

# Key Considerations in the Optimal Clinical Care of Patients with Small Cell Lung Cancer

Wednesday, February 9, 2022  
5:00 PM – 6:00 PM ET

## Faculty

Luis Paz-Ares, MD, PhD  
Jared Weiss, MD

## Moderator

Neil Love, MD

# Faculty



**Luis Paz-Ares, MD, PhD**

Chair of the Medical Oncology Department at the  
Hospital Universitario 12 de Octubre  
Associate Professor at the Universidad Complutense  
Head of the Lung Cancer Unit at the National Oncology  
Research Center  
Madrid, Spain



**Jared Weiss, MD**

Professor of Medicine  
UNC School of Medicine  
Lineberger Comprehensive Cancer Center  
Chapel Hill, North Carolina



**Moderator**

**Neil Love, MD**

Research To Practice  
Miami, Florida

## Commercial Support

This activity is supported by educational grants from AstraZeneca Pharmaceuticals LP, Genentech, a member of the Roche Group, G1 Therapeutics Inc and Jazz Pharmaceuticals Inc.

## Dr Love — Disclosures

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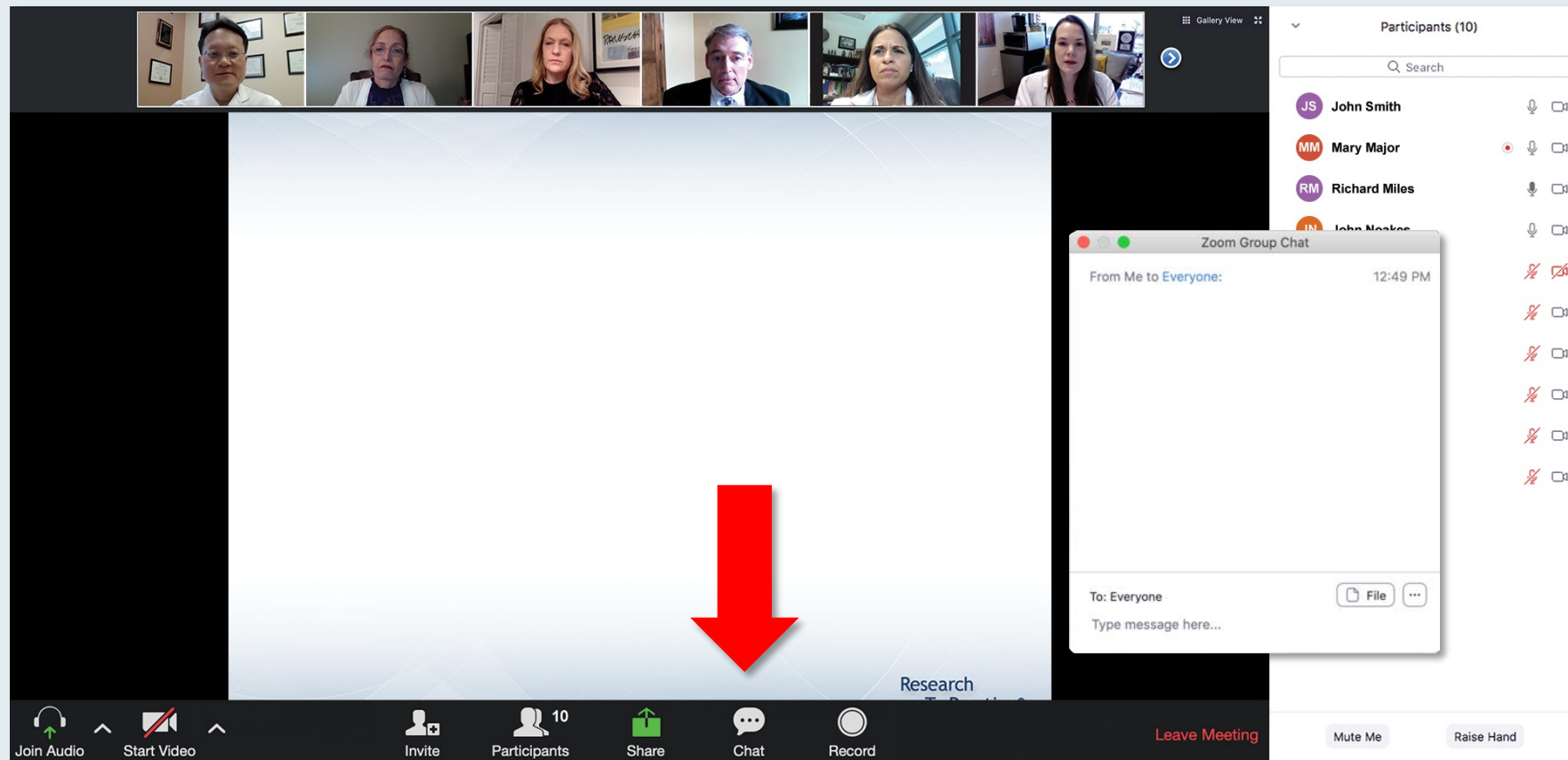
## Dr Paz-Ares — Disclosures

<b>Advisory Committee</b>	Amgen Inc, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, GlaxoSmithKline, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, Lilly, Merck Serono, Merck Sharp & Dohme Corp, Mirati Therapeutics, Novartis, Pfizer Inc, PharmaMar, Roche Laboratories Inc, Sanofi Genzyme, Takeda Pharmaceutical Company Limited
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## Dr Weiss — Disclosures

<b>Consulting Agreements</b>	AbbVie Inc, AstraZeneca Pharmaceuticals LP, Azitra, Boehringer Ingelheim Pharmaceuticals Inc, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab, Jazz Pharmaceuticals Inc, Lilly, Nanobiotix, Pfizer Inc, Regeneron Pharmaceuticals Inc, Saatchi & Saatchi Wellness, Sumitomo Dainippon Pharma Oncology Inc
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<b>Data and Safety Monitoring Board/Committee</b>	BeiGene Ltd, EMD Serono Inc, Jounce Therapeutics
<b>Ownership Interest</b>	Achilles Therapeutics, Lyell, Nuvalent, Vesselon (warrants)

# 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

## Expand chat submission box

The screenshot displays a Zoom meeting interface. At the top, a video bar shows participants: RTP Coordinat..., Kirsten Miller, RTP Mike Rivera, and Lisa Suarez. Below the video bar, a 'Recording...' indicator is visible. The main content area shows a presentation slide titled 'Meet The Professor Program Steering Committee'. The slide lists six members of the steering committee, each with a portrait photo and their name and affiliation. The chat window on the right is open, showing messages from 'Me to Panelists' and 'Me to Panelists and Attendees'. A red arrow points to the white line above the chat submission box, indicating where to drag to expand the box.

**Meet The Professor Program Steering Committee**

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

**Chat**

Me to Panelists 4:31 PM

Welcome and thank you for attending! To access the slides from today's session please use the link below.  
[http://images.researchtopractice.com/2021/Meetings/Slides/MTP\\_ToGo\\_CLL\\_2021\\_April1.pdf](http://images.researchtopractice.com/2021/Meetings/Slides/MTP_ToGo_CLL_2021_April1.pdf)

Me to Panelists and Attendees 4:32 PM

Welcome and thank you for attending! To access the slides from today's session please use the link below.  
[http://images.researchtopractice.com/2021/Meetings/Slides/MTP\\_ToGo\\_CLL\\_2021\\_April1.pdf](http://images.researchtopractice.com/2021/Meetings/Slides/MTP_ToGo_CLL_2021_April1.pdf)

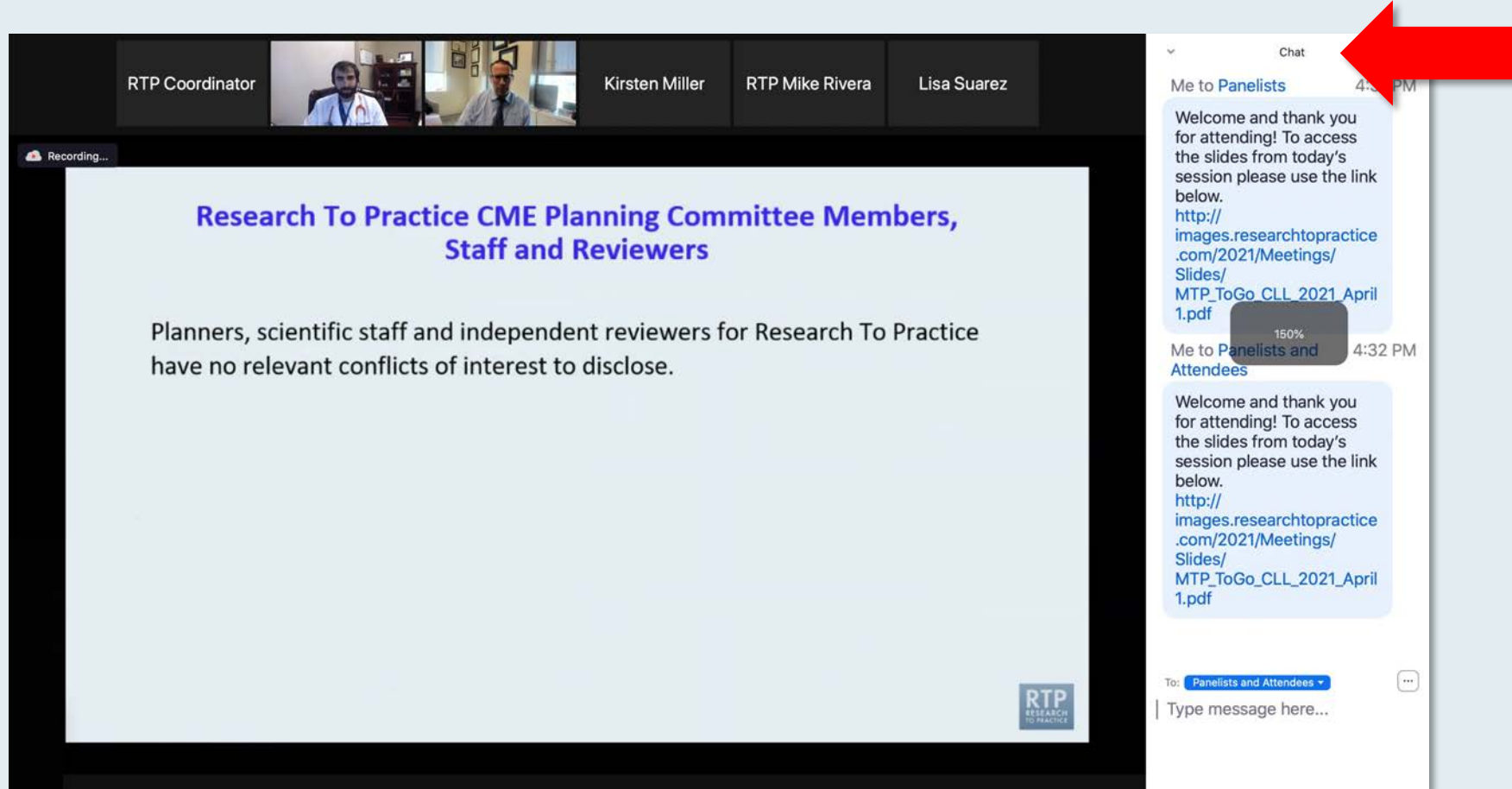
To: Panelists and Attendees ▼

Type message here...

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

## NSCLC with EGFR Exon 20 Insertion Mutations



DR GREGORY RIELY  
MEMORIAL SLOAN KETTERING CANCER CENTER



# **Recent Advances and Real-World Implications in Medical Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society**

**Saturday, February 12, 2022  
8:30 AM – 4:00 PM ET**



# Recent Advances and Real-World Implications in Medical Oncology: Agenda

- |                 |   |
|-----------------|---|
| <b>Module 1</b> | <b>Chronic Lymphocytic Leukemia and Lymphomas 8:35 AM – 9:40 AM</b> |
| <b>Module 2</b> | <b>Multiple Myeloma 9:40 AM – 10:45 AM</b>                          |
| <b>Module 3</b> | <b>Genitourinary Cancers 10:45 AM – 11:50 AM</b>                    |
| <b>Module 4</b> | <b>Breast Cancer 12:30 PM – 1:35 PM</b>                             |
| <b>Module 5</b> | <b>Gastrointestinal Cancers 1:35 PM – 2:40 PM</b>                   |
| <b>Module 6</b> | <b>Lung Cancer 2:40 PM – 3:45 PM</b>                                |

# ***Meet The Professor***

## **Current and Future Role of Immunotherapy in the Management of Lung Cancer**

**Tuesday, February 15, 2022  
5:00 PM – 6:00 PM ET**

### **Faculty**

**Charu Aggarwal, MD**

### **Moderator**

**Neil Love, MD**

# **Beyond the Guidelines: Clinical Investigator Perspectives on the Management of Prostate Cancer (Part 1 of a 2-Part Series)**

**Thursday, February 17, 2022**

**7:00 PM – 9:00 PM PT**

## **Faculty**

**Neeraj Agarwal, MD**

**Himisha Beltran, MD**

**Fred Saad, MD**

**A Oliver Sartor, MD**

## **Moderator**

**Alan H Bryce, MD**

# **Beyond the Guidelines: Clinical Investigator Perspectives on the Management of Bladder Cancer (Part 2 of a 2-Part Series)**

**Friday, February 18, 2022**

**6:30 PM – 8:00 PM PT**

## **Faculty**

**Shilpa Gupta, MD  
Daniel P Petrylak, MD  
Guru Sonpavde, MD**

## **Moderator**

**Sumanta Kumar Pal, MD**

# ***Meet The Professor***

## **Optimizing the Management of Acute Myeloid Leukemia**

**Thursday, February 24, 2022**

**5:00 PM – 6:00 PM ET**

### **Faculty**

**Amir Fathi, MD**

### **Moderator**

**Neil Love, MD**

# **The Great Adjuvant Debate — Exploring the Role of Novel Therapies in the Management of Localized Cancer**

**Monday, February 28, 2022**

**5:00 PM – 6:00 PM ET**

## **Faculty**

**Jeffrey S Weber, MD, PhD**

**Roy S Herbst, MD, PhD**

**Sara M Tolaney, MD, MPH**

## **Moderator**

**Neil Love, MD**

# ***Meet The Professor***

## **Optimizing the Clinical Management of Hodgkin and Non-Hodgkin Lymphomas**

**Tuesday, March 1, 2022  
5:00 PM – 6:00 PM ET**

**Faculty**

**Michael E Williams, MD, ScM**

**Moderator**

**Neil Love, MD**

***Thank you for joining us!***

***CME and MOC credit information will be emailed to each participant within 5 business days.***



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

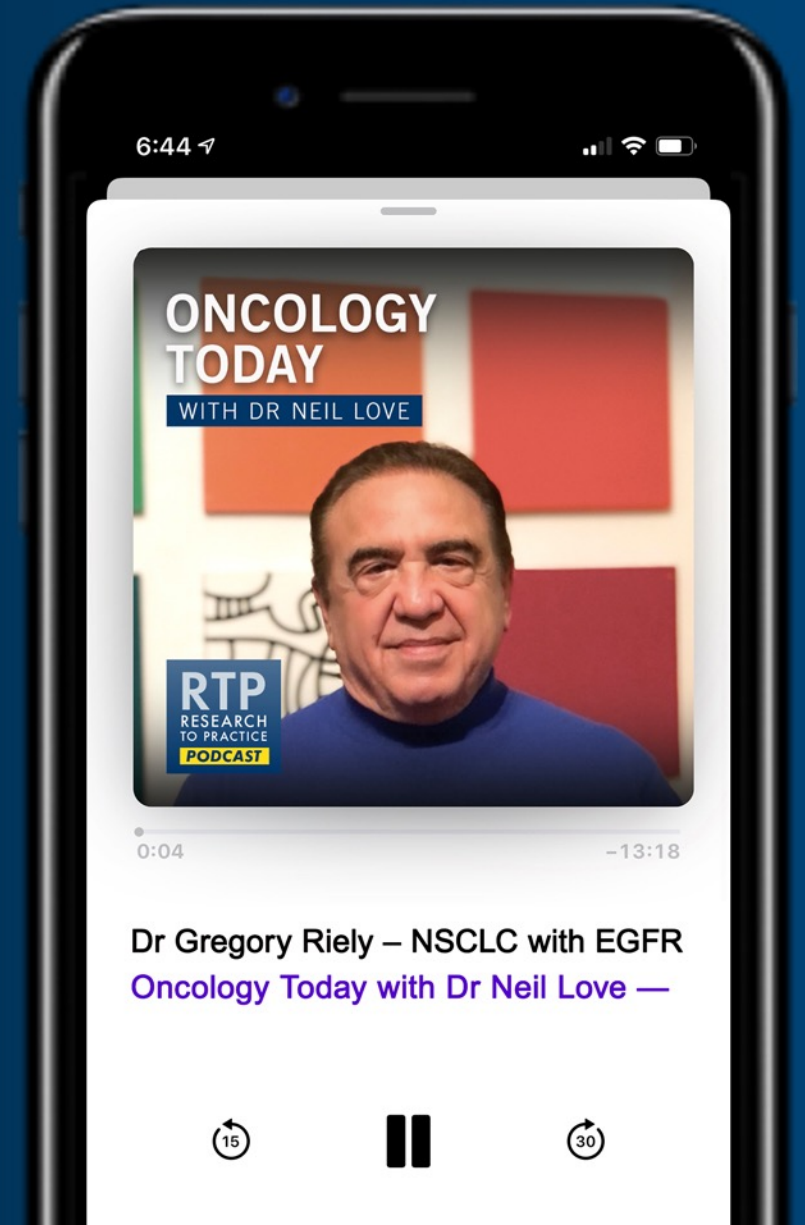
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***Key Considerations in the Optimal  
Management of Patients with Small Cell Lung  
Cancer — A Case-Based Live CME Webcast and  
Multifaceted Enduring Resource***

