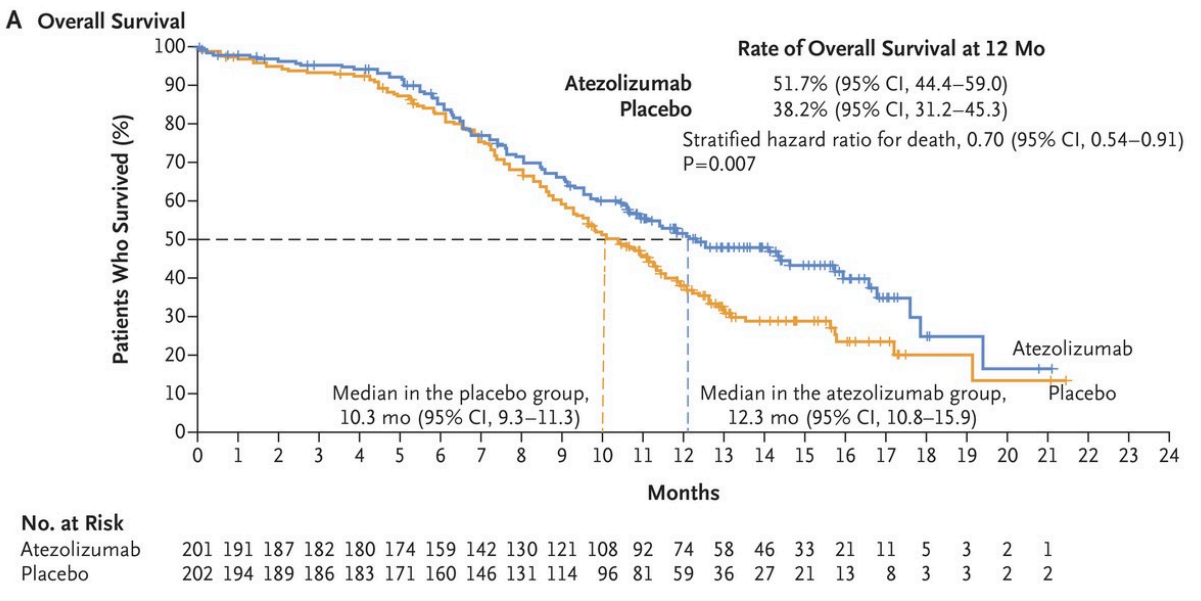


Premeeting survey: July 2021

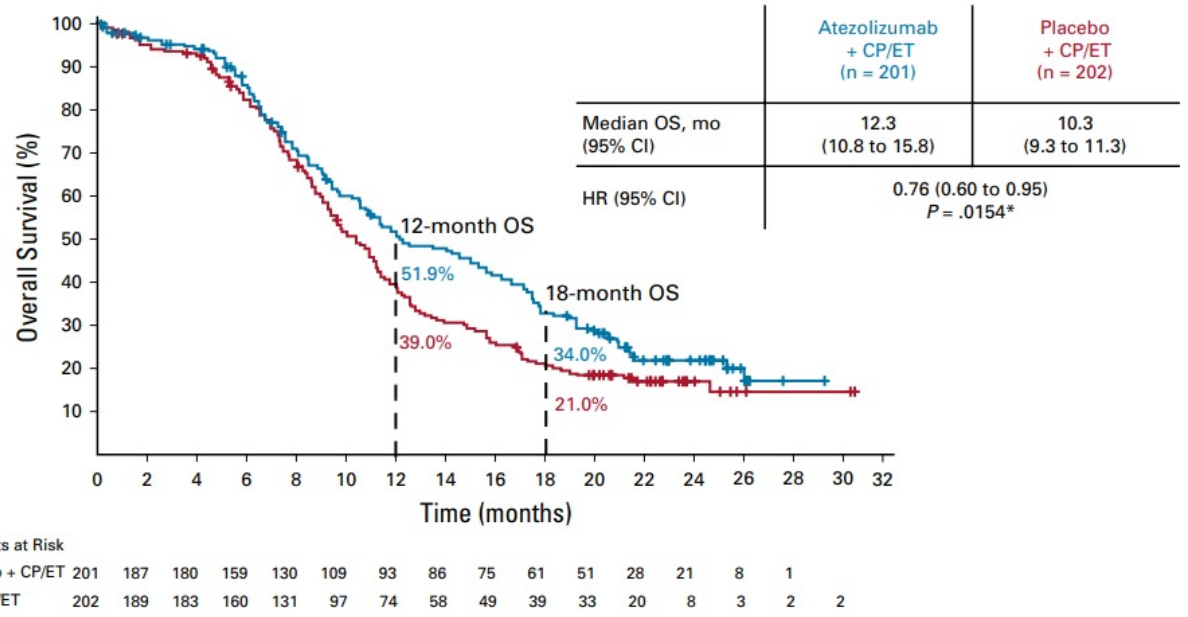
RTP RESEARCH TO PRACTICE

IMpower133 Update

Original Report



With 9 additional months of follow up



Courtesy of Mark Awad, MD, PhD

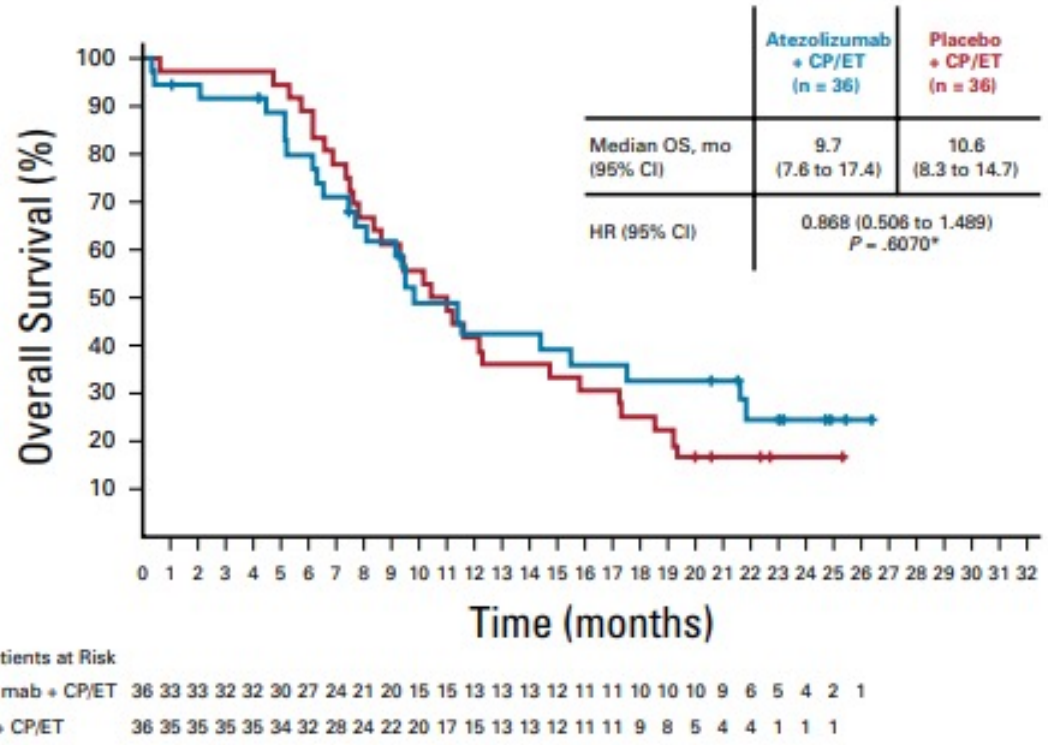
L Horn et al. *N Engl J Med* 2018;379:2220-2229.

Liu SV, et al, *J Clin Oncol*. 2021 Feb 20;39(6):619-630.