**Luis Paz-Ares**  
**Hospital Universitario 12 de Octubre**

# Recognition and Management of Adverse Events (AEs) with Available SCLC Treatments

Dr Weiss

# Agenda

**Case – Dr Paz-Ares: A 69-year-old woman with newly diagnosed extensive-stage small-cell lung cancer (ES-SCLC) who receives carboplatin/etoposide/atezolizumab**

**Case – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab**

**Case – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression**

**Case – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin**

**Case – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression**

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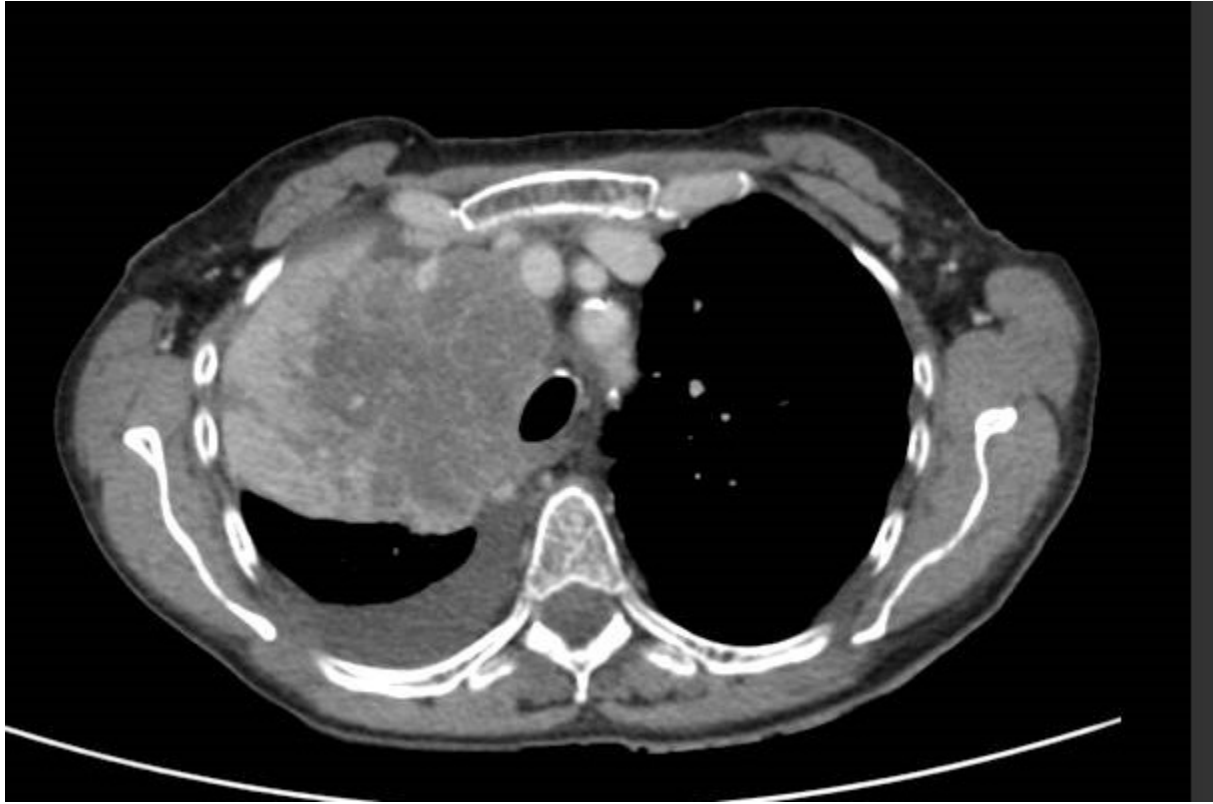


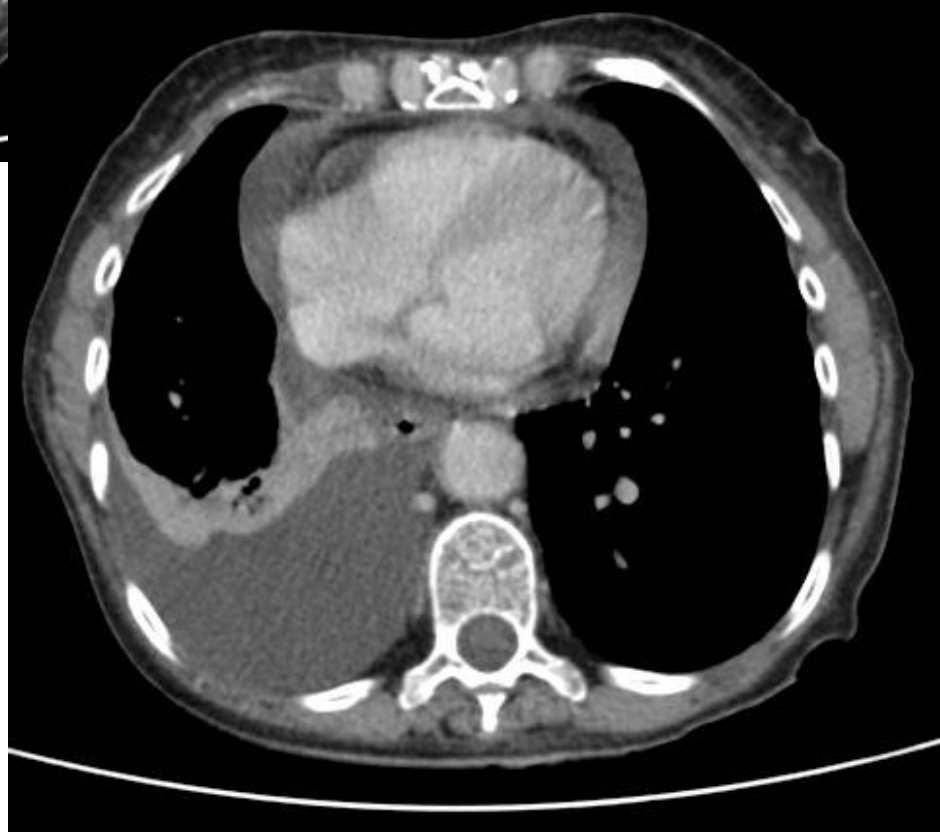
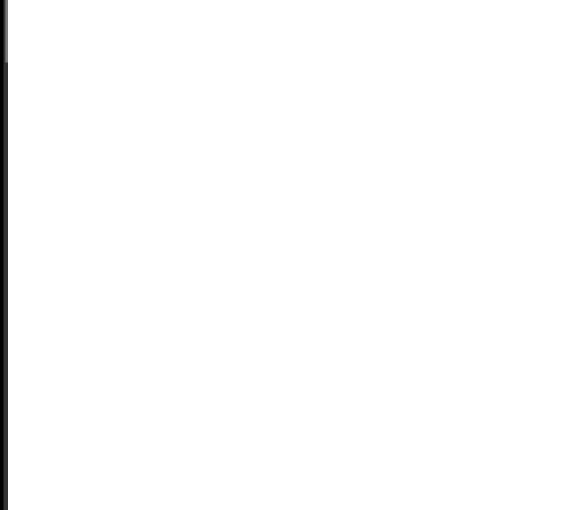
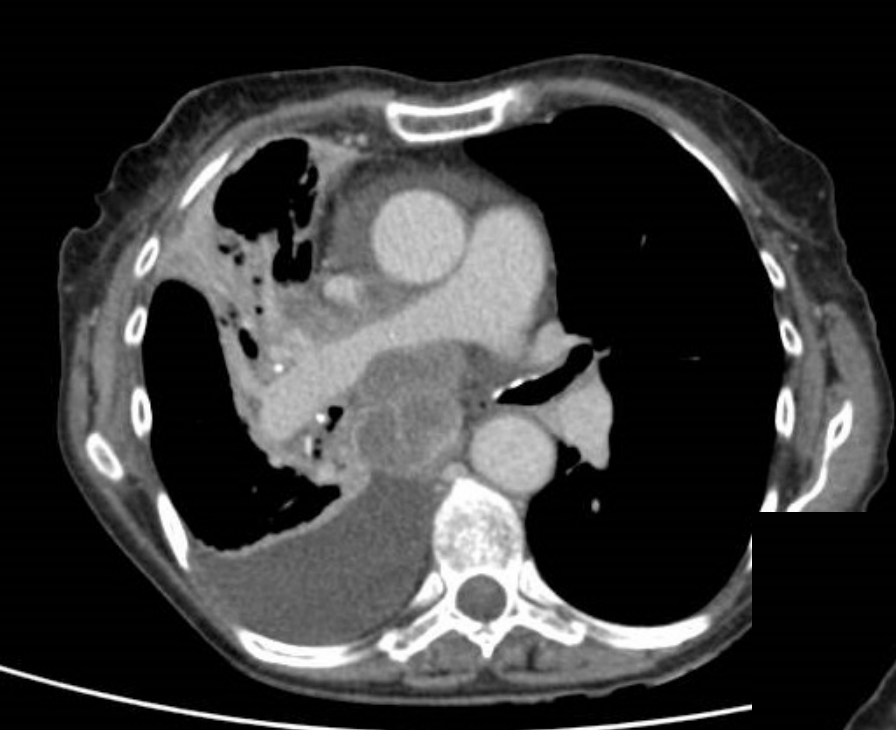
## **Case Presentation – Dr Paz-Ares: A 69-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/atezolizumab**

- 69 yo female
- PMH
  - Smoker (53 p/y)
  - HBP
  - Alcohol use
- June 2020:
  - Increased cough and dyspnea for 3 months
  - Asthenia, hyporexia
  - DX: Stage IV SCLC RUL  
(lung, mediastinal, pleural, pericardial, abdominal)

**Case Presentation – Dr Paz-Ares: A 69-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/atezolizumab (continued)**

**June 2020 - Baseline**





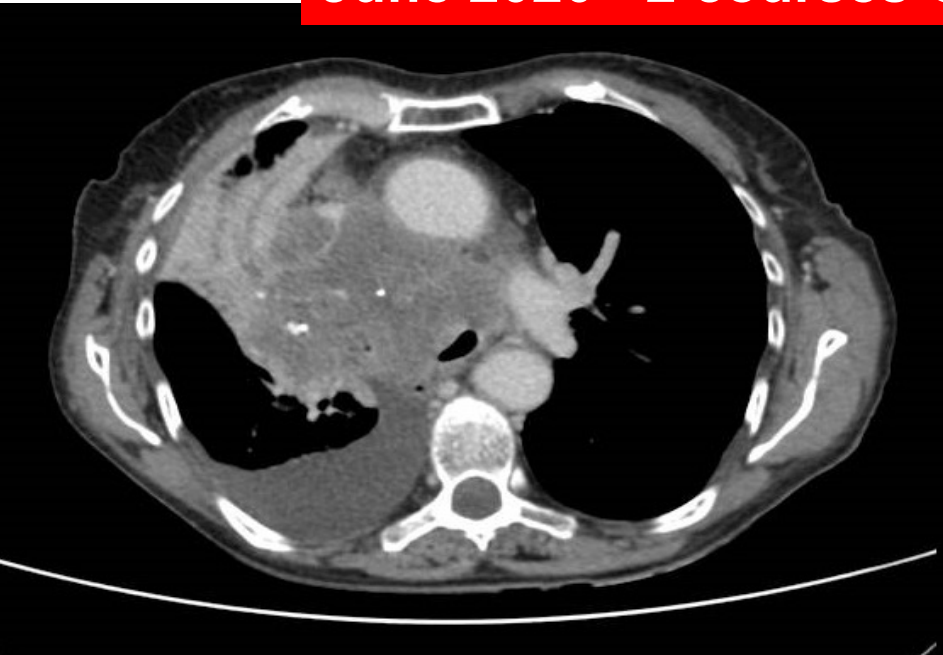
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- June 2020:
  - Increased cough and dyspnea for 3 months
  - Asthenia, hyporexia
  - DX: Stage IV SCLC RUL  
(lung, mediastinal, pleural, pericardial, abdominal)
- **What would be your treatment proposal?**



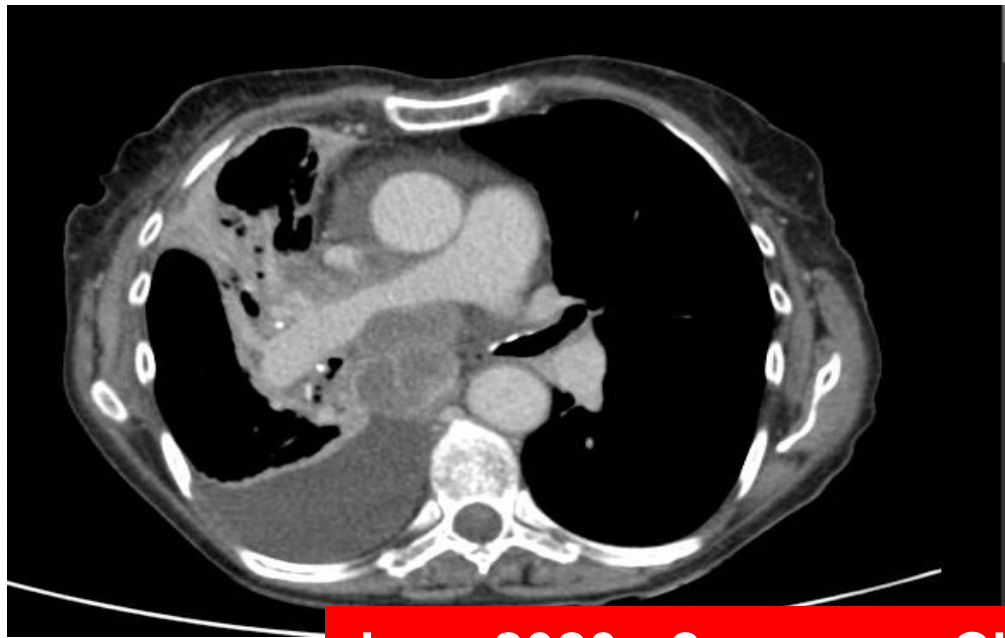
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June 2020 - 2 courses Cb/VP-16/Atezo - August 2020

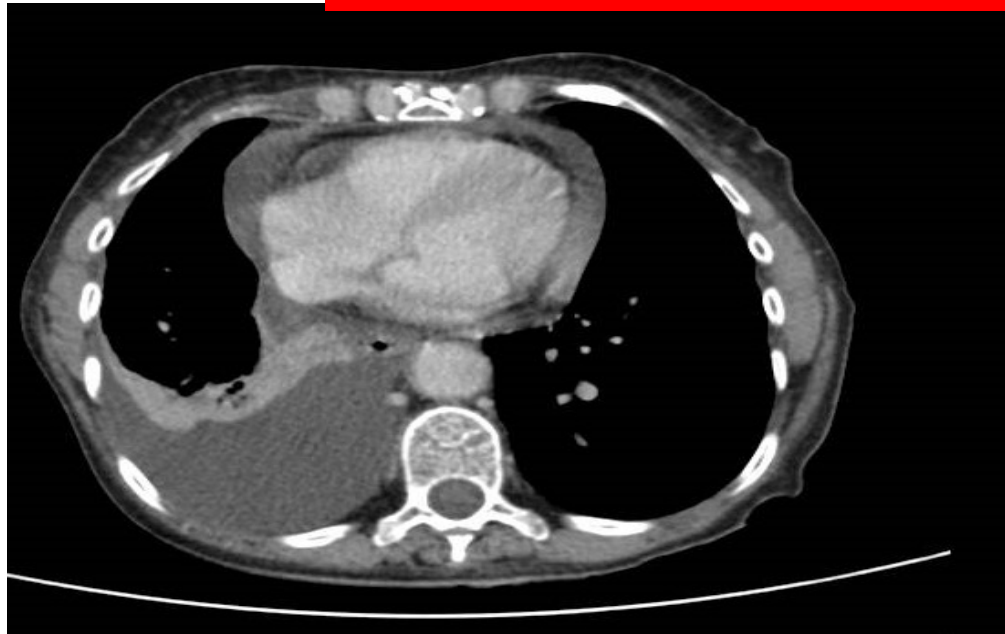


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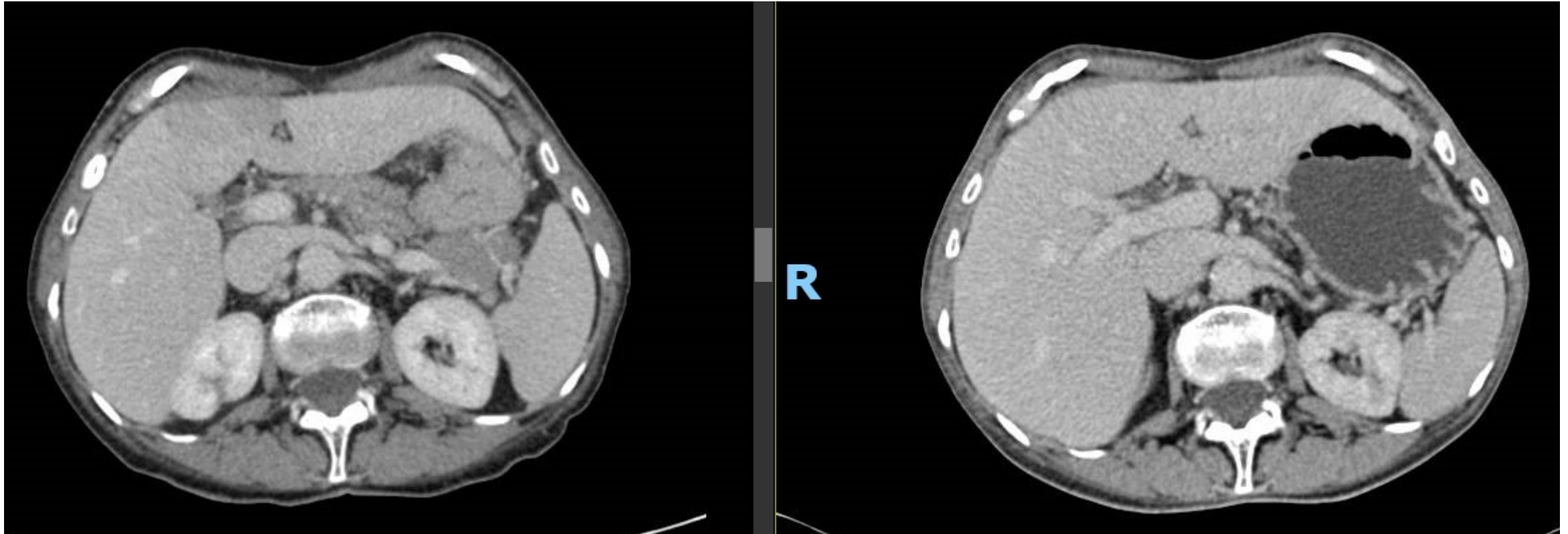