IMpower133 Update: PD-L1 Expression 1%

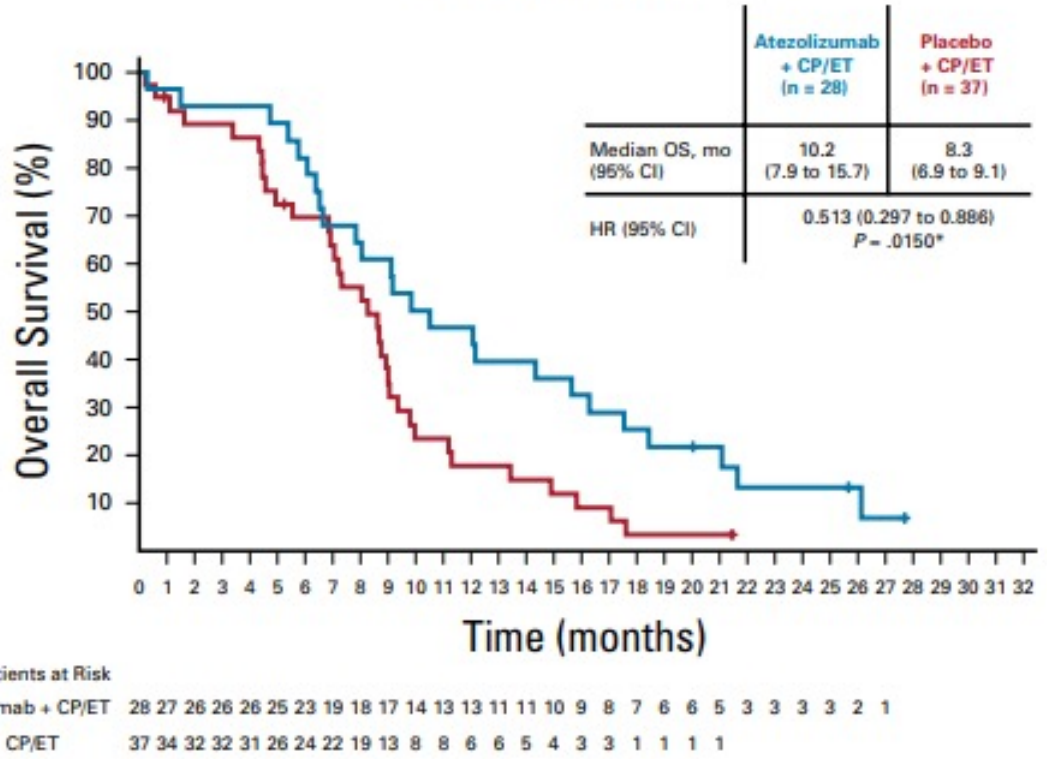
TC or IC

PD-L1 Expression ≥ 1%



TC or IC

PD-L1 Expression < 1%



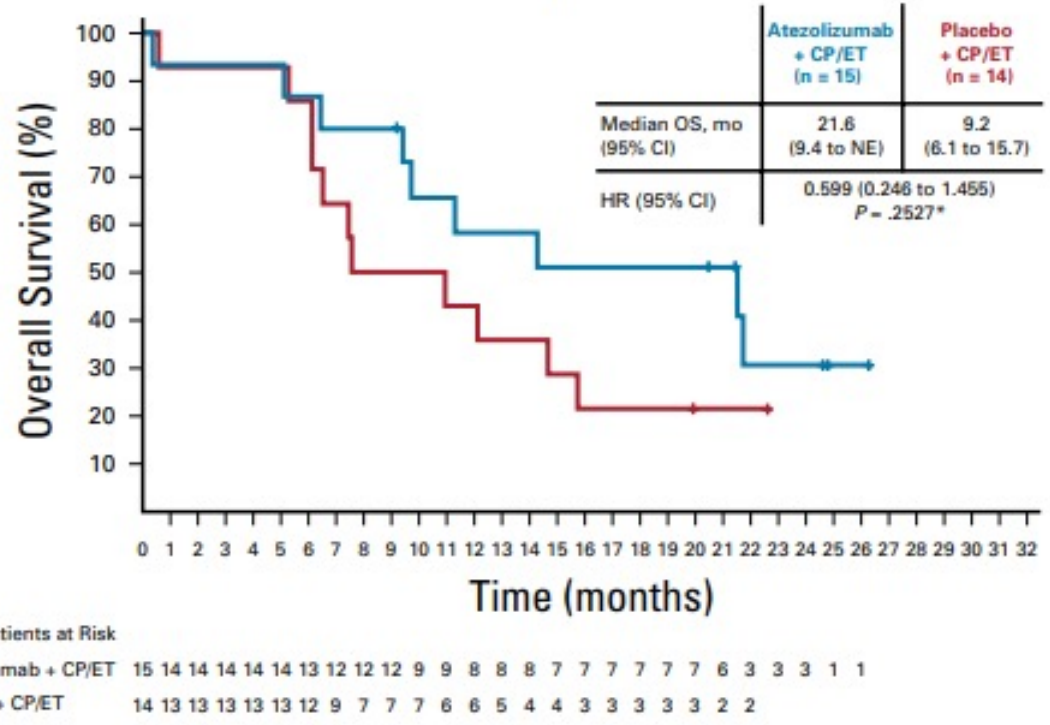
Courtesy of Mark Awad, MD, PhD

Liu SV, et al, *J Clin Oncol*. 2021 Feb 20;39(6):619-630.

IMpower133 Update: PD-L1 Expression 5%

TC or IC

PD-L1 Expression ≥ 5%

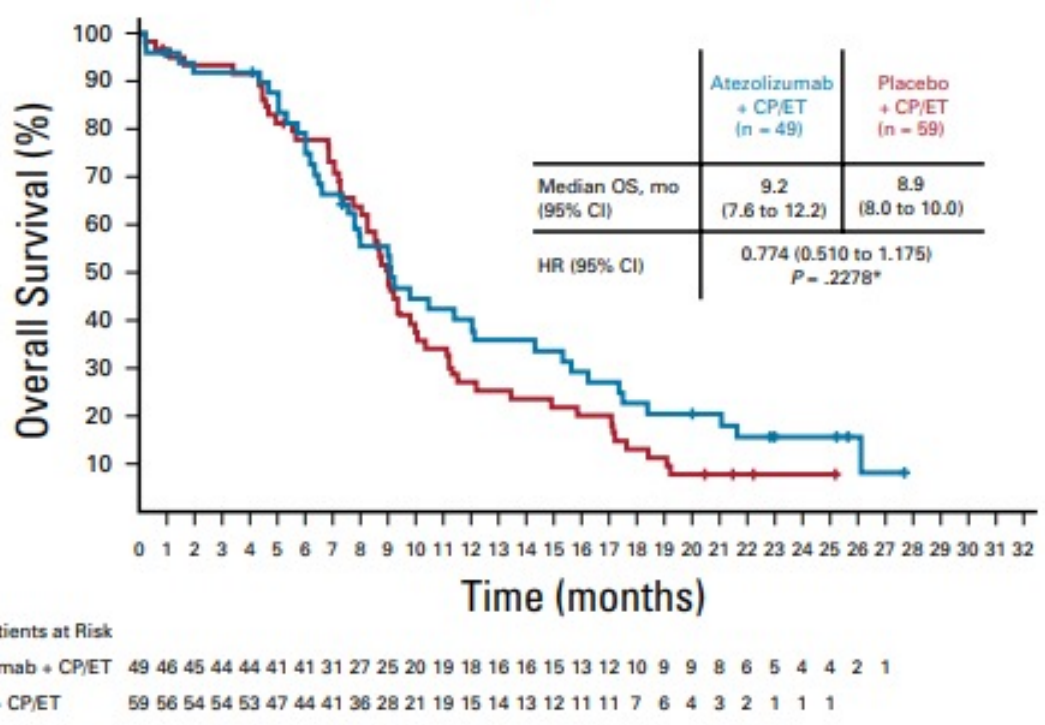


No. of Patients at Risk

Atezolizumab + CP/ET	15	14	14	14	14	14	13	12	12	12	9	9	8	8	8	7	7	7	7	7	7	6	3	3	3	1	1
Placebo + CP/ET	14	13	13	13	13	13	12	9	7	7	7	6	6	5	4	4	3	3	3	3	3	2	2				