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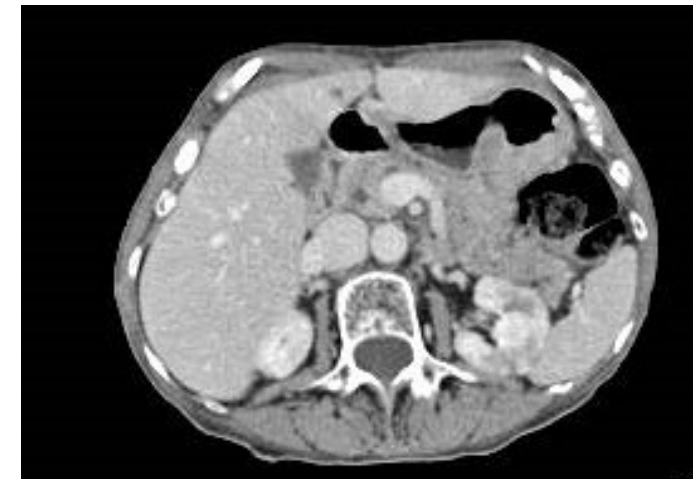
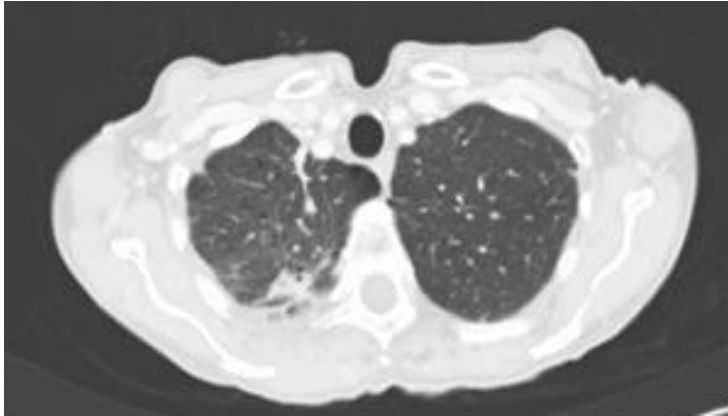
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June 2020 - 2 courses Cb/VP-16/Atezo - August 2020



# Case Presentation – Dr Paz-Ares: A 69-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/atezolizumab (continued)

LAST CT Scan – Dec 2021





# Agenda

**Case – Dr Paz-Ares: A 69-year-old woman with newly diagnosed extensive-stage small-cell lung cancer (ES-SCLC) who receives carboplatin/etoposide/atezolizumab**

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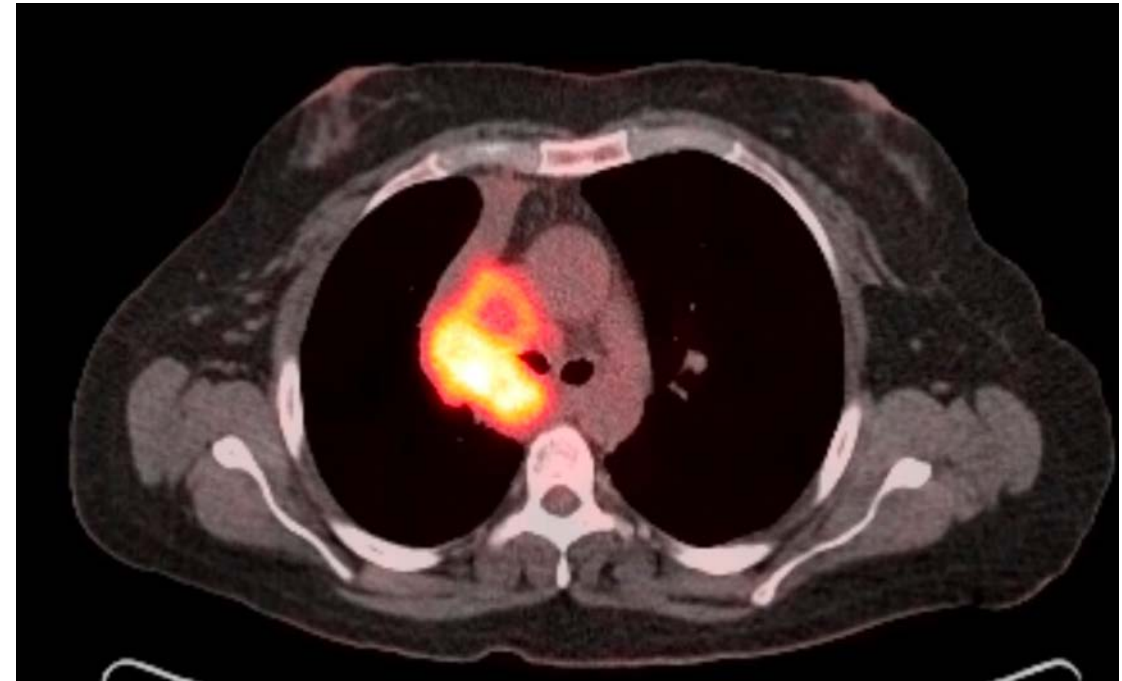
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## Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab

- A 46-year-old woman with 40 pack-year smoking history who presented to the ER with acute increase in chronic dyspnea and cough.
- Imaging demonstrated bulky central chest mass, as well as post-obstructive pneumonia. MRI brain negative for metastases.
- She was admitted to the hospital and antibiotics were started, resulting in partial improvements in her symptoms.
- PS is 1. PMH = COPD.
- Bronch/EBUS showed SCLC.
- PET demonstrated spread to contralateral lung and to liver.



# For consideration

What should be done next to palliate her dyspnea?

Airway stent

XRT

Chemotherapy

Oxygen and morphine

## Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab (continued)

- The patient was treated with carboplatin and etoposide. Her physician tried to order durvalumab, but it was not in inpatient formulary.
- Cough and SOB improved rapidly. The patient was discharged on the 7<sup>th</sup> hospital day.
- She returned to clinic two weeks later. Her dyspnea and cough were further improved, but she complained of:
  - Fatigue, now napping twice per day, but still able to perform her ADLs and IADLs.
  - Anorexia. Not eating as much as her family would like.
  - Nausea, partially relieved with ondansetron.

# Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab (continued)

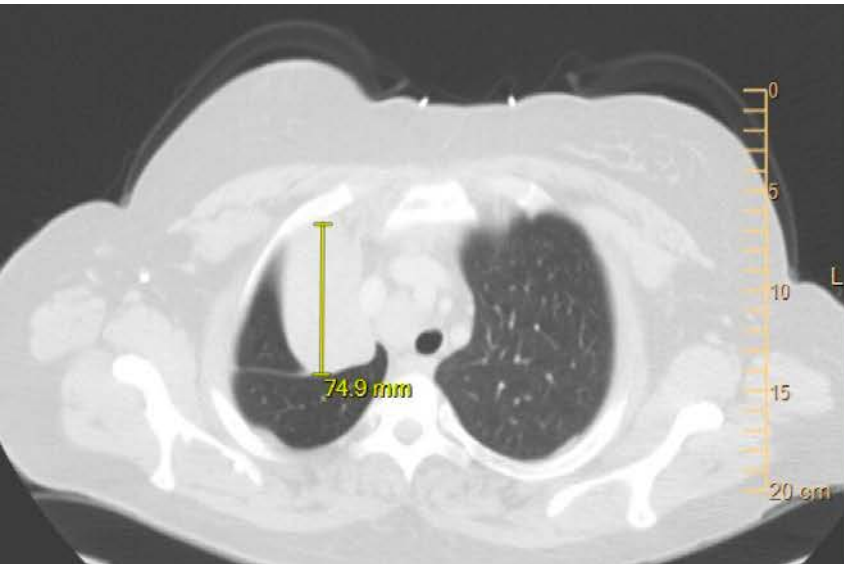
- Fatigue
  - Patient was felt to be mildly hypovolemic. NS given by IV, patient asked to increase hydration PO, and a followup visit made for 1 week to reassess and for possible additional IVF.
  - Patient advised to increase activity, as tolerated.
  - Nutrition mgmt. as below.
- Anorexia
  - Nutrition consulted and advised patient to pursue small, more frequent meals.
  - Dietary counseling offered.
  - Dronabinol prescribed.
- Nausea
  - On questioning, constipation was elicited. Ca checked and was OK.
  - Patient hydrated as above.
  - Docusate and senna started twice per day.
  - Patient advised the ondansetron can be constipating. Given prochlorperazine to try in place of or in addition, as needed.
- Palliative care consulted. They provided many useful recommendations, including recognition of depression resulting in a referral to counseling.

## Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab (continued)

- The Patient's symptoms improved with additional supportive care.
- C2 was administered with the addition of durvalumab. Followup imaging planned for prior to a theoretical third cycle.

# Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab (continued)

Pre C1



Pre C3



Post C4



## Case Presentation – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab (continued)

- Laboratory results prior to C4 demonstrated a TSH of 20, FT4 0.5. Cortisol wnl.
- On ROS, the only possibly attributable symptoms were fatigue and constipation, but the extent to which hypothyroidism contributed to these was not clear.
- Patient started on 1ug/kg levothyroxine.
- C4 and maintenance C1-2 went well. Fatigue increased.
- Followup imaging showed additional minor response. The patient initiated maintenance durvalumab. TSH decreased to 10; levothyroxine increased. Recheck planned for 6 weeks later.



# Side Effects

How much toxicity does the PDL1 inhibitor add?

What are the most common AEs?

What are the most common irAEs?

	Durvalumab + EP (n=265)		EP (n=266)	
	Any grade*	Grade 3 or 4	Any grade*	Grade 3 or 4
Any immune-mediated adverse event (grouped term), n (%) <sup>†,‡</sup>	52 (20%)	12 (5%)	7 (3%)	1 (<1%)
Hypothyroid events	24 (9%)	0	2 (1%)	0
Hyperthyroid events	14 (5%)	0	0	0
Pneumonitis	7 (3%)	2 (1%)	2 (1%)	1 (<1%)
Hepatic events	7 (3%)	5 (2%)	0	0
Dermatitis/rash	4 (2%)	0	2 (1%)	0
Diarrhoea/colitis	4 (2%)	1 (<1%)	1 (<1%)	0
Thyroiditis	4 (2%)	0	0	0
Type 1 diabetes mellitus	4 (2%)	4 (2%)	0	0
Adrenal insufficiency	1 (<1%)	0	0	0
Pancreatic events	1 (<1%)	1 (<1%)	0	0
Other rare/miscellaneous <sup>§</sup>	2 (1%)	0	0	0

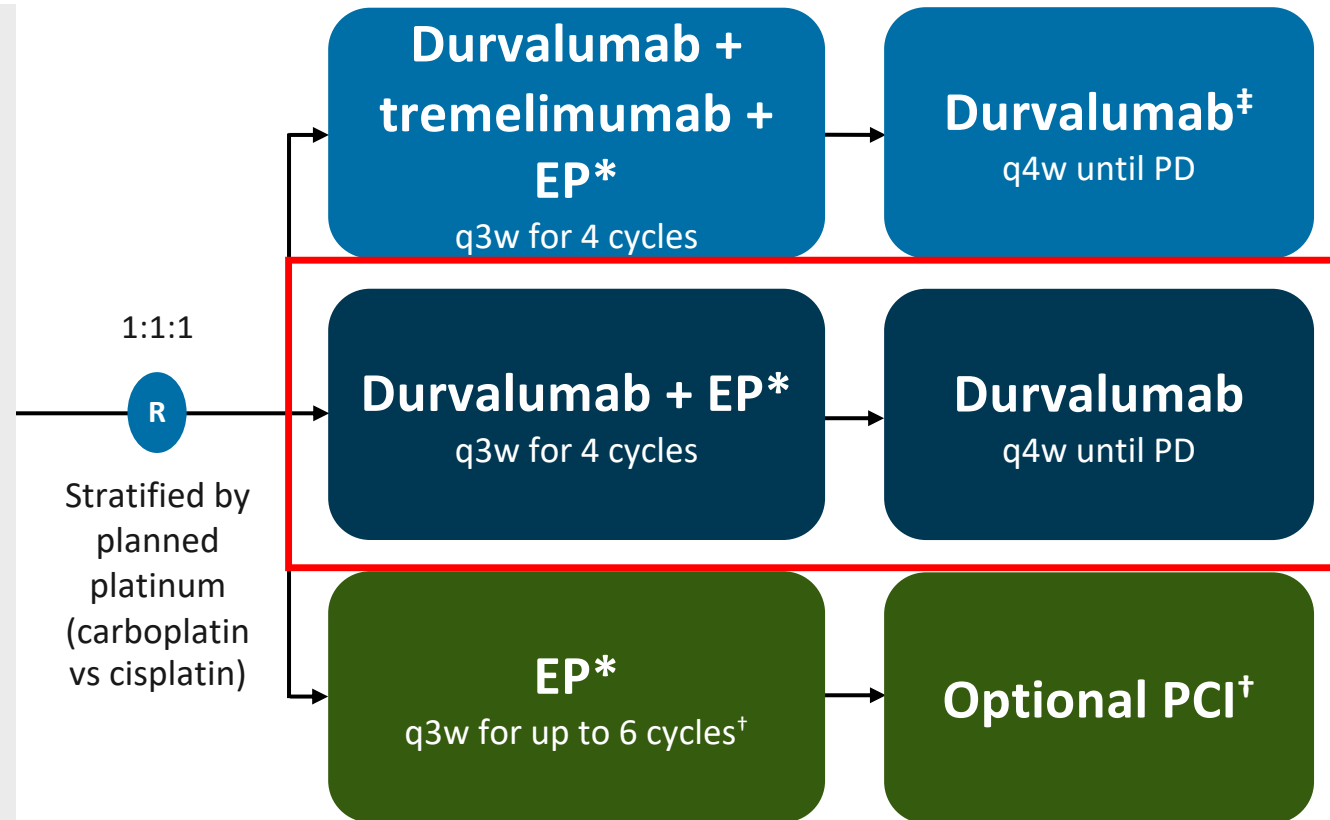
	Durvalumab plus platinum-etoposide (n=265)		Platinum-etoposide (n=266)	
	Any grade	Grade 3 or 4	Any grade	Grade 3 or 4
Any event	260 (98%)	163 (62%)	258 (97%)	166 (62%)
Any serious event	82 (31%)	57 (22%)	96 (36%)	70 (26%)
Any event leading to discontinuation*	25 (9%)	7 (3%)	25 (9%)	7 (3%)
Any event leading to death†	13 (5%)	..	15 (6%)	..
Neutropenia	111 (42%)	64 (24%)	124 (47%)	88 (33%)
Anaemia	102 (38%)	24 (9%)	125 (47%)	48 (18%)
Nausea	89 (34%)	1 (<1%)	89 (33%)	5 (2%)
Alopecia	83 (31%)	3 (1%)	91 (34%)	2 (1%)
Constipation	44 (17%)	2 (1%)	51 (19%)	0
Decreased appetite	48 (18%)	2 (1%)	46 (17%)	2 (1%)
Thrombocytopenia	41 (15%)	15 (6%)	53 (20%)	25 (9%)
Fatigue	48 (18%)	4 (2%)	45 (17%)	3 (1%)
Vomiting	39 (15%)	0	44 (17%)	3 (1%)
Asthenia	40 (15%)	5 (2%)	40 (15%)	3 (1%)
Leucopenia	40 (15%)	17 (6%)	32 (12%)	14 (5%)
Dyspnoea	31 (12%)	5 (2%)	28 (11%)	3 (1%)
Neutrophil count decreased	26 (10%)	17 (6%)	31 (12%)	17 (6%)
Diarrhoea	26 (10%)	3 (1%)	30 (11%)	3 (1%)
Cough	33 (12%)	2 (1%)	18 (7%)	0
Hyponatraemia	26 (10%)	10 (4%)	12 (5%)	7 (3%)
Febrile neutropenia	17 (6%)	14 (5%)	17 (6%)	17 (6%)
White blood cell count decreased	14 (5%)	4 (2%)	17 (6%)	6 (2%)
Platelet count decreased	16 (6%)	4 (2%)	14 (5%)	6 (2%)
Pneumonia	11 (4%)	5 (2%)	18 (7%)	9 (3%)
Hypertension	15 (6%)	8 (3%)	7 (3%)	1 (<1%)
Lipase increased	12 (5%)	9 (3%)	7 (3%)	4 (2%)
Amylase increased	11 (4%)	6 (2%)	2 (1%)	1 (<1%)