TC or IC

PD-L1 Expression < 5%



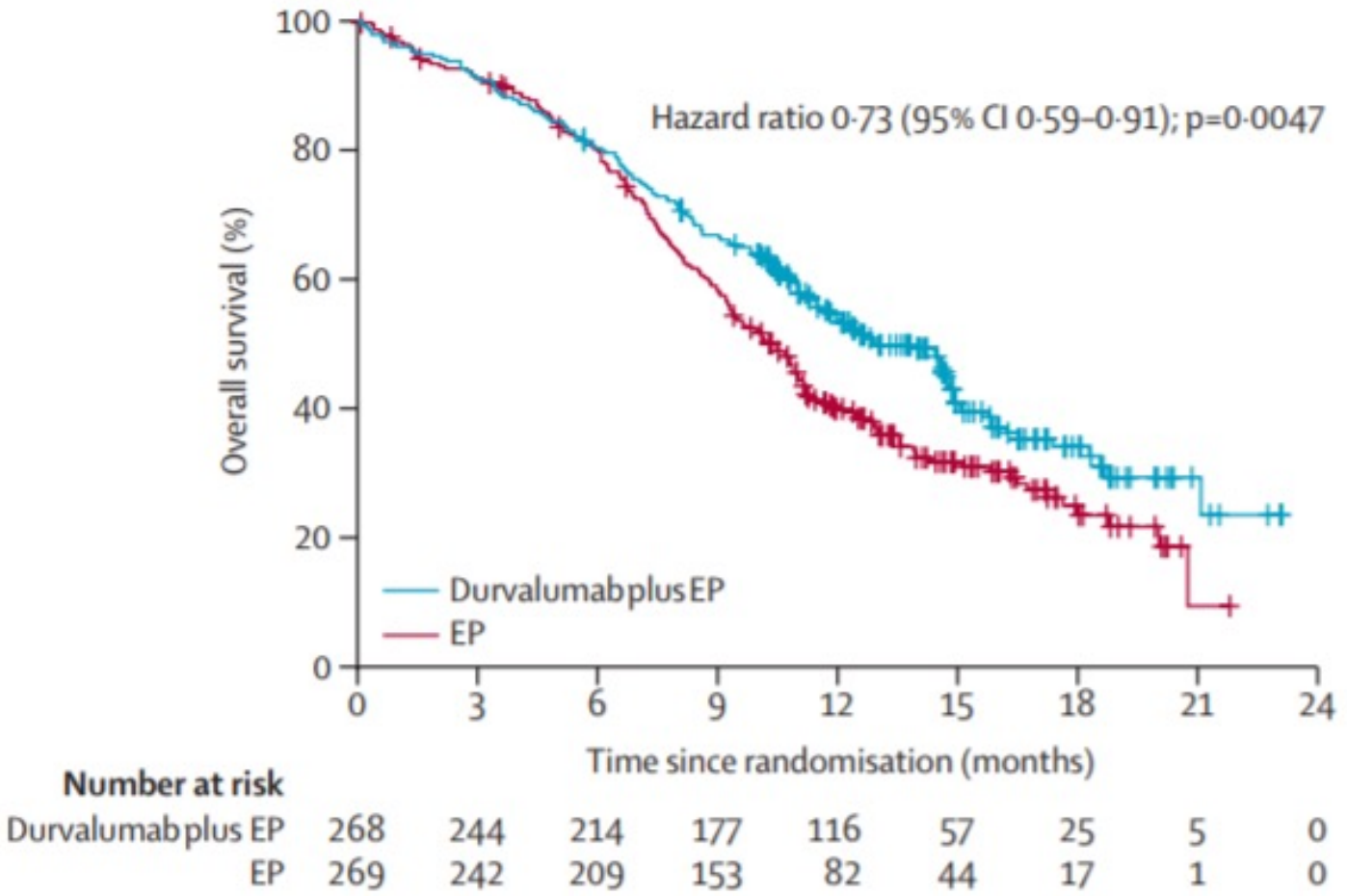
No. of Patients at Risk

Atezolizumab + CP/ET	49	46	45	44	44	41	41	31	27	25	20	19	18	16	16	15	13	12	10	9	9	8	6	5	4	4	2	1
Placebo + CP/ET	59	56	54	54	53	47	44	41	36	28	21	19	15	14	13	12	11	11	7	6	4	3	2	1	1	1		

Courtesy of Mark Awad, MD, PhD

Liu SV, et al, *J Clin Oncol*. 2021 Feb 20;39(6):619-630.

Phase III CASPIAN Trial: Overall Survival



Platinum/Etoposide + Durvalumab (PD-L1)

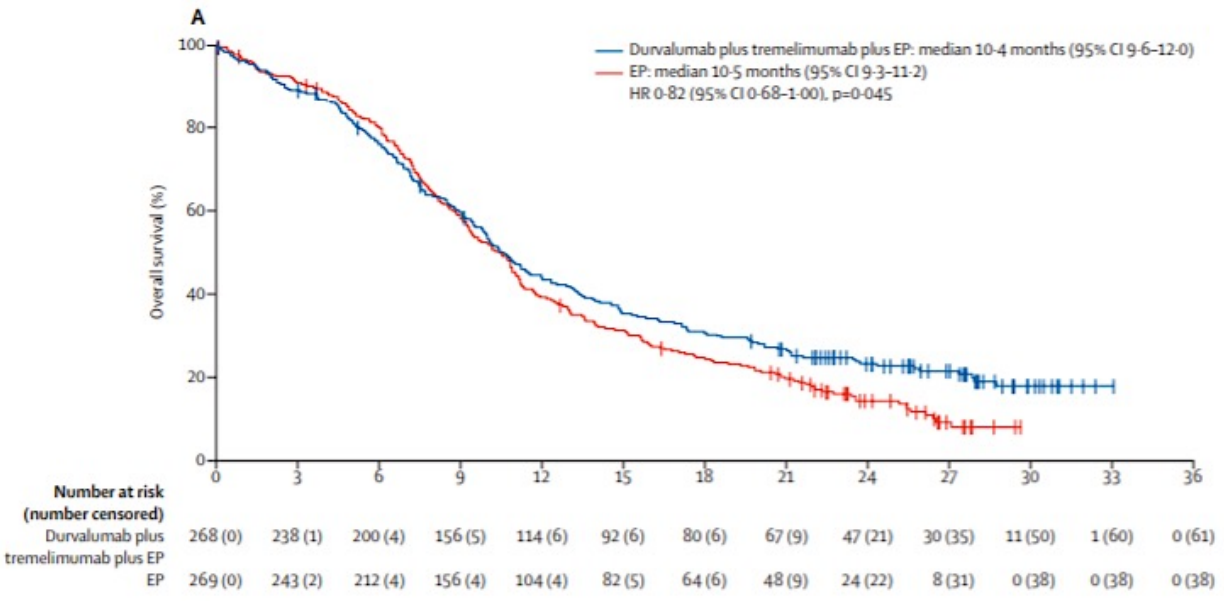
Does adding tremelimumab (CTLA-4) to EP + durvalumab improve outcomes?