# Key Relevant Data Sets

# CASPIAN Study Design

Phase 3, global, randomized, open-label, active-controlled, multicentre study

- Treatment-naïve ES-SCLC
  - WHO PS 0 or 1
  - Asymptomatic or treated and stable brain metastases permitted
  - Life expectancy  $\geq 12$  weeks
  - Measurable disease per RECIST v1.1
- N=805 (randomized)



## Primary endpoint

- OS

## Secondary endpoints

- PFS <sup>§</sup>
- ORR <sup>§</sup>
- Safety & tolerability
- PROs

\*EP consists of etoposide 80–100 mg/m<sup>2</sup> with either carboplatin AUC 5–6 or cisplatin 75–80 mg/m<sup>2</sup>, durvalumab dosed at 1500 mg, tremelimumab dosed at 75 mg

<sup>†</sup>Patients could receive an additional 2 cycles of EP (up to 6 cycles total) and PCI at the investigator's discretion

<sup>‡</sup>Patients received an additional dose of tremelimumab post-EP; <sup>§</sup>By investigator assessment per RECIST v1.1

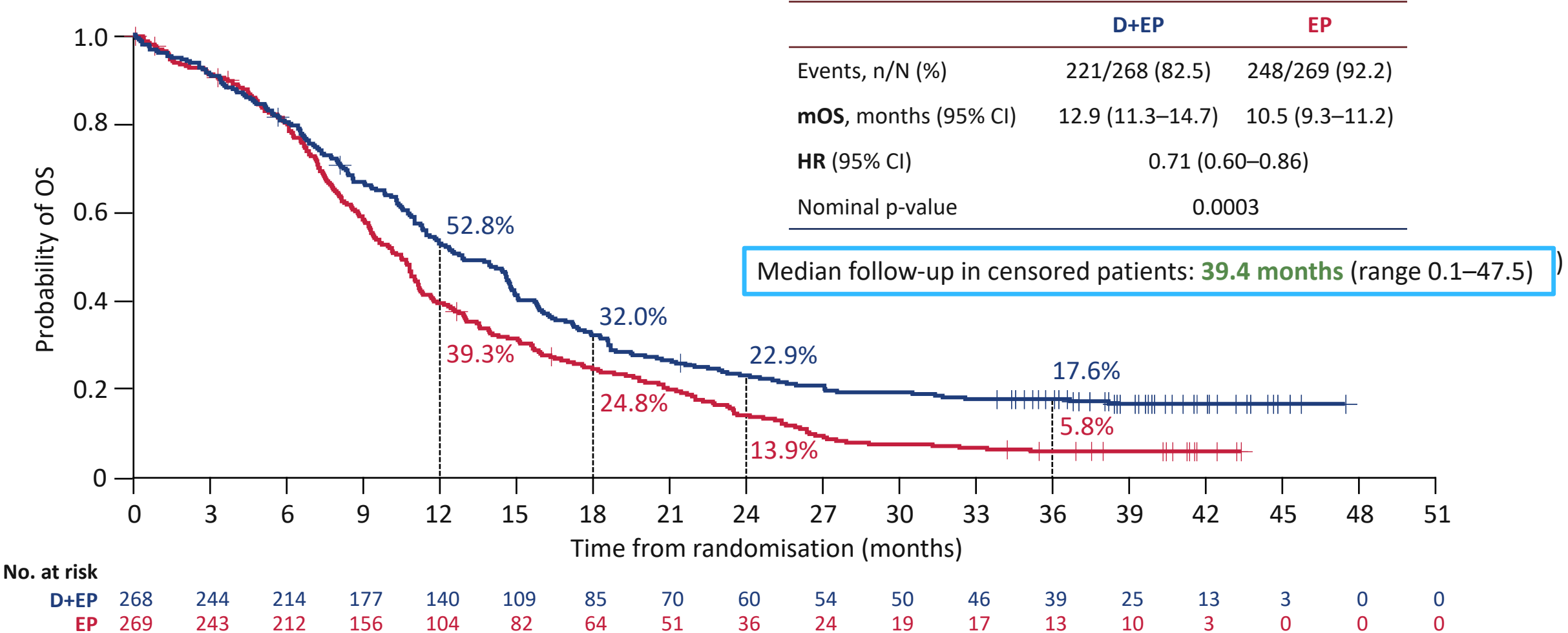
AUC, area under the curve; ORR, objective response rate; PCI, prophylactic cranial irradiation; PD, disease progression; PFS, progression-free survival;

PROs, patient-reported outcomes; PS, performance status; q3w, every 3 weeks; q4w, every 4 weeks; RECIST v1.1, Response Evaluation Criteria in Solid Tumors version 1.1

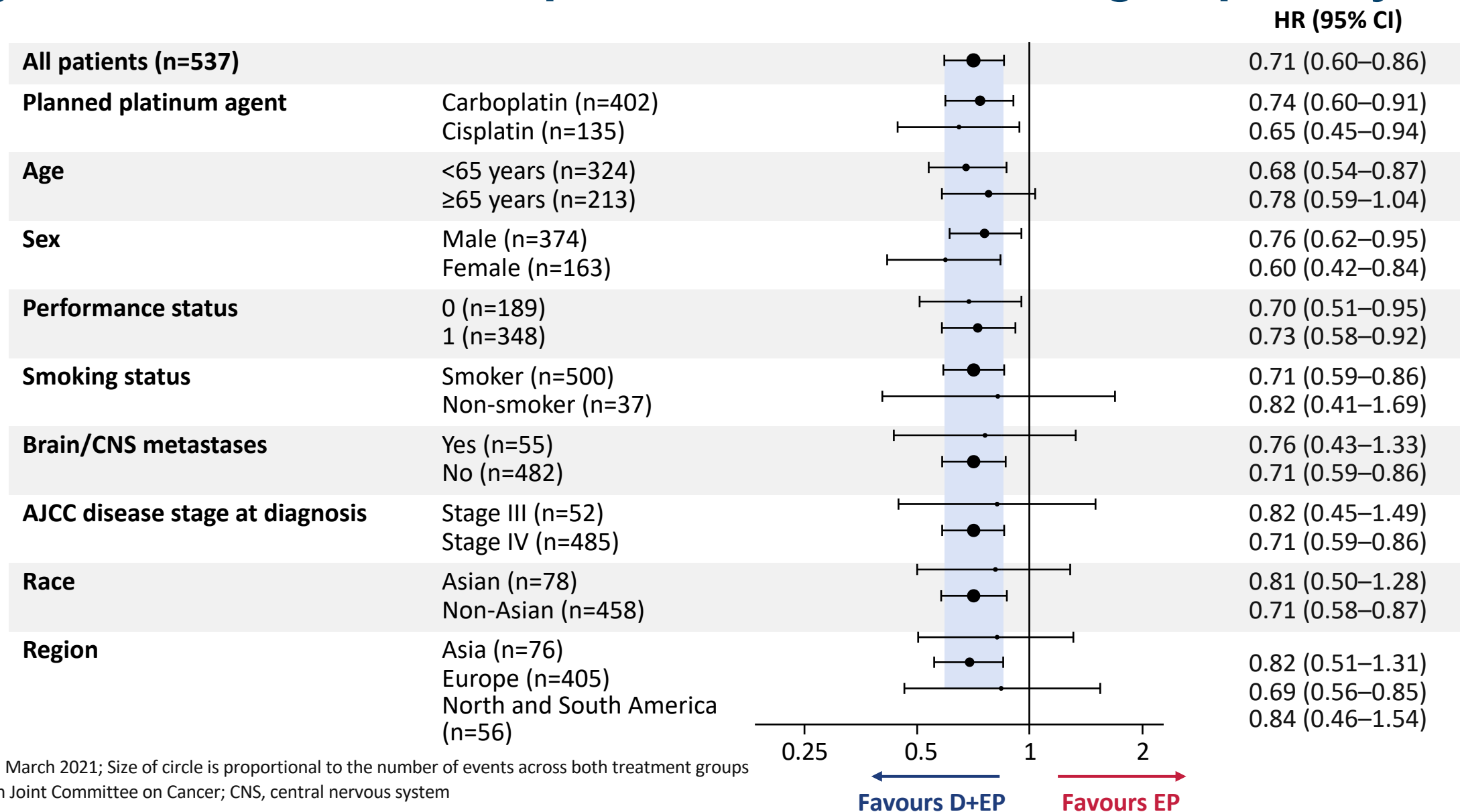
Paz-Ares L, et al. Oral presentation at ASCO 2020; abstract 9002.

Courtesy of Luis Paz-Ares, MD, PhD

# 3-year Overall Survival Update: D+EP vs EP



# 3-year Overall Survival Update: D+EP vs EP Subgroup Analysis

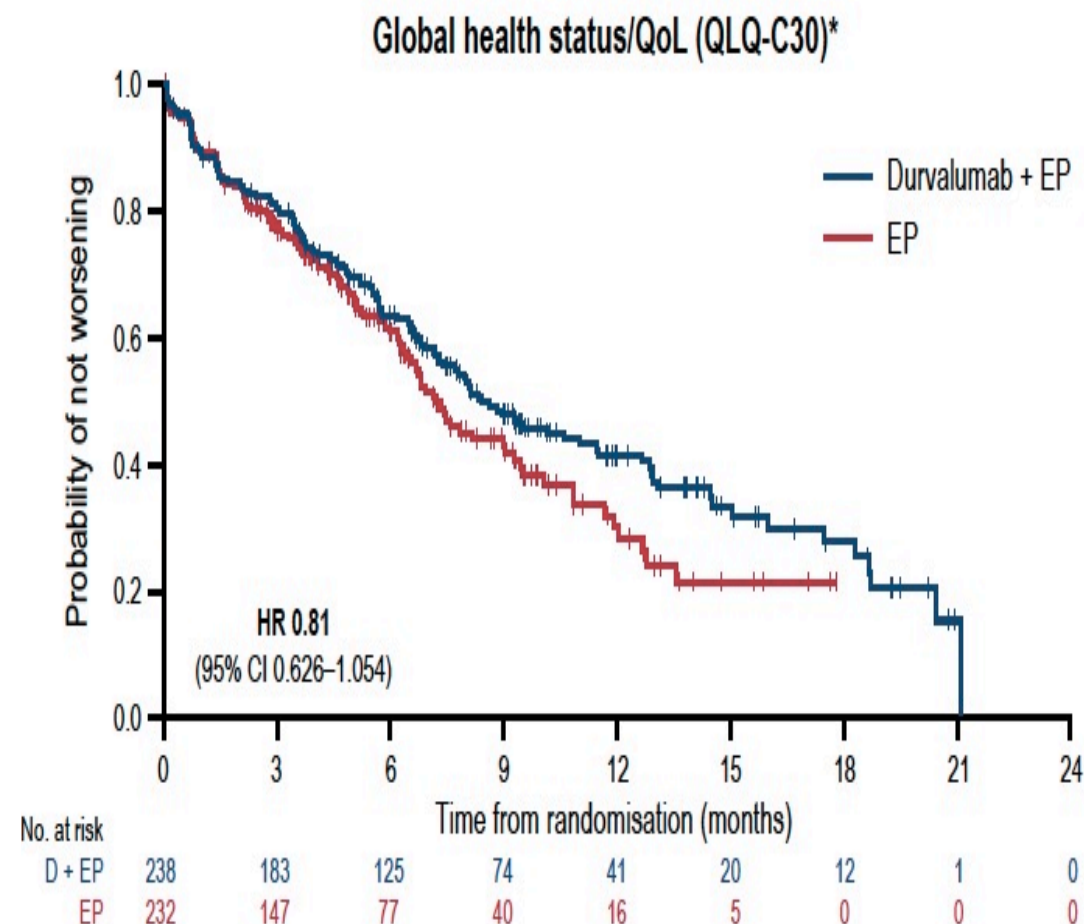
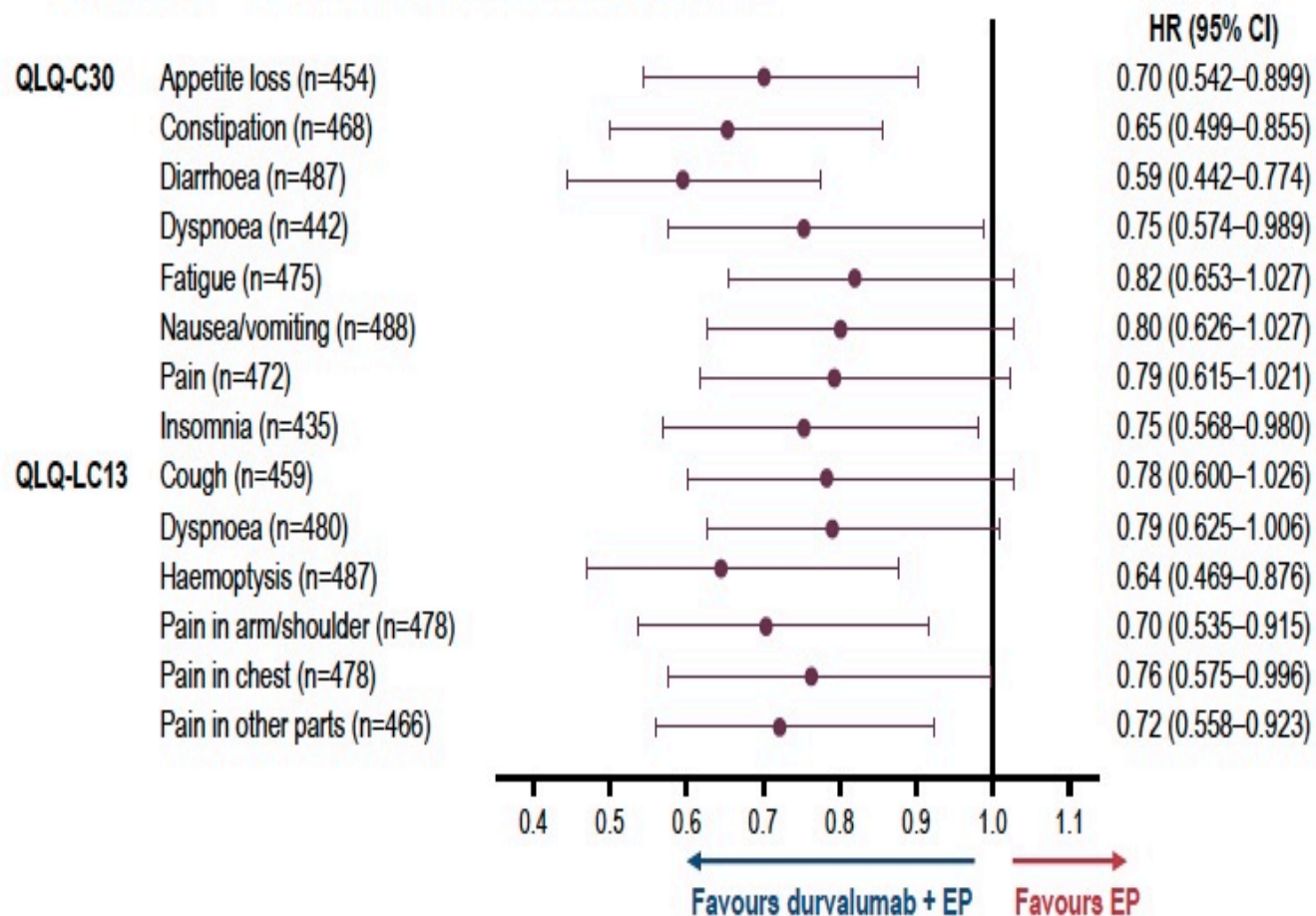


Data cutoff: 22 March 2021; Size of circle is proportional to the number of events across both treatment groups

AJCC, American Joint Committee on Cancer; CNS, central nervous system

# QoL

- Durvalumab + EP was favoured across all symptoms



Goldman JW et al, Lancet Oncol 2021; 22:51-65.