Courtesy of Mark Awad, MD, PhD

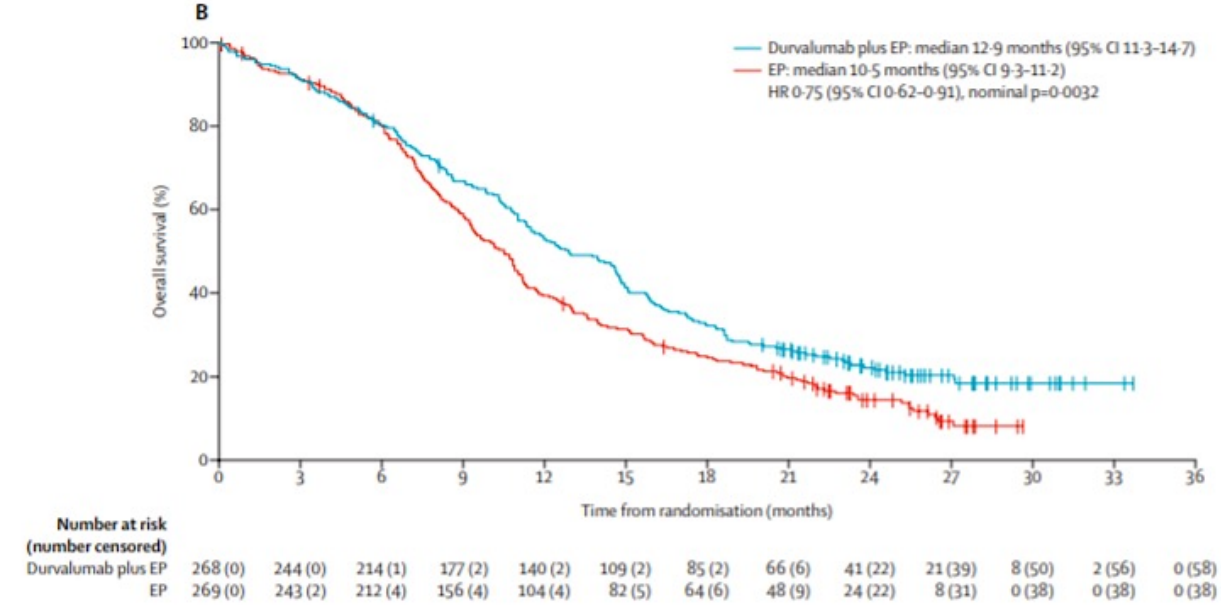
Paz-Ares L, et al, *Lancet*. 2019 Nov 23;394(10212):1929-1939.

CASPIAN: Updated Overall Survival

EP + Durvalumab
+ Tremelimumab



EP + Durvalumab



Courtesy of Mark Awad, MD, PhD

Goldman JW, et al, *Lancet Oncol*. 2021 Jan;22(1):51-65.

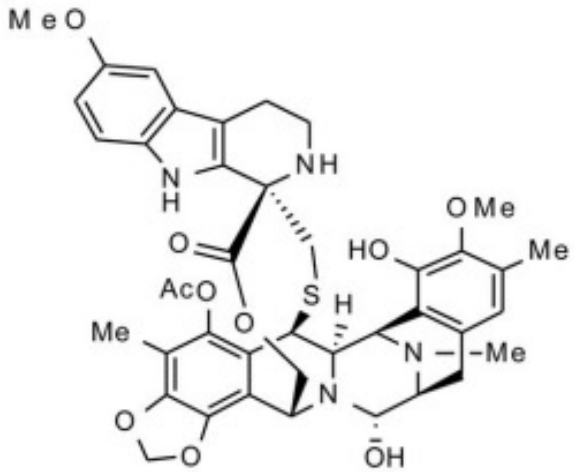
CASPIAN: Toxicities

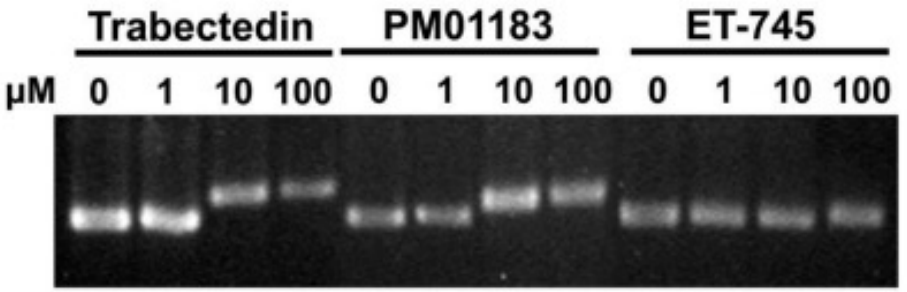
	Durvalumab plus tremelimumab plus platinum-etoposide (n=266)				Durvalumab plus platinum-etoposide (n=265)				Platinum-etoposide (n=266)			
	Grade 1–2	Grade 3	Grade 4	Grade 5	Grade 1–2	Grade 3	Grade 4	Grade 5	Grade 1–2	Grade 3	Grade 4	Grade 5
Any event	68 (26%)	112 (42%)	57 (21%)	27 (10%)*	89 (34%)	116 (44%)	42 (16%)	13 (5%)*	85 (32%)	107 (40%)	51 (19%)	15 (6%)*
Neutropenia	30 (11%)	52 (20%)	33 (12%)	0	47 (18%)	38 (14%)	26 (10%)	0	36 (14%)	58 (22%)	30 (11%)	0
Anaemia	66 (25%)	32 (12%)	2 (1%)	0	78 (29%)	24 (9%)	0	0	77 (29%)	47 (18%)	1 (<1%)	0
Nausea	81 (30%)	5 (2%)	0	0	88 (33%)	1 (<1%)	0	0	84 (32%)	5 (2%)	0	0
Alopecia	78 (29%)	1 (<1%)	0	0	81 (31%)	3 (1%)	0	0	89 (33%)	2 (1%)	0	0

Goldman JW, et al, *Lancet Oncol*. 2021 Jan;22(1):51-65.

Lurbinectedin

- Synthetic alkaloid (PM01183)
- Structurally related to trabectedin (first isolated in an extract from a sea squirt Ecteinascidia turbinata during plant & marine life screens in the 1960s)
- DNA minor groove binder in GC-rich areas of gene promoters, inhibits transcription in cancer cells and tumor-associated macrophages





Courtesy of Mark Awad, MD, PhD

Leal JFM, et al, *Br J Pharmacol*. 2010 Nov;161(5):1099-110.
Li JW-H and Vederas JC, *Science*. 2009 Jul 10;325(5937):161-5.
Nunez GM, et al, *Mol Cancer Ther*. 2016 Oct;15(10):2399-2412.
Belgiovine C, et al, *Br J Cancer*. 2017 Aug 22;117(5):628-638.