Courtesy of Luis Paz-Ares, MD, PhD



# IMpower133

## Patients with (N = 403):

- Measurable ES-SCLC (RECIST v1.1)
- ECOG PS 0 or 1
- No prior systemic treatment for ES-SCLC
- Patients with treated asymptomatic brain metastases were eligible

## Stratification:

- Sex (male vs. female)
- ECOG PS (0 vs. 1)
- Brain metastases (yes vs. no)<sup>a</sup>

R  
1:1

## Induction (4 x 21-day cycles)

Atezolizumab (1200 mg IV, Day 1)  
+ carboplatin  
+ etoposide

Placebo  
+ carboplatin  
+ etoposide

Carboplatin: AUC 5 mg/mL/min IV, Day 1  
Etoposide: 100 mg/m<sup>2</sup> IV, Days 1–3

## Co-primary end points:

- Overall survival
- Investigator-assessed PFS

## Maintenance

Atezolizumab

Placebo

Treat until  
PD or loss  
of clinical  
benefit

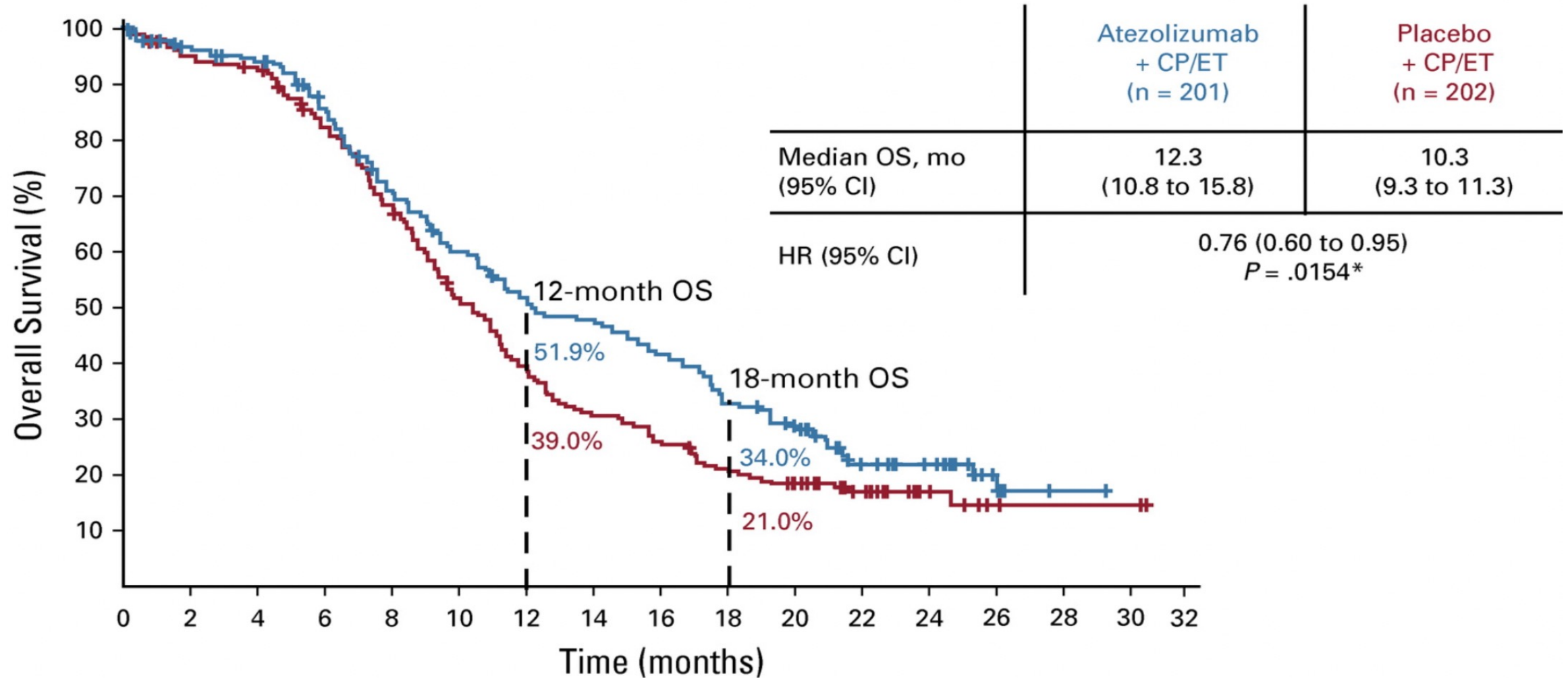
PCI per local standard of care

## Key secondary end points:

- Objective response rate
- Duration of response
- Safety

Survival follow-up

# IMpower133: Updated Overall Survival





# IMpower133

Patients — no. (%)	Atezolizumab + CP/ET (N = 198)	Placebo + CP/ET (N = 196)
Patients with ≥ 1 AE	198 (100)	189 (96.4)
Grade 3–4 AEs	133 (67.2)	125 (63.8)
Treatment-related AEs <sup>a</sup>	188 (94.9)	181 (92.3)
Serious AEs	74 (37.4)	68 (34.7)
Immune-related AEs	79 (39.9)	48 (24.5)
AEs leading to withdrawal from any treatment <sup>a</sup>	22 (11.1)	6 (3.1)
AEs leading to withdrawal from atezolizumab/placebo	21 (10.6)	5 (2.6)
AEs leading to withdrawal from carboplatin	5 (2.5)	1 (0.5)
AEs leading to withdrawal from etoposide	8 (4.0)	2 (1.0)
Treatment-related deaths	3 (1.5)	3 (1.5)

- Median duration of treatment with atezolizumab was 4.7 months (range: 0 to 21)
- Median number of doses received:
  - Atezolizumab: 7 (range: 1 to 30)
  - Chemotherapy: 4 doses for carboplatin; 12 doses for etoposide (same for both treatment groups)

# CASPIAN vs IMpower133

## CASPIAN

- Free choice for platinum
- Up to 6 cycles of CT
- Maintenance every 4 wks
- PCI not allowed in ICI group
- 10% BM - untreated
- OS as primary endpoint
- Median OS 13 months
- Median PFS 5.1 months
- AE grade  $\geq 3$ : 62%

## IMpower133

- Only carboplatin
- Up to 4 cycles of CT
- Maintenance every 3 wks
- PCI allowed
- 9% BM - treated
- OS and PFS co-primary
- Median OS 12.3 months
- Median PFS 5.2 months
- AE grade  $\geq 3$ : 58.1%

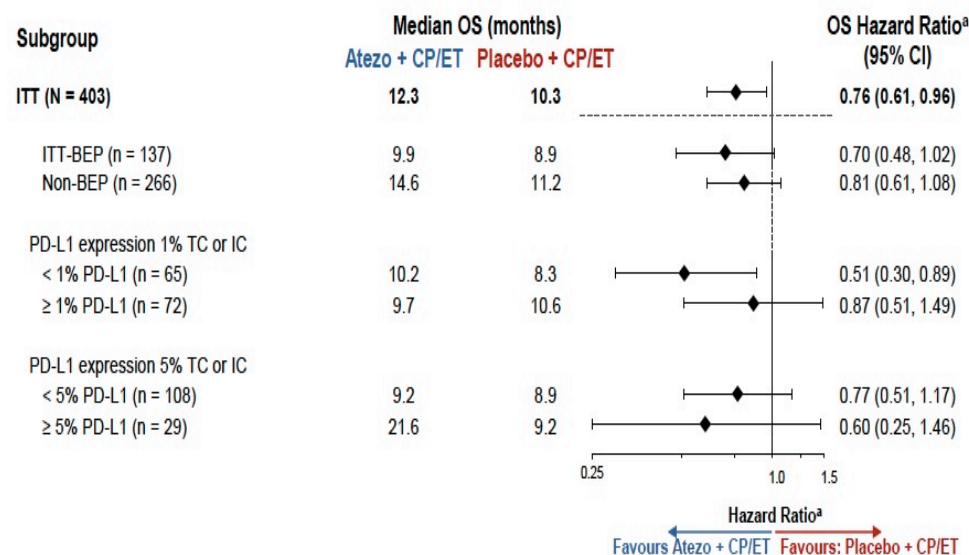
Paz-Ares L, et al. Lancet. 2019; 394: 1929-39.  
Horn L, et al. N Engl J Med. 2018; 379: 2220-9.

# PD-L1 expression and outcome

## IMpower133

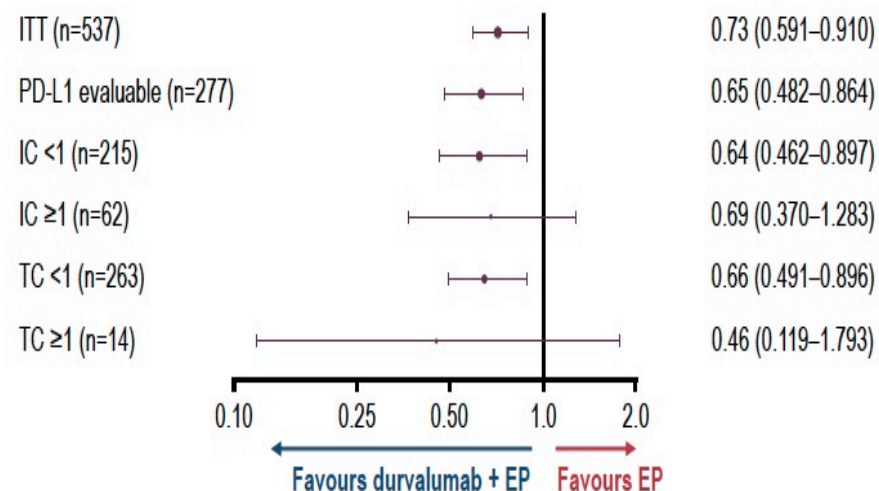
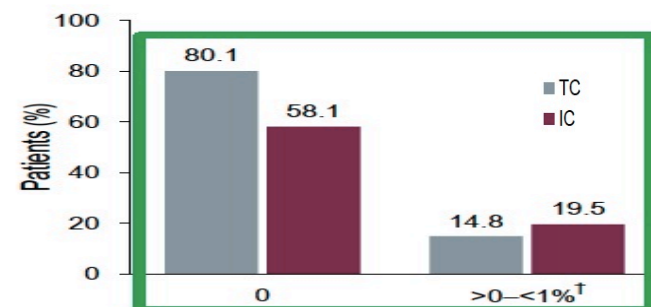
PD-L1 (SP263) evaluable in 34% of ITT

PD-L1 IHC expression in ES-SCLC (n = 137)			
IC	% BEP (n)	TC	% BEP (n)
< 1%	49.6% (68)	< 1%	94.2% (129)
≥ 1%	50.4% (69)	≥ 1%	5.8% (8)



## CASPIAN

PD-L1 (SP263) evaluable in 59% of pts. in 3 arms

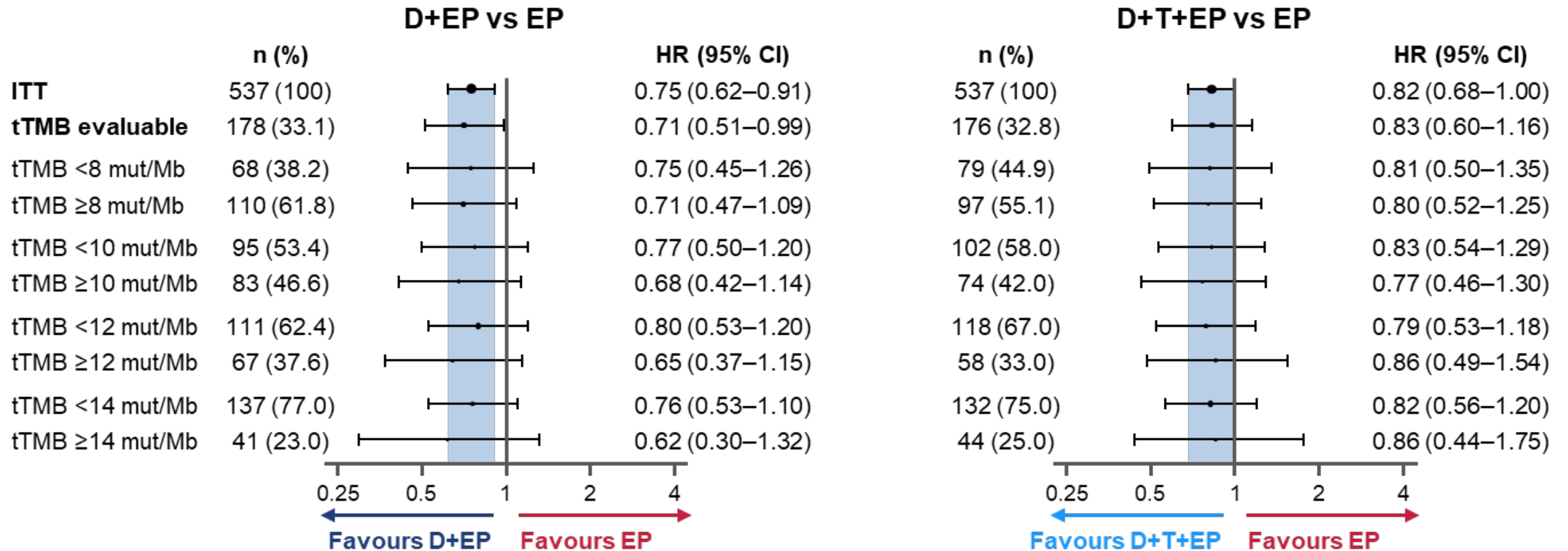


**PD-L1 expression in TC is low and no significant interaction PD-L1 and outcome**

- BEP, biomarker evaluable population; IC, immune cells; TC, tumor cells.
- Reck M, et al. Presented at: ESMO 2019; Abstract 2374. Paz-Ares, et al. Presented at: ESMO 2019; Abstract 3837.

# CASPIAN: Overall survival based on tTMB

tTMB was not predictive of an improvement in OS for durvalumab ± tremelimumab + EP vs EP



CI, confidence interval; D, durvalumab; EP, platinum-etoposide; HR, hazard ratio; ITT, intent-to-treat; T, tremelimumab; tTMB, tissue tumour mutational burden.

# Agenda

**Case – Dr Paz-Ares: A 69-year-old woman with newly diagnosed extensive-stage small-cell lung cancer (ES-SCLC) who receives carboplatin/etoposide/atezolizumab**

**Case – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab**

**Case – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression**

**Case – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin**

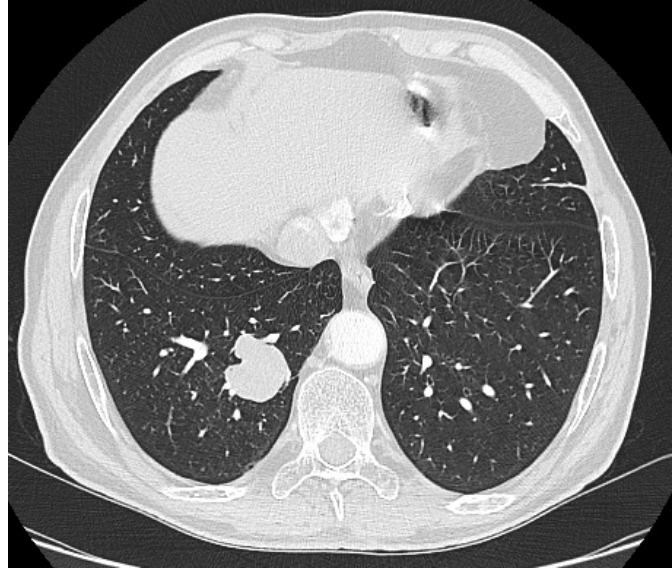
**Case – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression**

# **Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression**

- 63 yo male
- PMH
  - Prior smoker (38 p/y)
  - HBP and dyslipemia
  - AF (Cardioverted, flecainide)
  - CAD – 3 vessel re-vascularization surgery in Aug 2009
- Jan 2018:
  - Cervical pain (2 months)
  - Stage IV SCLC of the RLL with spinal cord compression (C6)



**Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)**



## Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)

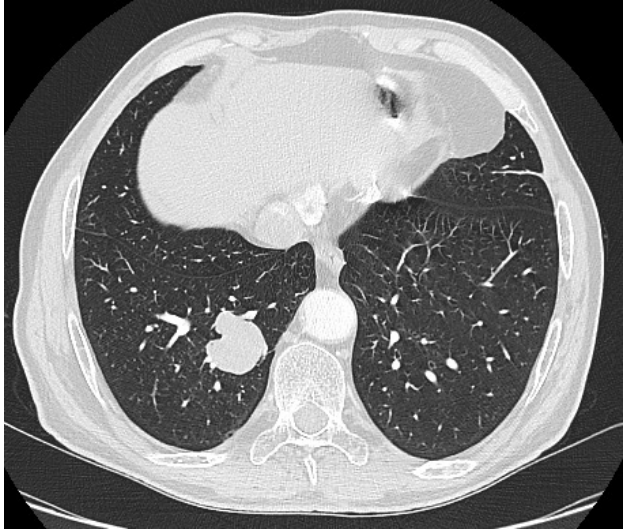
- 63 yo male
- PMH
  - Prior smoker (38 p/y)
  - HBP and dyslipemia
  - AF (Cardioverted, flecainide)
  - CAD – 3 vessel re-vascularization surgery in Aug 2009
- Jan 2018:
  - Cervical pain (2 months)
  - Stage IV SCLC of the RLL with spinal cord compression (C6)
  - Local hospital: **Radiation therapy (10 x 300 cGy)**



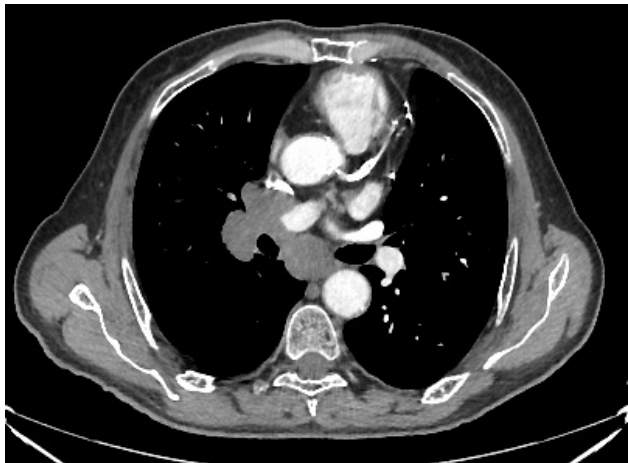
## Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)

- 63 yo male
- PMH
  - Prior smoker (38 p/y)
  - HBP and dyslipemia
  - AF (Cardioverted, flecainide)
  - CAD – 3 vessel re-vascularization surgery in Aug 2009
- Jan 2018:
  - Cervical pain (2 months)
  - Stage IV SCLC of the RLL with spinal cord compression (C6)
  - Local hospital: **Radiation therapy (10 x 300 cGy)**
- Feb 2018:
  - Second opinion at Hospital Universitario12 de Octubre
  - **What would be your recommendation?**

# Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)

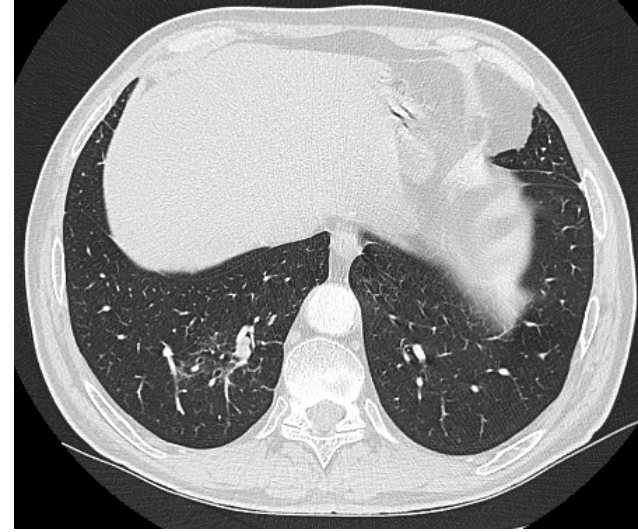


**Feb 2018**



**Carbo  
Etoposide  
Durva**

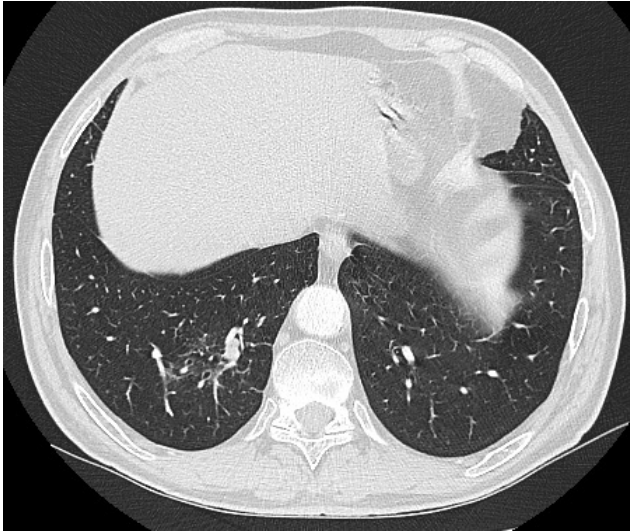
**2 courses**



**April 2018**



# Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)

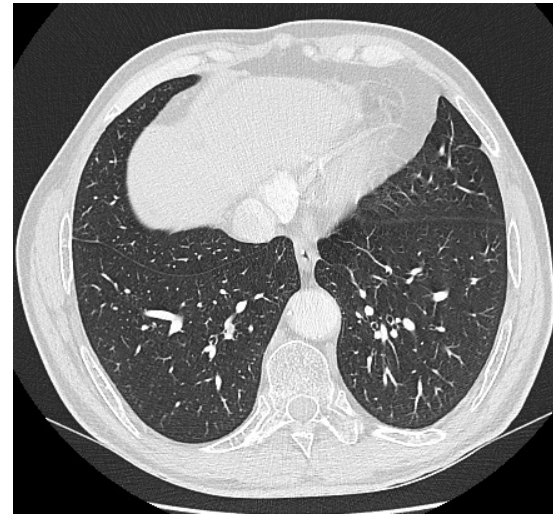


April 2018

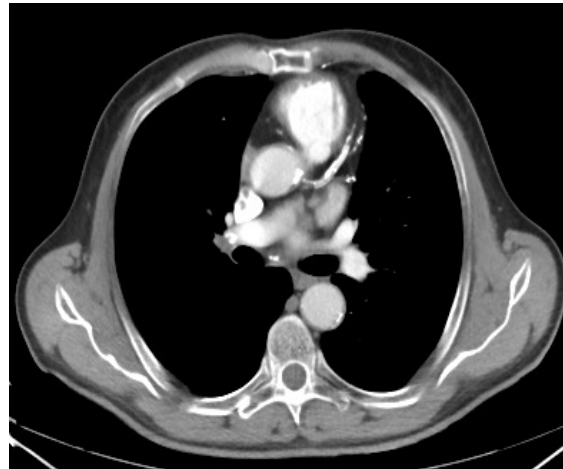
Carbo  
Etoposide  
Durva



14 courses

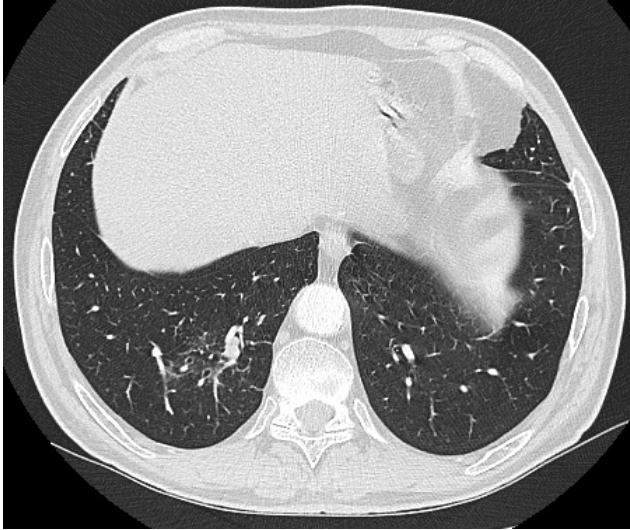


Feb 2019





# Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)



April 2018

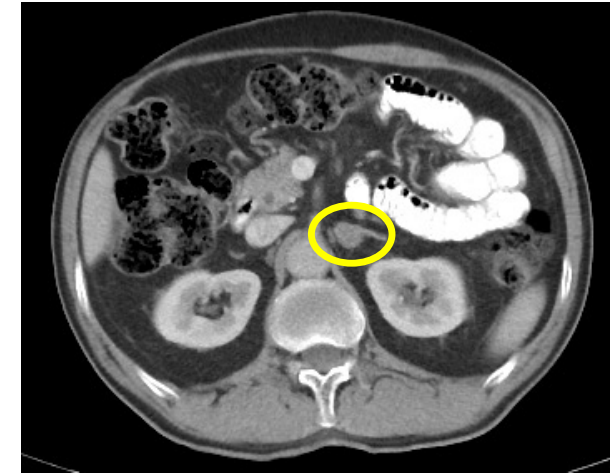
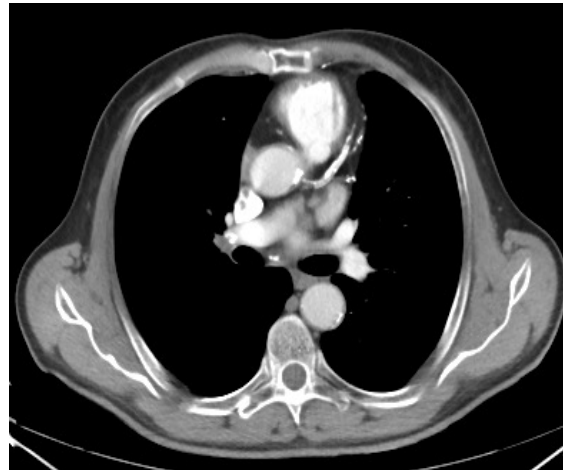
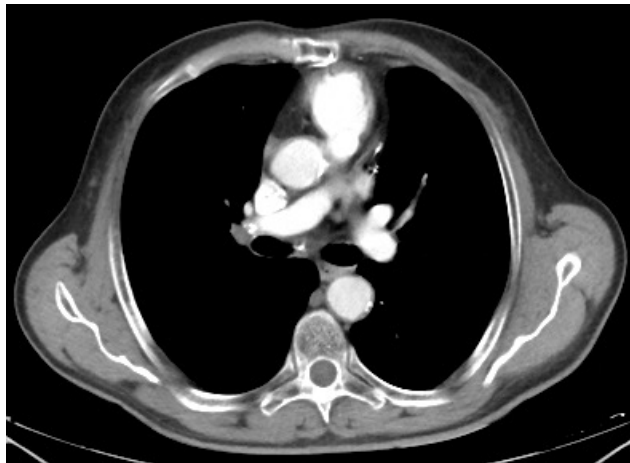
Carbo  
Etoposide  
Durva



2 courses



Feb 2019



**PFS = 12 months**

## Case Presentation – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression (continued)

- 63 yo male
- PMH
  - Prior smoker (38 p/y)
  - HBP and dyslipemia
  - AF Cardioverted
  - CAD – 3 vessel re-vascularization surgery in Aug 2009
- Jan 2018: Stage IV SCLC of the RLL with SCC
- Jan 2018: Local hospital: **Radiation therapy** (10 x 300 cGy)
- Feb 2018 – Feb 2019: **CASPIAN regimen x 14**
- March 2019 – June 2019: **Cb/VP-16 x 4**
- October 2019 – Jan 2022: **Lurbinectedin-Irinotecan x 36**

### Response – PFS

PR - 12 m

SD - 4 m

PR - 27 m+

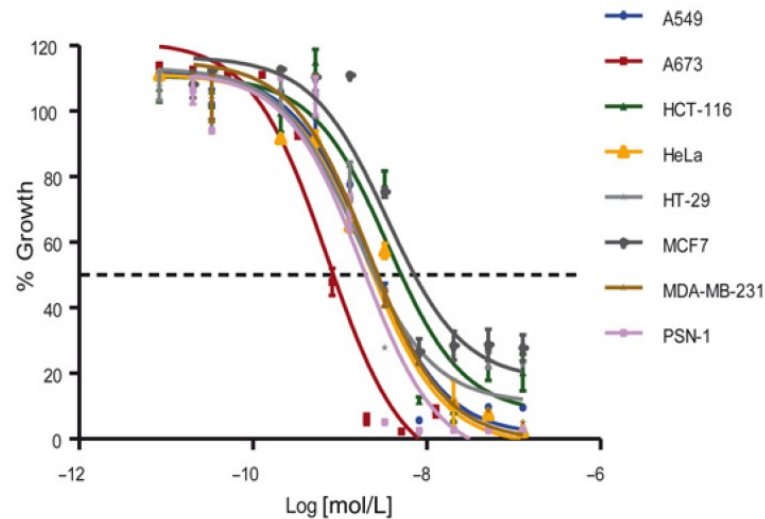
**SURVIVAL: 46+ months**

# Key Relevant Data Sets

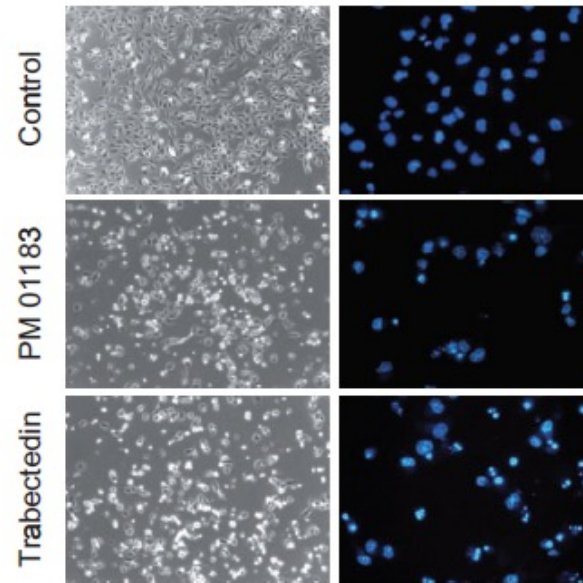
# Lurbinectedin - Preclinical Antitumor Activity

Antitumor activity of lurbinectedin (PM01183) has been proven in several preclinical tumor models

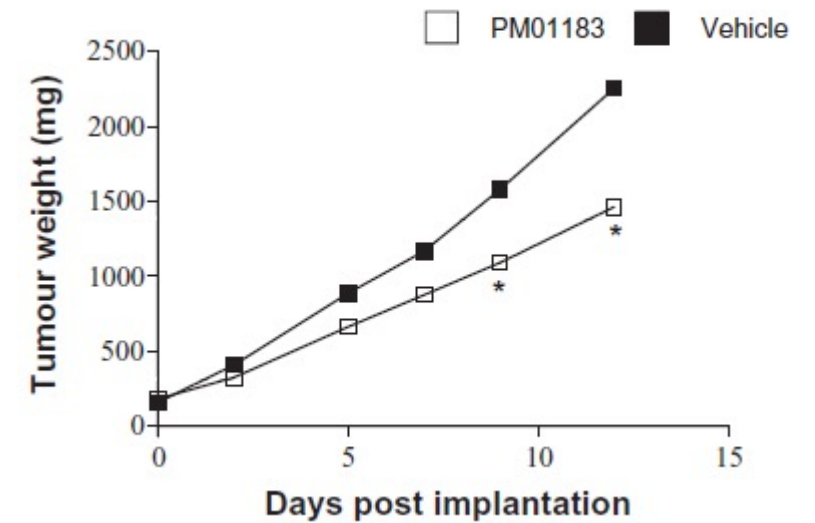
Lurbinectedin showed antiproliferative activity with  $IC_{50}$  values in the low nanomolar range in human lung (A549), Ewing sarcoma (A673), colon (HCT-116, HT-29), breast (MCF7, MDA-MB-231), cervix (HeLa), and pancreas (PSN-1) cancer cell lines<sup>1</sup>



Exposure of A549 lung cancer cells to 150 nM lurbinectedin for 24 hours induced cell death by apoptosis<sup>2</sup>



Lurbinectedin (0.18 mg/kg in 3 consecutive weekly doses) showed statistically significant inhibition of tumor growth *in vivo* in an NCI-H460 lung xenograft model compared with vehicle-treated animals<sup>2</sup>



Reprinted from *Molecular Cancer Therapeutics*, ©2016, 15(10), pgs 2399-2412, Santamaria Nuñez G, et al, Lurbinectedin specifically triggers the degradation of phosphorylated RNA polymerase II and the formation of DNA breaks in cancer cells, with permission from AACR.

1. Santamaria Nuñez G, et al. *Mol Cancer Ther.* 2016;15(10):2399-2412.  
2. Leal JF, et al. *Br J Pharmacol.* 2010;161(5):1099-1110.

Reprinted with permission from Leal JR, et al, PM01183, a new DNA minor groove covalent binder with potent *in vitro* and *in vivo* anti-tumour activity, ©2010 PharmaMar SA and The British Pharmacological Society..

# BASKET Trial - Lurbinectedin monotherapy

## Efficacy in Patients With SCLC

	All patients (n=105)	Chemotherapy-free interval <90 days (n=45)	Chemotherapy-free interval ≥90 days (n=60)
<b>RECIST responses, %</b>			
CR / PR / SD,* %	0 / 35 / 33	0 / 22 / 29	0 / 45 / 37
PD, %	27	40	17
Not evaluable,‡ %	5	9	2
Overall response, %	35.2	22.2	45.0
Disease control, %□	68.6	51.1	81.7
<b>Duration of response</b>			
Median DoR, months (95% CI)	5.3 (4.1–6.4)	4.7 (2.6–5.6)	6.2 (3.5–7.3)
<b>Progression-free survival</b>			
Median PFS, months (95% CI)	3.5 (2.6–4.3)	2.6 (1.3–3.9)	4.6 (2.8–6.5)
4-month PFS rate, %	46.6	29.1	59.9
6-month PFS rate, %	32.9	18.8	43.5
<b>Overall survival</b>			
Median OS, months (95% CI)	9.3 (6.3–11.8)	5.0 (4.1–6.3)	11.9 (9.7–16.2)
6-month OS rate, %	67.1	45.8	83.6
12 month OS rate, %	34.2	15.9	48.3

\*Includes five patients with partial response not confirmed; ‡ five patients were not evaluable because they had no radiological assessment during treatment due to early death from malignant disease (n=2), symptomatic deterioration because of disease progression (n=2), and patient refusal (n=1); □ partial response or stable disease

Median follow-up of 17.1 months (as of data cut-off January 15, 2019)



# BASKET Trial | Treatment-Related Adverse Events

	Grade 1-2	Grade 3	Grade 4
<b>Haematological abnormalities (regardless of relation to study drug)*</b>			
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%)
<b>Biochemical abnormalities (regardless of relation to study drug)*</b>			
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

<b>Treatment-related adverse events</b>			
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