Lurbinectedin: Efficacy

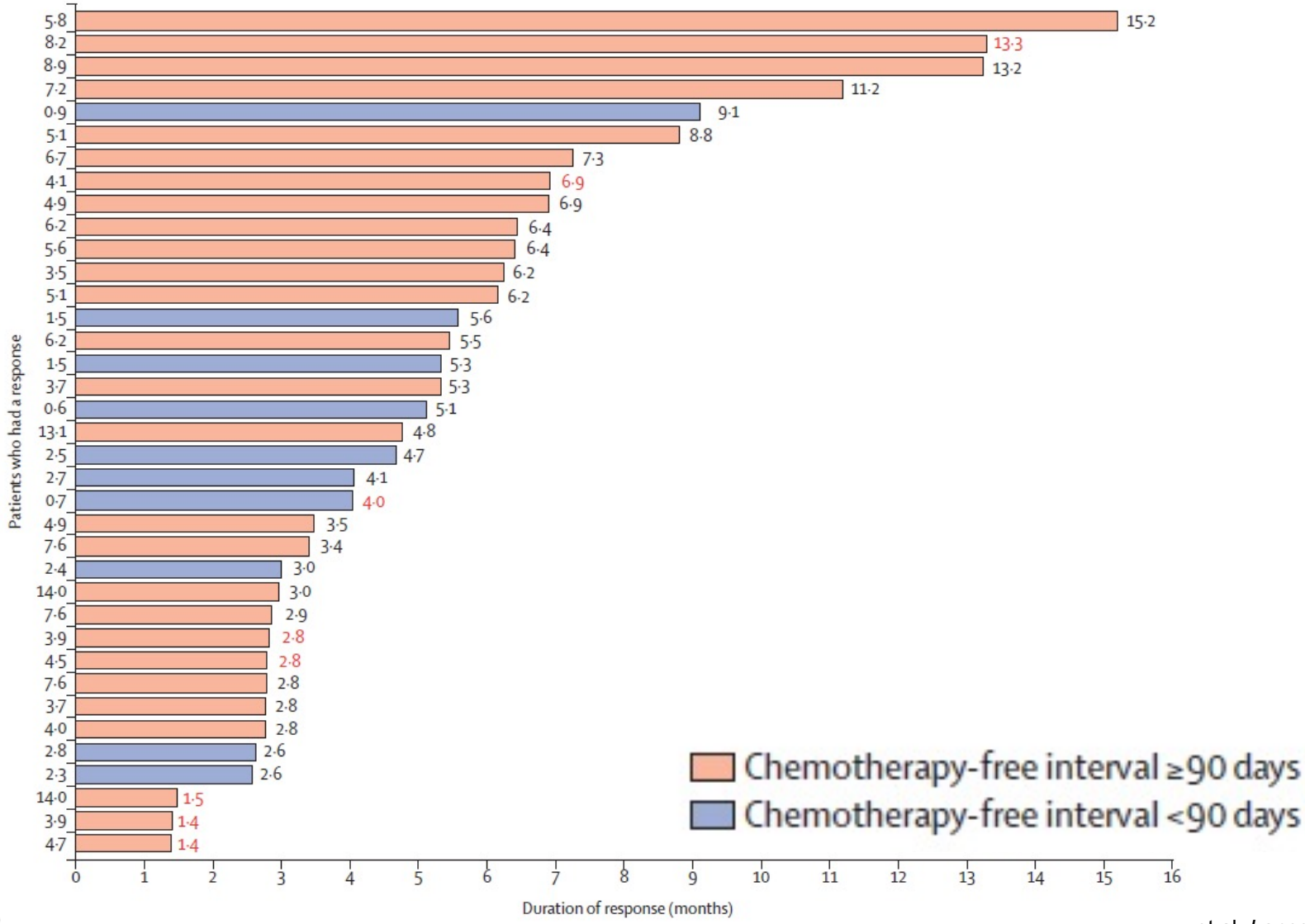
	All patients (n=105)	Chemotherapy-free interval <90 days (n=45)	Chemotherapy-free interval ≥90 days (n=60)
RECIST responses			
Complete response	0	0	0
Partial response	37 (35%)	10 (22%)	27 (45%)
Stable disease*	35 (33%)	13 (29%)	22 (37%)
Progressive disease	28 (27%)	18 (40%)	10 (17%)
Not evaluable†	5 (5%)	4 (9%)	1 (2%)
Overall response, % (95% CI)	35·2% (26·2–45·2)	22·2% (11·2–37·1)	45·0% (32·1–58·4)
Disease control, % (95% CI)‡	68·6% (58·8–77·3)	51·1% (35·8–66·3)	81·7% (69·6–90·5)
Duration of response			
Disease progression, relapse, or death events in responding patients, n/N (%)	29/37 (78%)	9/10 (90%)	20/27 (74%)
Median duration of response, months	5·3 (4·1–6·4)	4·7 (2·6–5·6)	6·2 (3·5–7·3)
Patients still responding at 6 months	43·0% (25·6–60·5)	11·7% (0·0–33·1)	55·3% (34·5–76·0)
Progression-free survival			
Progression-free survival events, n (%)	90 (86%)	41 (91%)	49 (82%)
Median progression-free survival, months (95% CI)	3·5 (2·6–4·3)	2·6 (1·3–3·9)	4·6 (2·8–6·5)
4-month progression-free survival (95%CI)	46·6% (36·7–56·5)	29·1% (15·3–42·8)	59·9% (47·1–72·7)
6-month progression-free survival (95% CI)	32·9% (23·3–42·5)	18·8% (6·8–30·9)	43·5% (30·1–56·9)
Overall survival			
Deaths	66 (63%)	37 (82%)	29 (48%)
Median overall survival, months (95% CI)	9·3 (6·3–11·8)	5·0 (4·1–6·3)	11·9 (9·7–16·2)
6-month overall survival (95%CI)	67·1% (57·6–76·7)	45·8% (30·4–61·3)	83·6% (73·7–93·5)
12-month overall survival (95% CI)	34·2% (23·2–45·1)	15·9% (3·6–28·2)	48·3% (32·5–64·1)

Courtesy of Mark Awad, MD, PhD

Dosing: 3.2 mg/m^2 every 3 weeks

Trigo J, et al, *Lancet Oncol*. 2020 May;21(5):645-654.

Lurbinectedin: Duration of Response



Courtesy of Mark Awad, MD, PhD

Trigo J, et al, *Lancet Oncol*. 2020 May;21(5):645-654.

Lurbinectedin: Adverse Events

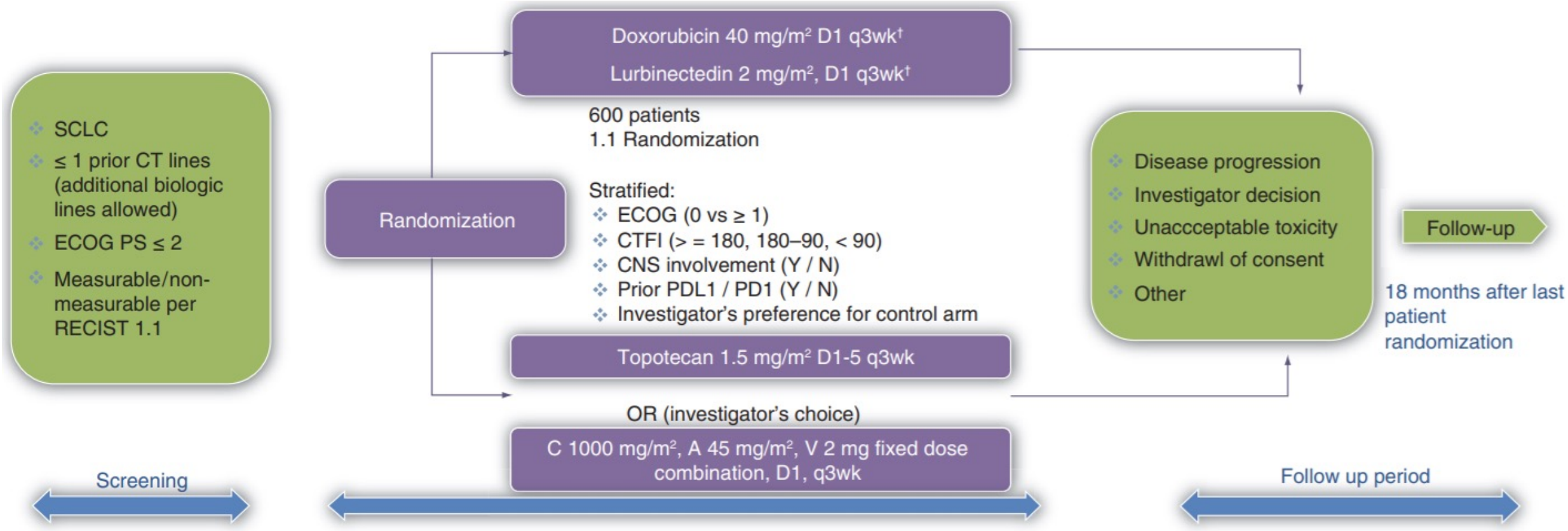
	Grade 1–2	Grade 3	Grade 4
Haematological abnormalities (regardless of relation to study drug)*			
Anaemia	91 (87%)	9 (9%)	0
Leucopenia	53 (50%)	20 (19%)	10 (10%)
Neutropenia	27 (26%)	22 (21%)	26 (25%)
Thrombocytopenia	39 (37%)	3 (3%)	4 (4%)
Biochemical abnormalities (regardless of relation to study drug)*			
Creatinine†	86/104 (83%)	0	0
Alanine aminotransferase	69/103 (67%)	5/103 (5%)	0
γ-glutamyl transferase	52/103 (50%)	13/103 (13%)	2/103 (2%)
Aspartate aminotransferase	44/103 (43%)	2/103 (2%)	0
Alkaline phosphatase	31/103 (30%)	3/103 (3%)	0
Treatment-related adverse events			
Fatigue	54 (51%)	7 (7%)	0
Nausea	34 (32%)	0	0
Decreased appetite	22 (21%)	0	0
Vomiting	19 (18%)	0	0
Diarrhoea	13 (14%)	1 (1%)	0
Febrile neutropenia	0	2 (2%)	3 (3%)
Pneumonia	0	2 (2%)	0
Skin ulcer	0	1 (1%)	0