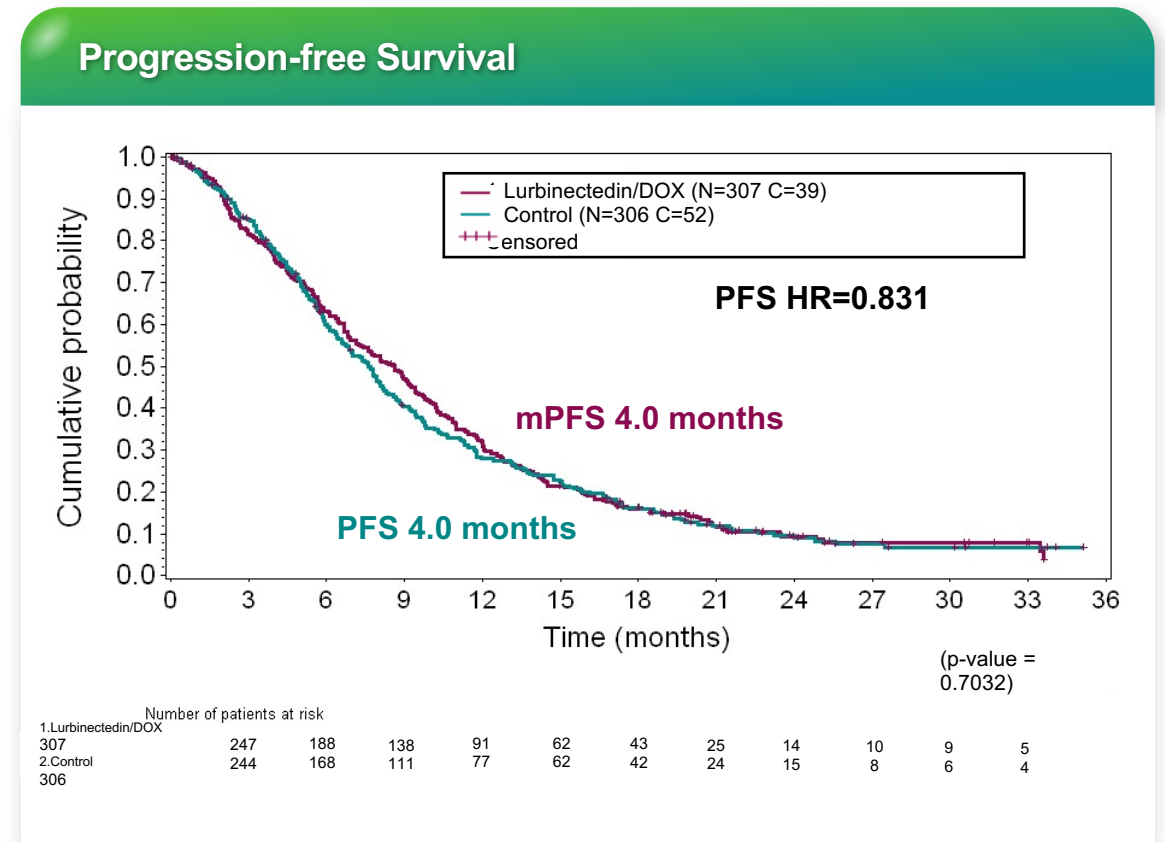
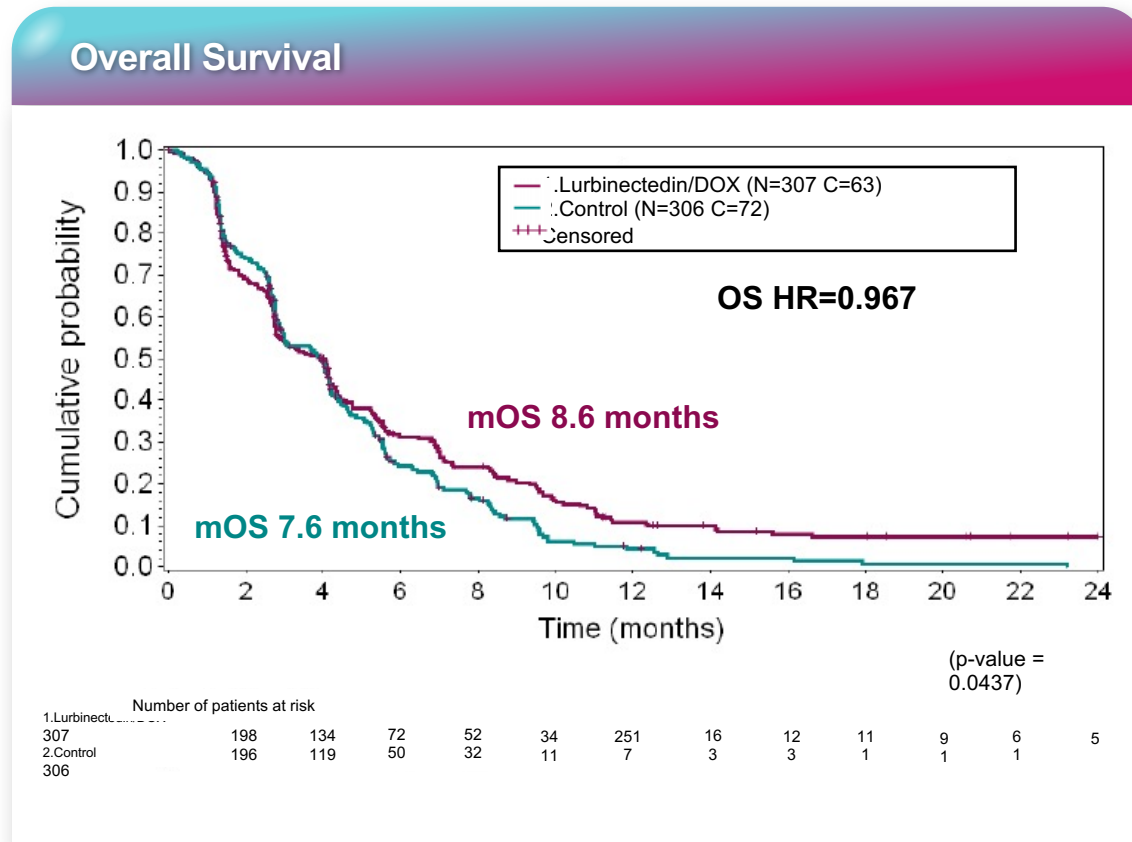
Data are n (%) of patients. NCI-CTCAE= National Cancer Institute Common Terminology Criteria for Adverse Events version 4.0. \*Based on all patients with laboratory data available. †Version 4.0 of NCI-CTCAE grades any creatinine increases from baseline as abnormalities, even if creatinine values remain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

**Table 3: Most common NCI-CTCAE laboratory abnormalities and treatment-related adverse events**

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

# ATLANTIS Trial | Lurbinectedin + Doxorubicin

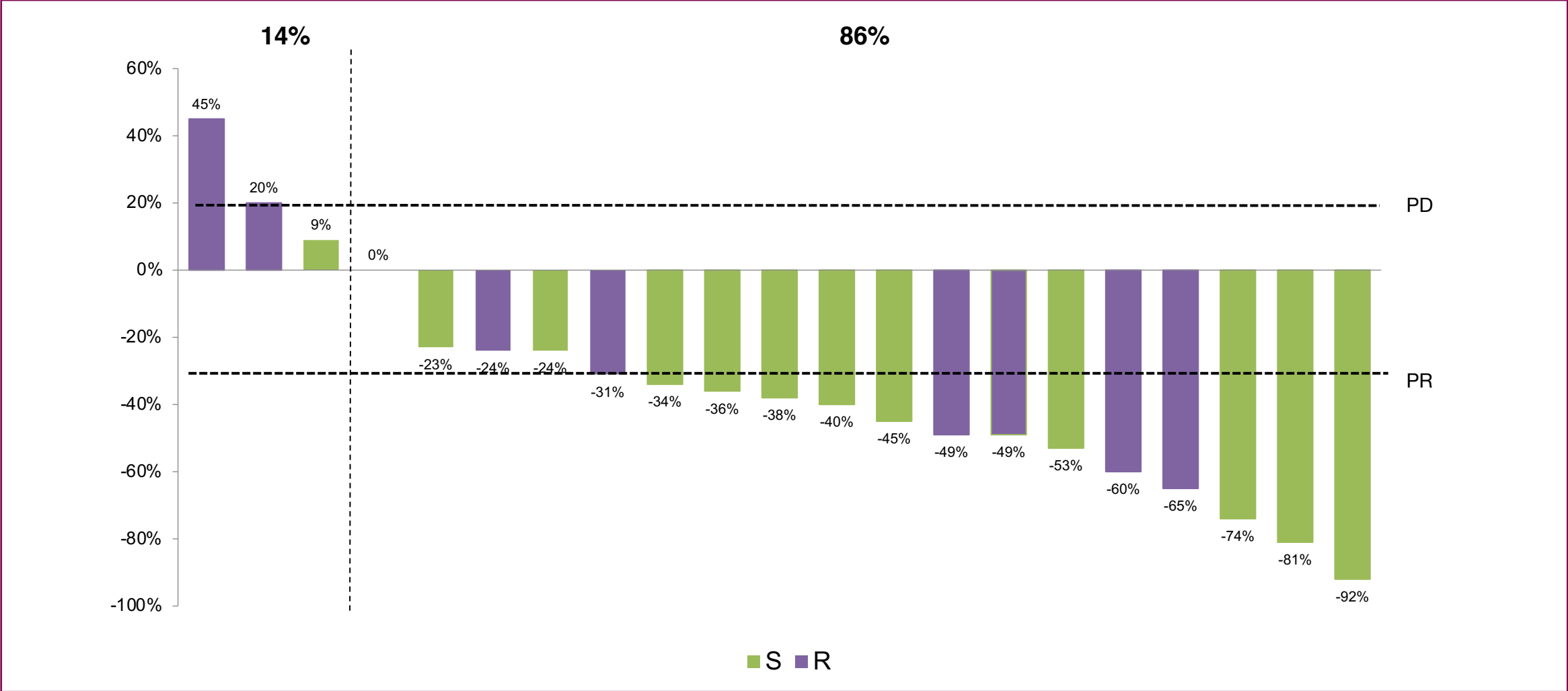
## Overall Survival and Progression-free Survival



- Paz-Ares et al. WCLC 2021 (PL02.03)

# Phase 1b/2 Trial | Lurbinectedin + Irinotecan

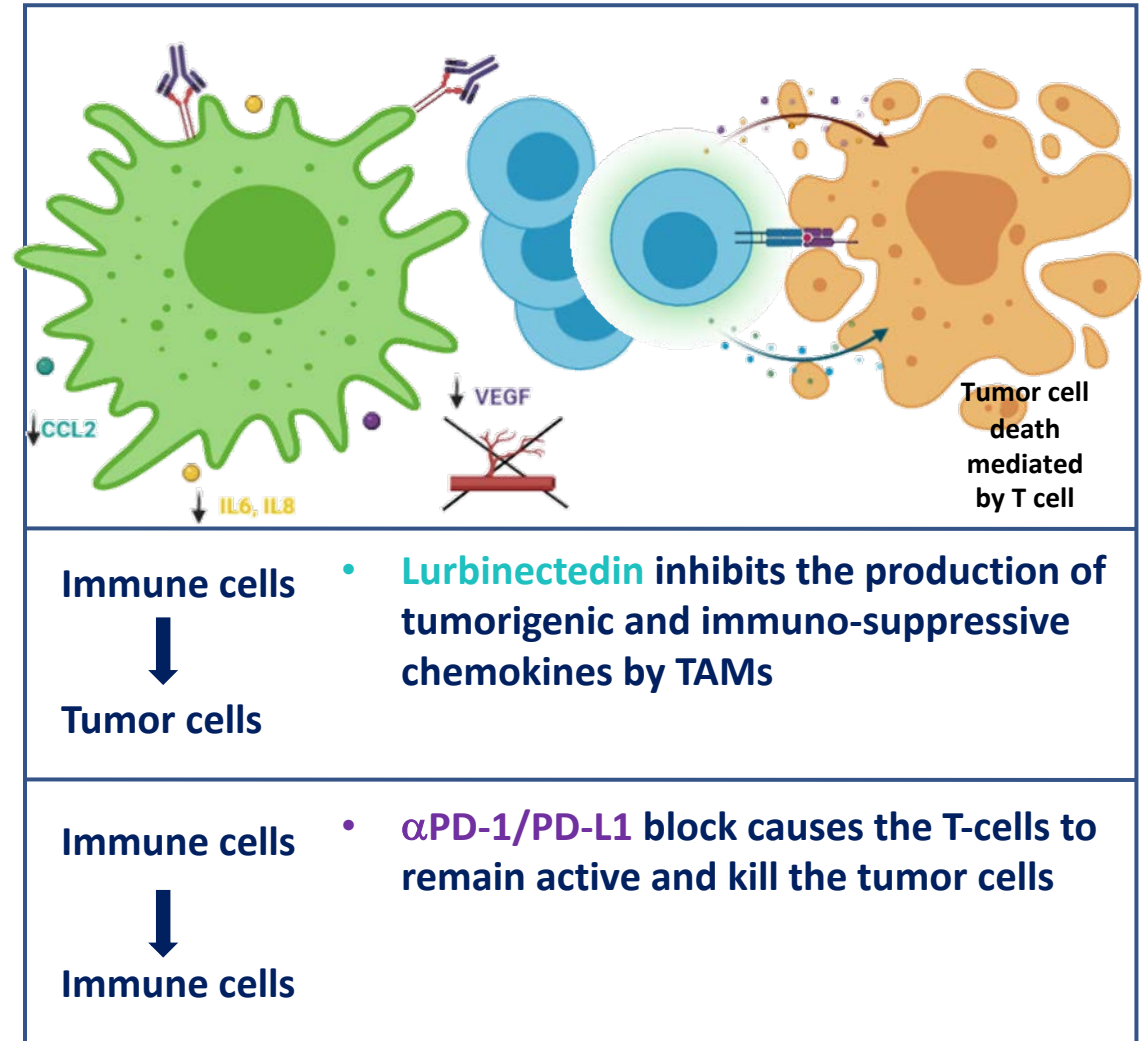
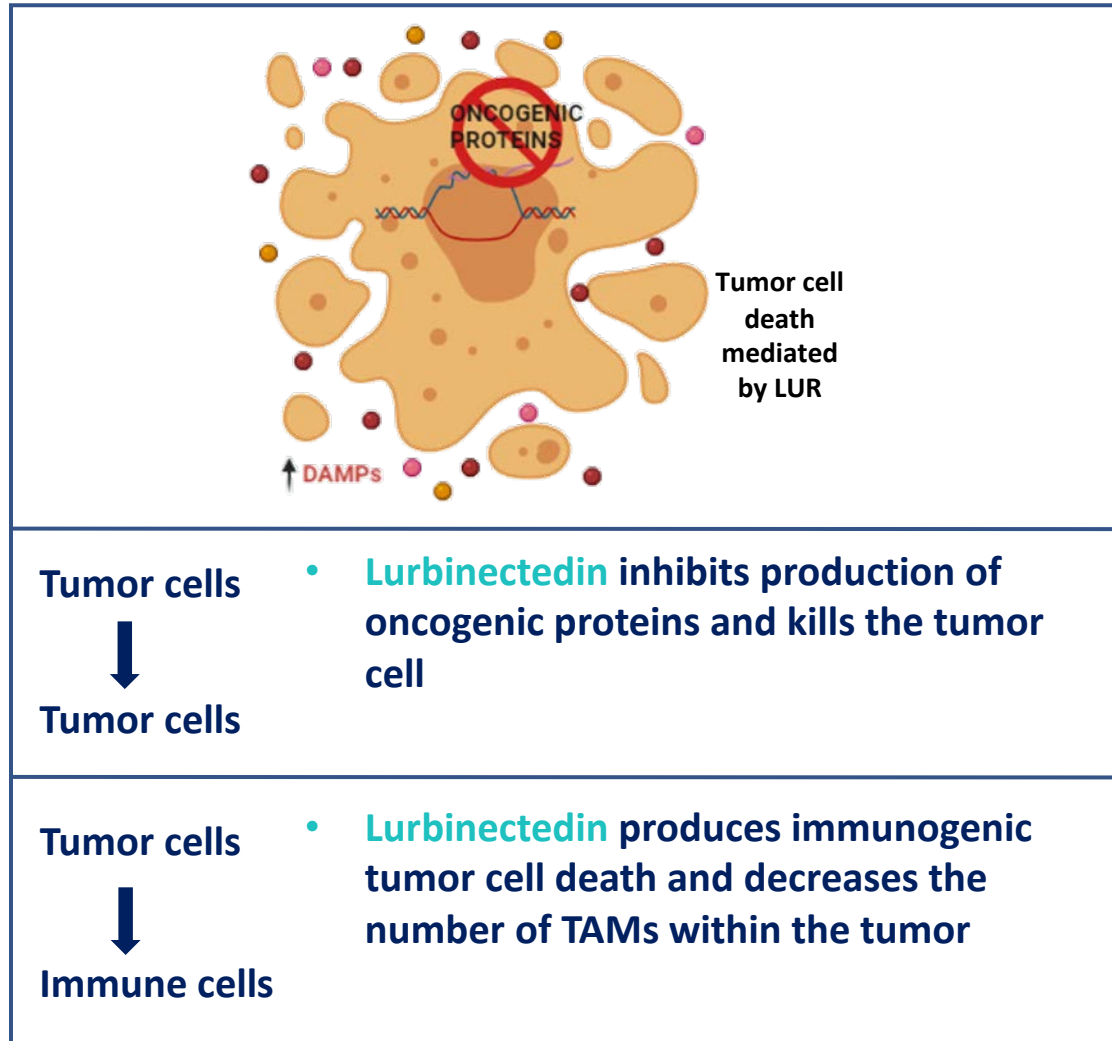
## Efficacy in the SCLC Cohort



1. Ponce-Aix S. Presented at WCLC 2020. Oral OA11.04.

SCLC, small-cell lung cancer; CTFI, chemotherapy-free interval; CNS, central nervous system; PR, partial response; SD, stable disease; DOR, duration of response; CI, confidence interval; PFS, progression-free survival.