Data are n (%) of patients. NCI-CTCAE=National Cancer Institute Common Terminology Criteria for Adverse Events version 4.0. *Based on all patients with laboratory data available. †Version 4.0 of NCI-CTCAE grades any creatinine increases from baseline as abnormalities, even if creatinine values remain within the normal range.

Courtesy of Mark Awad, MD, PhD

Trigo J, et al, *Lancet Oncol*. 2020 May;21(5):645-654.

ATLANTIS: Lurbinectedin + Doxorubicin in SCLC



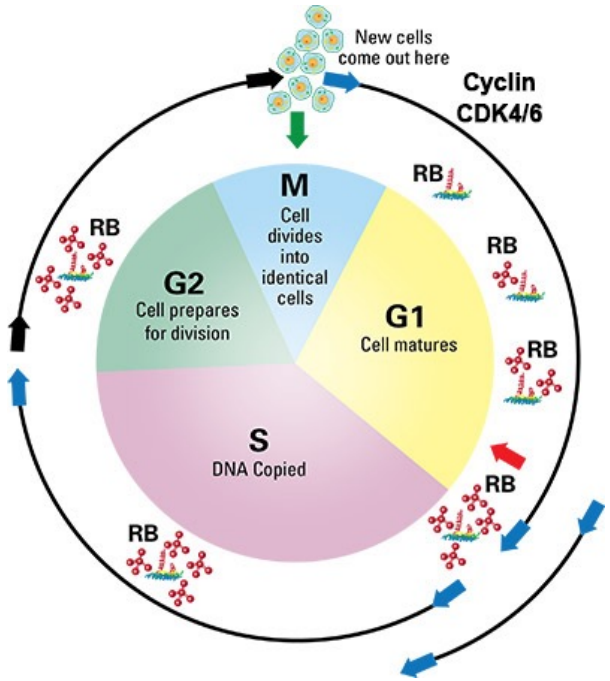
Press Release – Dec. 3, 2020: *The study did not meet the pre-specified criteria of significance for the primary endpoint of overall survival (OS) in the intent-to-treat (ITT) population comparing lurbinectedin in combination with doxorubicin to the control arm.*

Courtesy of Mark Awad, MD, PhD

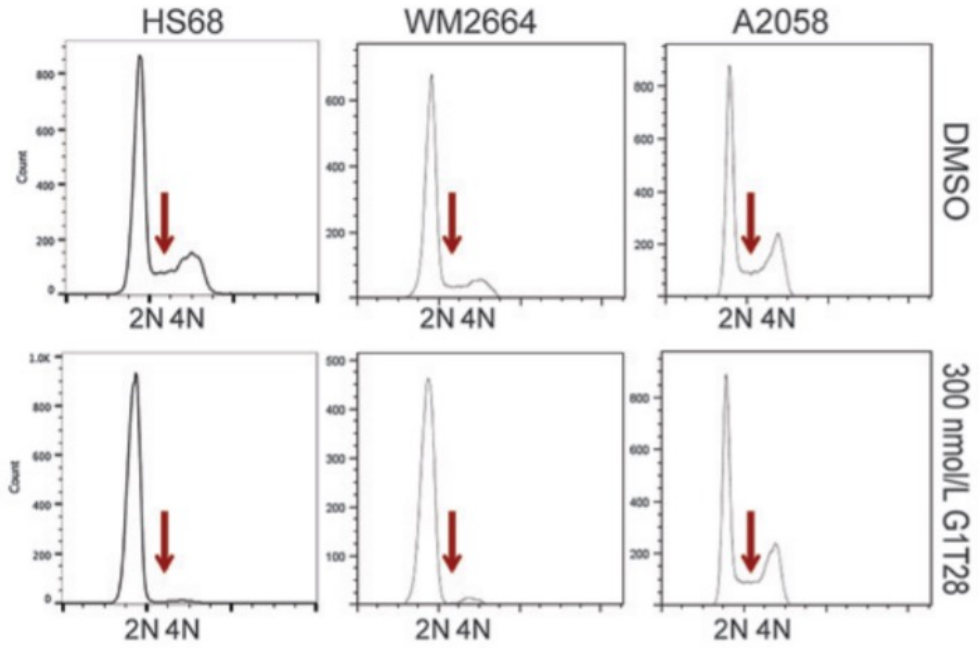
Farago AF, et al, *Future Oncol*. 2019 Jan;15(3):231-239.

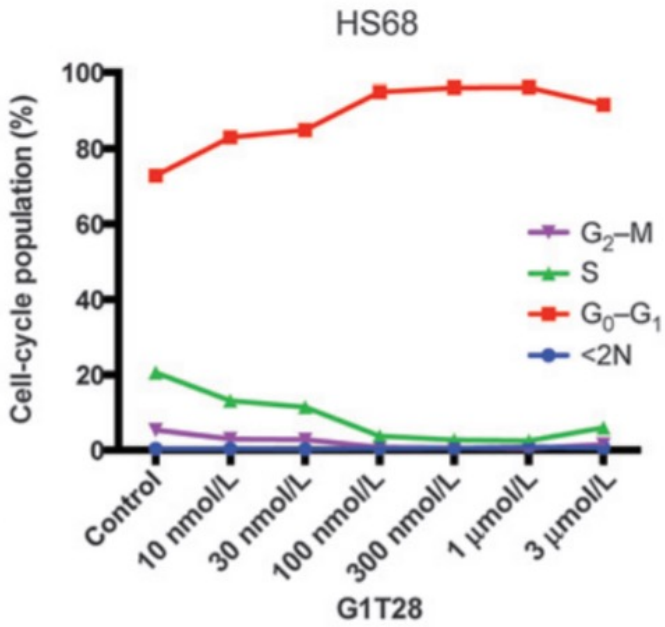
Trilaciclib to prevent myelosuppression in SCLC

CDK4/6 inhibitors (G1T28) transiently maintain G1 cell cycle arrest of hematopoietic stem and progenitor cells.



CDK4/6-dependent cell lines



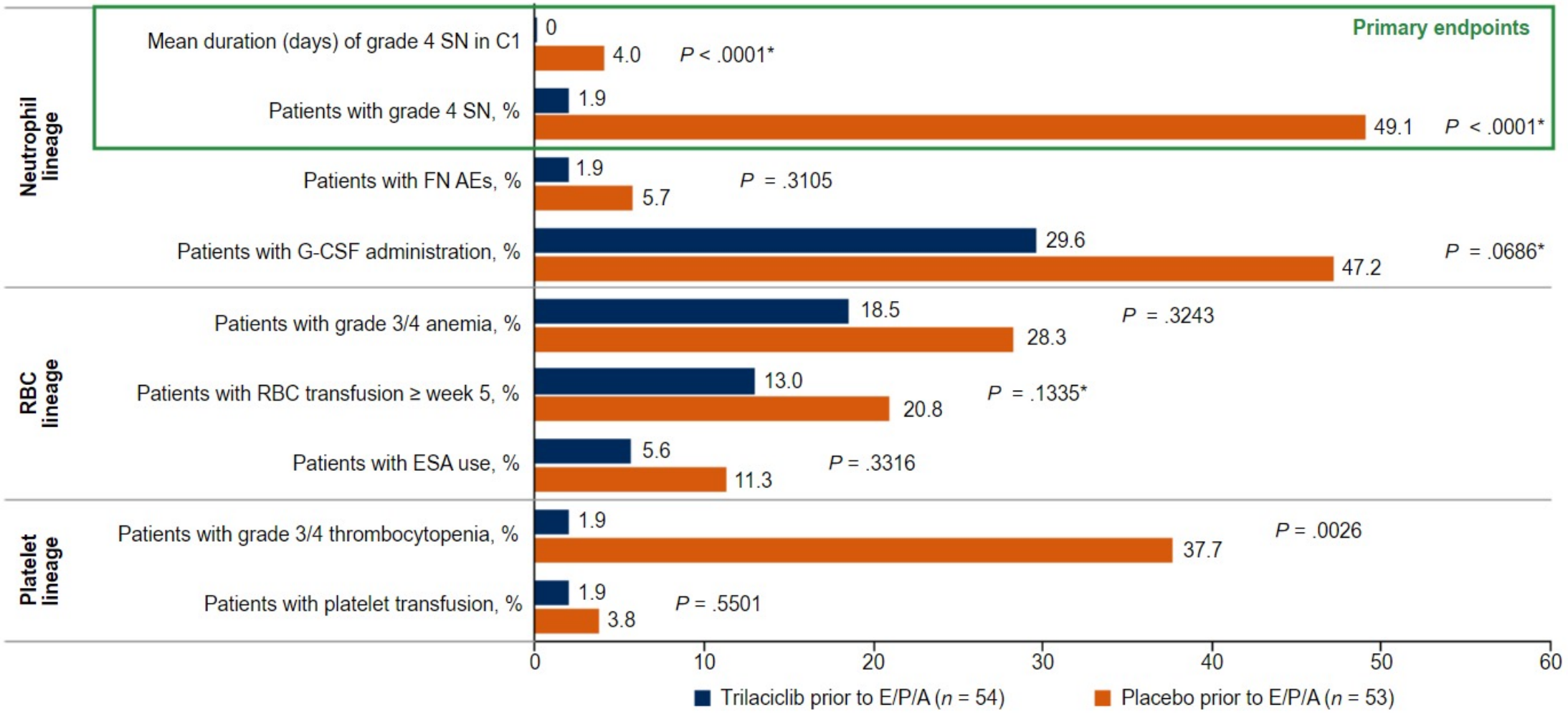


Courtesy of Mark Awad, MD, PhD

https://www.dana-farber.org/newsroom/publications/paths-of-progress-2019/wrench-in-the-works/

Bisi JE, et al, *Mol Cancer Ther*. 2016 May;15(5):783-93.

Trilaciclib given before atezolizumab + EP in SCLC

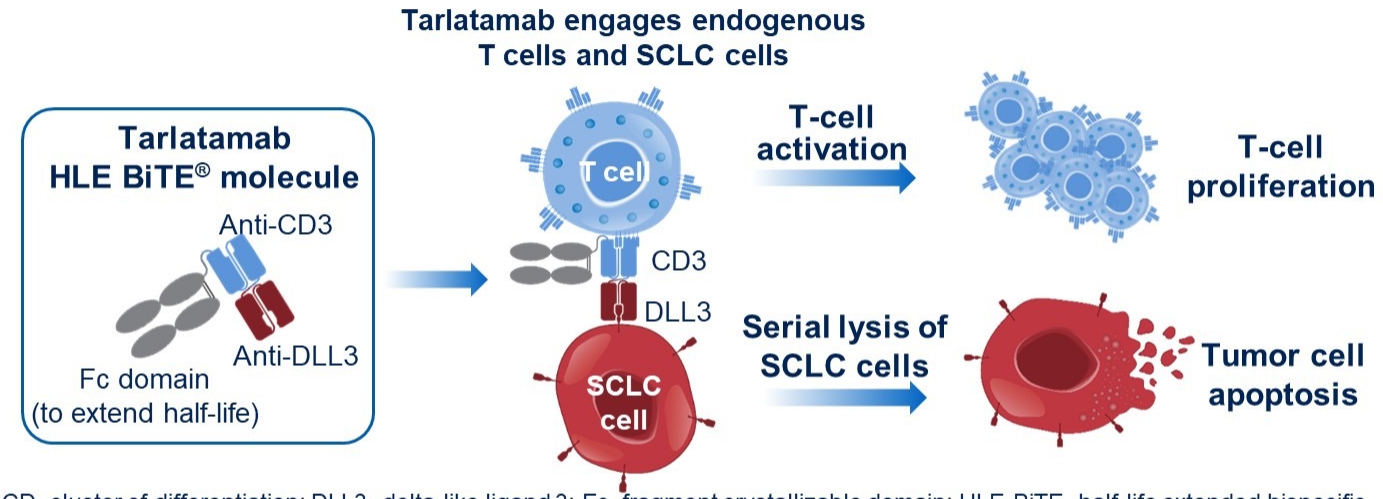


Courtesy of Mark Awad, MD, PhD

Daniel D, et al, *Int J Cancer.* 2020 Dec 21;148(10):2557-2570.

Novel strategies for SCLC

Tarlatamab: A Half-life Extended Bispecific T-cell Engager (HLE BiTE®) Targeting DLL3 for SCLC



CD, cluster of differentiation; DLL3, delta-like ligand 3; Fc, fragment crystallizable domain; HLE BiTE, half-life extended bispecific T-cell engager; SCLC, small cell lung cancer.

We report updated safety, efficacy, and pharmacokinetic data from 10 cohorts from the open-label, multi-center phase 1 study of tarlatamab (0.003 mg to 100 mg IV every 2 weeks, with or without step dose: data cutoff, 22 March 2021) in relapsed/refractory SCLC (NCT03319940)

1. Stieglmaier J, et al. *Expert Opin Biol Ther.* 2015;15:1093-1099.
2. Einsele H, et al. *Cancer.* 2020;126:3192-3201.

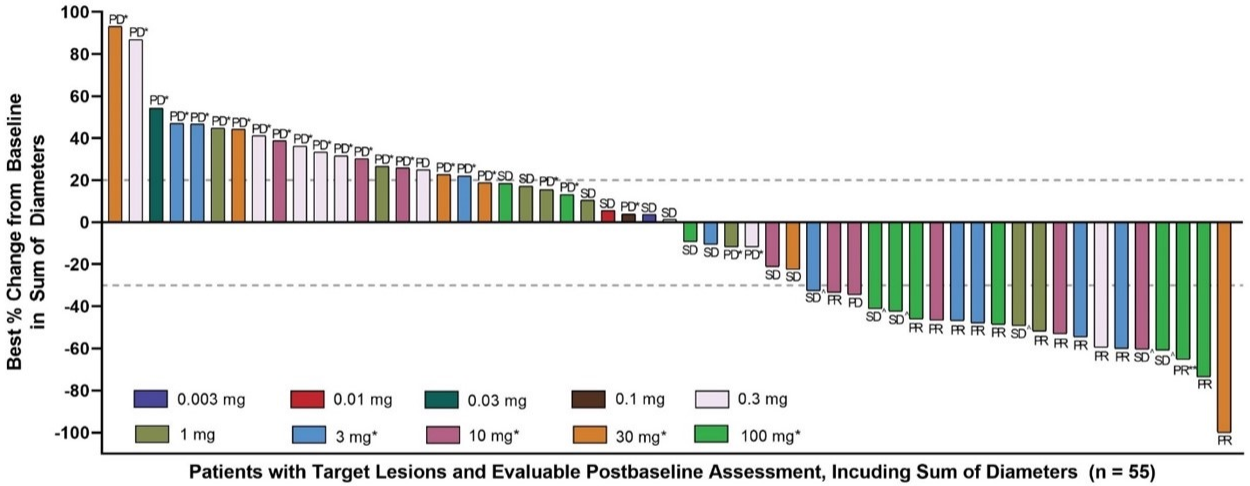
Presented By: **Taofeek K. Owonikoko**
towonik@emory.edu

2021 ASCO ANNUAL MEETING

Courtesy of Mark Awad, MD, PhD

Novel strategies for SCLC

Tarlatamab Demonstrates Anti-Tumor Activity in Patients with SCLC



Modified RECIST 1.1 Response, n (%)	Patients† (N = 64)
PR, confirmed	13 (20)
0.3 mg target dose	1/12 (8)
1 mg target dose	1/8 (13)
3 mg target dose	4/11 (36)
10 mg target dose	3/10 (30)
30 mg target dose	1/8 (13)
100 mg target dose	3/11 (27)
PR, unconfirmed	1 (2)
100 mg target dose	1/11 (9)
SD	17 (27)
Disease control rate, %	30 (47)

PD* indicates PD in post baseline scan and came off study without further confirmation scan. PR** indicates the PR is unconfirmed. SD^ indicates patients who had an initial PR, but did not have confirmation of PR on the subsequent scan. *Step dosing. †Includes patients who received ≥ 1 dose of tarlatamab and had at least 8 weeks follow-up. PD, progressive disease; PR, partial response; SD, stable disease.

Tumor shrinkage is observed across a range of tarlatamab doses

Presented By: **Taofeek K. Owonikoko**
towonik@emory.edu

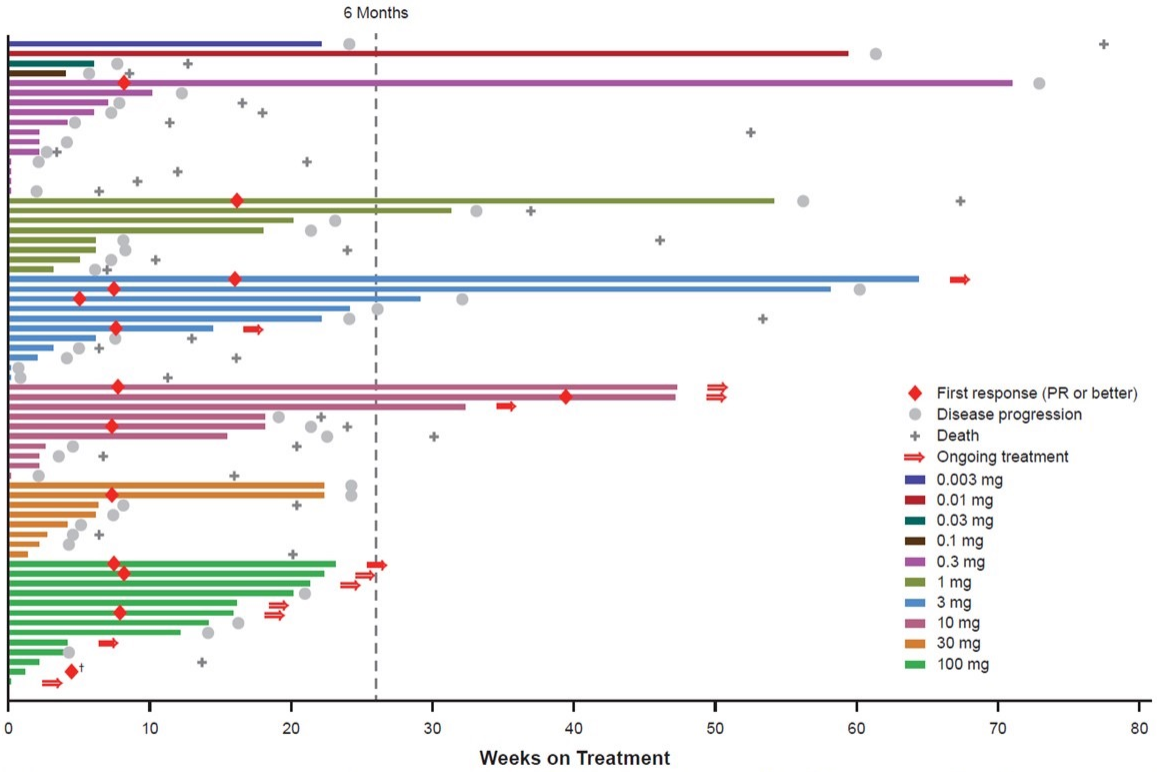
2021 ASCO ANNUAL MEETING

Courtesy of Mark Awad, MD, PhD

Novel strategies for SCLC

Tarlatamab Shows Durability of Response

- **For patients with confirmed PR (n = 13)**
  - **Median duration of response was 8.7 months**
  - Median time to response was 1.8 months
  - Median follow-up was 11.2 months
- **10/66 (15%) patients completed ≥ 6 months of treatment**
  - 7/13 patients with confirmed PR are still receiving therapy and have on-going response



Includes all patients who received ≥ 1 dose of AMG 757. *Step dosing. †No follow-up confirmation scan at cutoff.

Presented By: **Taofeek K. Owonikoko**
towonik@emory.edu

2021 ASCO ANNUAL MEETING

Courtesy of Mark Awad, MD, PhD

Novel strategies for SCLC

Adverse Events (AEs) Summary

Treatment-related AEs	Patients (N = 66)	
	All Grades, n (%)	Grade ≥ 3, n (%)*
Any treatment-related AE	56 (85)	18 (27)
Treatment-related AEs in ≥ 10% of patients		
CRS	29† (44)	1 (2)
Pyrexia	17 (26)	2 (3)
Fatigue	11 (17)	0 (0)
Asthenia	7 (11)	1 (2)
Dysgeusia	7 (11)	0 (0)
Nausea	7 (11)	0 (0)

- Treatment-related AEs resulted in discontinuation in 3 (5%) patients
  - DLT: grade 5 pneumonitis (1 [2%] patient; 0.3 mg); grade 3 encephalopathy (1 [2%] patient; 100 mg)
- CRS was typically reversible, manageable, and associated with fever, tachycardia, nausea, fatigue, and hypotension‡
  - One CRS event led to treatment discontinuation
  - CRS typically occurred in cycle 1 and did not recur in subsequent cycles
  - CRS management could include supportive care, corticosteroids, and/or anti-IL-6R

*Includes one patient with grade 5 pneumonitis. †Of the 29 patients, 21 had grade 1, 7 had grade 2, and 1 had grade 3 CRS. ‡Lee 2014 grading. AE, adverse event; CRS, cytokine release syndrome; DLT, dose limiting toxicity.

Tarlatamab monotherapy demonstrated a favorable safety profile

Presented By: **Taofeek K. Owonikoko**
towonik@emory.edu

2021 ASCO ANNUAL MEETING

Courtesy of Mark Awad, MD, PhD

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 2-3 business days.

RTP
RESEARCH
TO PRACTICE