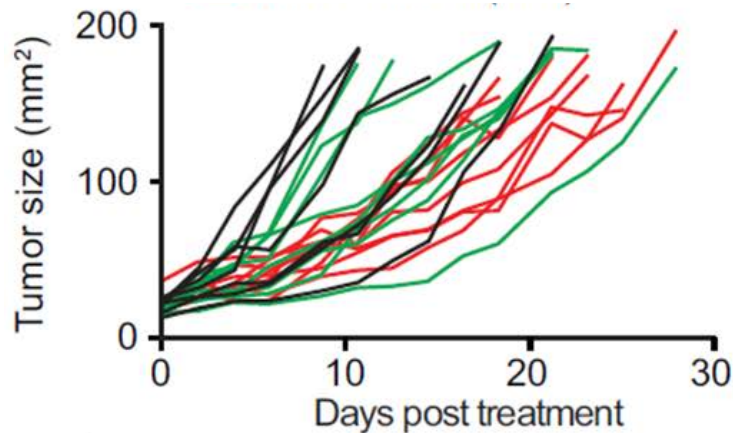
# Synergistic action of LUR + $\alpha$ PD-1/PD-L1: Rationale



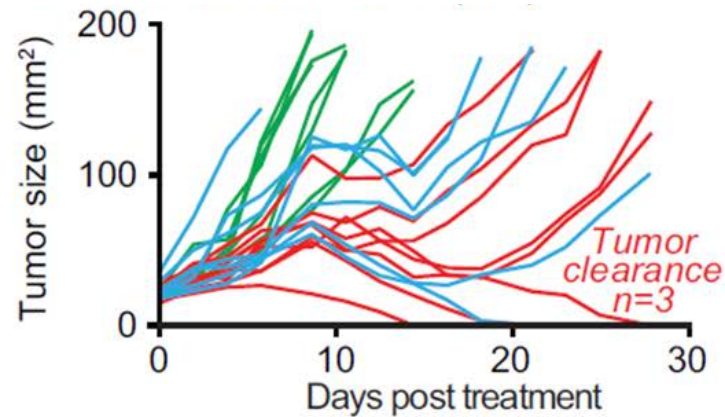
## Tumor Cell Death and Immune Response

# Lurbinectedin and anti-PD1 Demonstrated Synergism *in vivo*

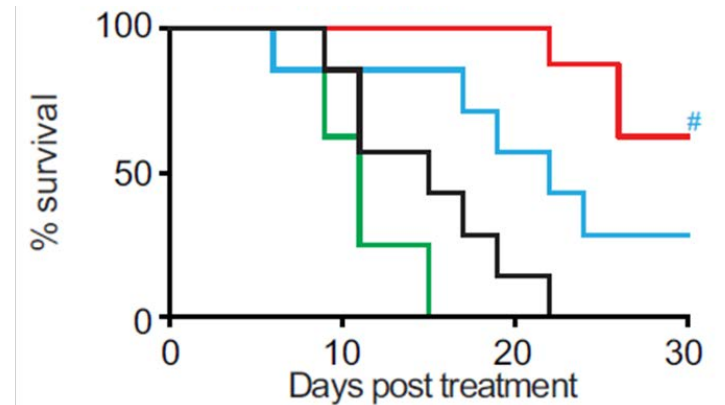
- Lurbinectedin sensitizes cancers to therapy with immune checkpoint blockers targeting CTLA4 or PD1
- The combination of lurbinectedin with aPD1 or aCTLA4 in tumor bearing animals significantly extended life expectancy and led to tumor clearance



— PBS  
— Lurbi + αCTLA4  
— Lurbi + αPD1



— αPD-1/αCTLA4  
— Lurbi + αPD-1/αCTLA4 + αCD4/CD8  
— Lurbi + αPD-1/αCTLA4

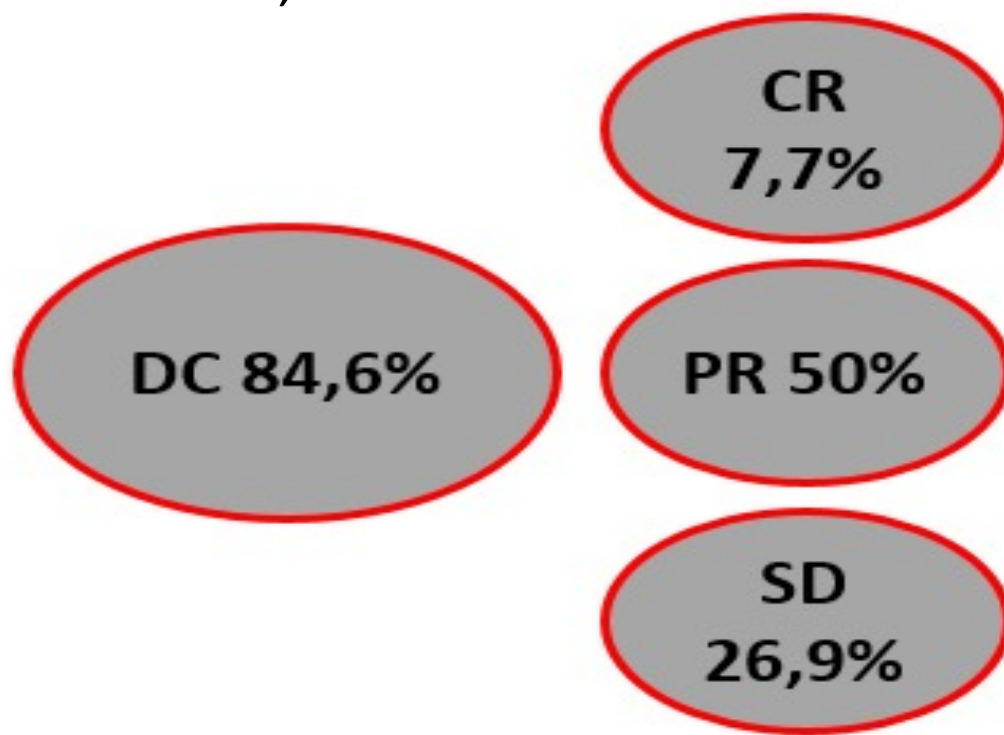


— PBS  
— αPD-1/αCTLA4  
— Lurbi + αPD-1/αCTLA4 + αCD4/CD8  
— Lurbi + αPD-1/αCTLA4

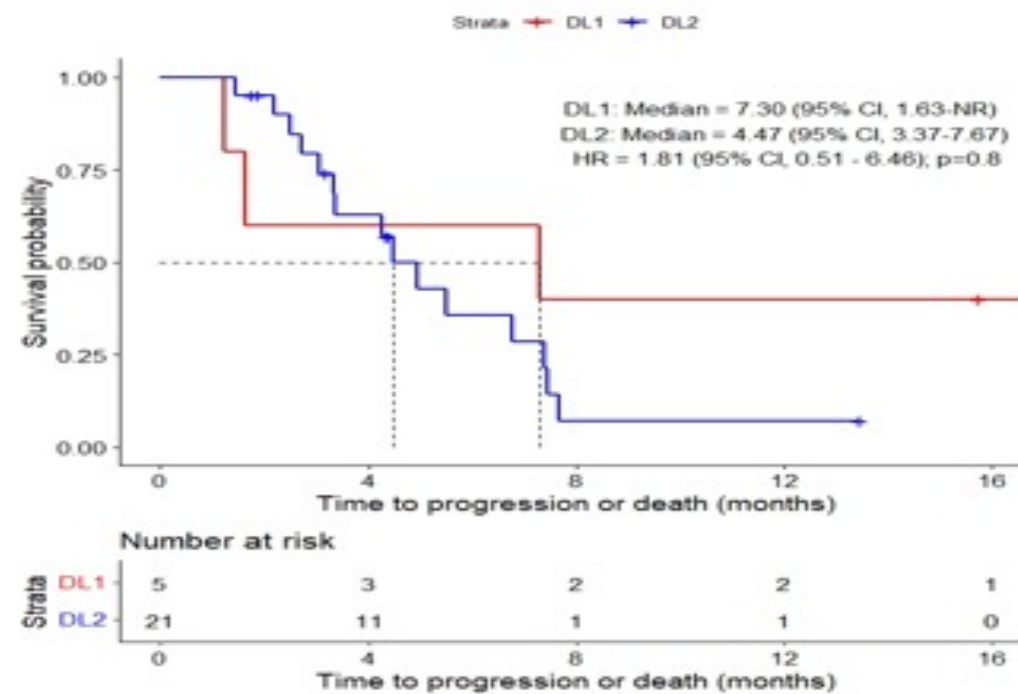


# 2SMALL Phase I/II trial: Lurbinectedin plus Atezolizumab

Objective responses (ORR) were observed in 15 pts (57.7%), including complete responses (CR) in 2 pts (7.7%), partial response (PR) in 13 pts (50%). Stable disease (SD) was observed in 7 pts (26.9%) and 3 pts (11.54%) were in progressive disease (PD). Disease control rate (DC) was 84.61%,

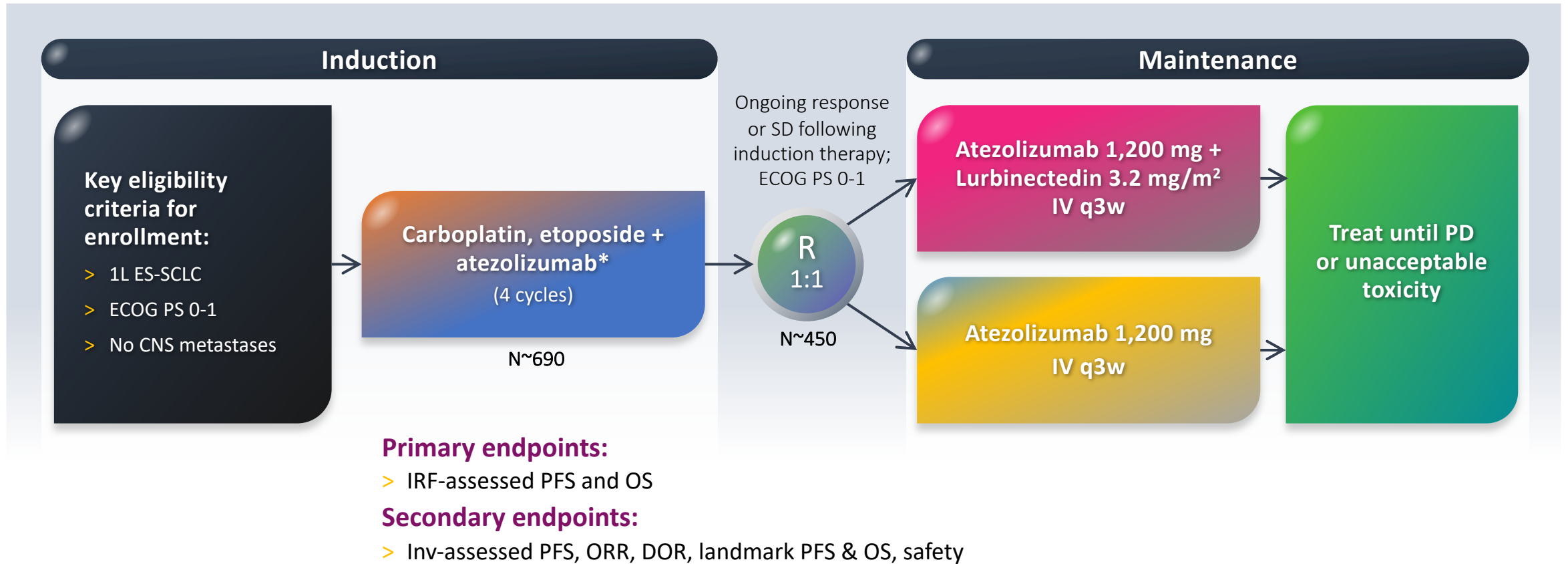


**FIGURE 1** Disease Control Rate and ORR



**FIGURE 2** Progression-free Survival curve for DL1 and DL2 dosing limiting toxicity patients.

# IMforte trial design



- PCI allowed following induction treatment
- **DOR**, duration of response; **Inv**, investigator; **IRF**, independent review facility; **ORR**, objective response rate; **OS**, overall survival; **PCI**, prophylactic cranial irradiation; **PD**, disease progression; **PFS**, progression-free survival; **SD**, stable disease

# Agenda

**Case – Dr Paz-Ares: A 69-year-old woman with newly diagnosed extensive-stage small-cell lung cancer (ES-SCLC) who receives carboplatin/etoposide/atezolizumab**

**Case – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab**

**Case – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression**

**Case – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin**

**Case – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression**



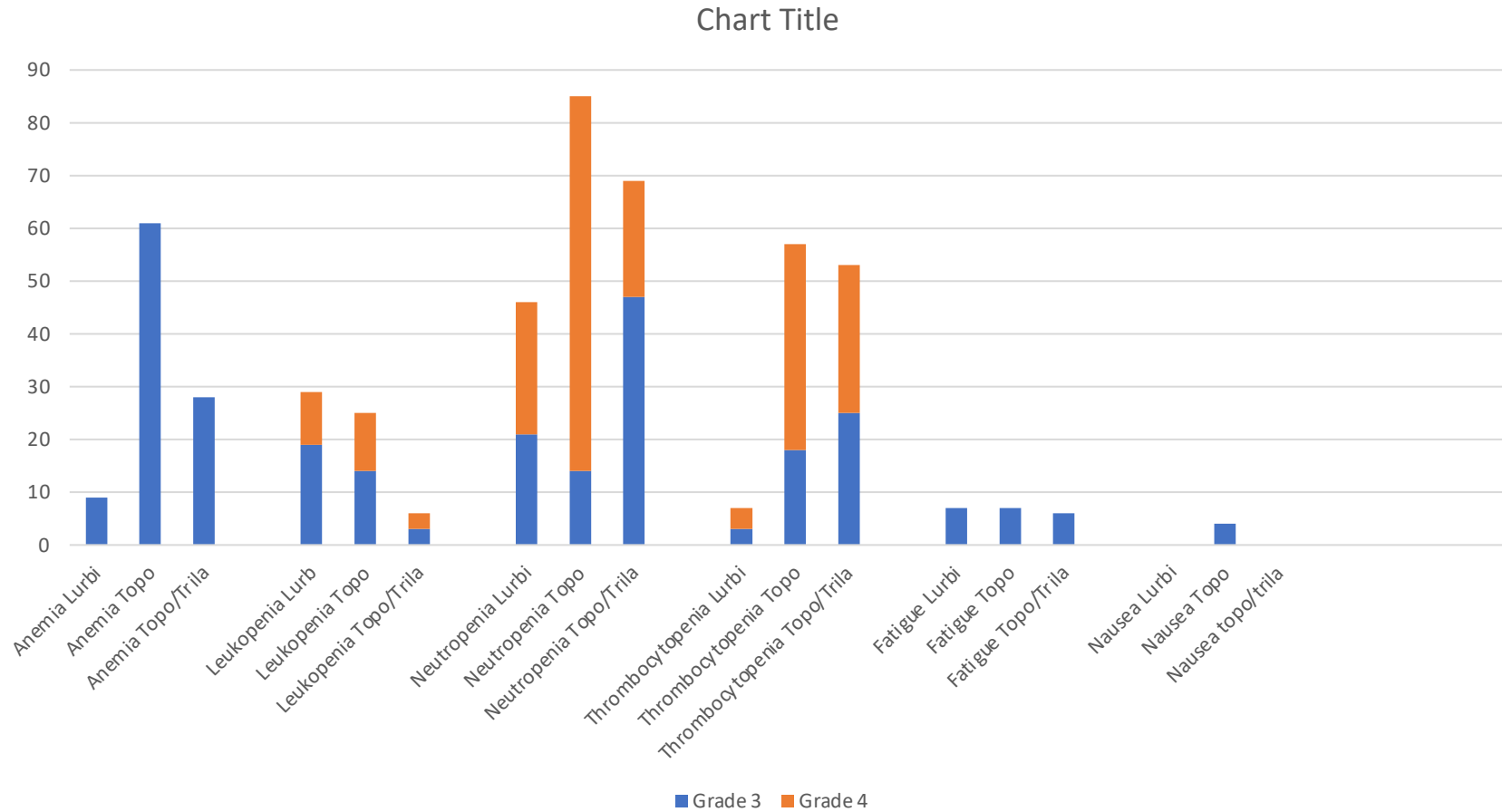
## Case Presentation – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin

- A 70 year old man was previously treated with CbP/VP16/atezolizumab with PR, but PD after 8 months while on atezolizumab maintenance therapy.
- Repeat platinum-doublet vs. lurbinectedin were discussed and the patient chose lurbinectedin.
- Patient returns on day 10 with fever and a cough productive of green sputum. O2 sat 90% (baseline 94%), RR15, no increased WOB.
- Chest Xray is ambiguous, with opacities difficult to specify. CT obtained demonstrated PNA. There is no cancer growth, perhaps diminution. CBC notable for WBC 1, ANC 200, Hgb 7 (baseline 12 pre-chemo) and plt 50.

# What is the incidence of NTP w/Lurbi?

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

# G3-4 Heme AEs; NB: This is cross-trial comparison, not randomized data



Hart, Adv. Ther, 2021  
Trigo, Lancet Oncol 2020

# More Cross Trial Comparison; stuff people feel (NB: any grade, prior was G3-4)

	Lurbinectedin	Topotecan	Topotecan/Trilaciclib
Fatigue	58	41	36
Nausea	32	50	28
Decreased appetite	21	18	21
Vomiting	18	32	6
Diarrhea	15	29	16

Hart, Adv. Ther, 2021  
Trigo, Lancet Oncol 2020

# Management

- Patient did not want to be admitted and asked if he could be managed at home.
- After recommendation for admission, he declined.

Sex

☒ Male (0 points)

☐ Female (-10 points)

Demographic factors

Age (1 point for each year)

☐ Nursing home resident (10 points)

Comorbid illnesses

☒ Neoplastic disease (active) (30 points)

☐ Chronic liver disease (20 points)

☐ Heart failure (10 points)

☐ Cerebrovascular disease (10 points)

☐ Chronic renal disease (10 points)

Physical examination findings

☐ Altered mental status (20 points)

☐ Respiratory rate  $\geq 30$ /minute (20 points)

☐ Systolic blood pressure  $< 90$  mmHg (20 points)

☐ Temperature  $< 35^{\circ}\text{C}$  ( $95^{\circ}\text{F}$ ) or  $\geq 40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ) (15 points)

☒ Pulse  $\geq 125$ /minute (10 points)

Laboratory and radiographic findings

☐ Arterial pH  $< 7.35$  (30 points)

☐ Blood urea nitrogen  $\geq 30$  mg/dL (11 mmol/L) (20 points)

☐ Sodium  $< 130$  mEq/L (20 points)

☐ Glucose  $\geq 250$  mg/dL (14 mmol/L) (10 points)

☒ Hematocrit  $< 30$  percent (10 points)

☐ Partial pressure of arterial oxygen  $< 60$  mmHg or oxygen saturation  $< 90$  percent (10 points)

☐ Pleural effusion (10 points)

[Reset form](#)

Class I 0.1% mortality (see note below)
0 to 70 points: Class II 0.6% mortality
71 to 90 points: Class III 0.9% mortality
91 to 130 points: Class IV 9.3% mortality
131 to 405 points: Class V 27.0% mortality

PORT/PSI  
Fine, NEJM 1997  
(Accessed on uptodate)

## Case Presentation – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin (continued)

### Followup

- Patient was treated with levofloxacin.
- His daughter stayed with him for two weeks.
- His nurse navigator called him daily.
- He returned to clinic for C2.
- CBC: WBC 3, ANC 1100, Hgb 10, Plt 150

# Poll Question

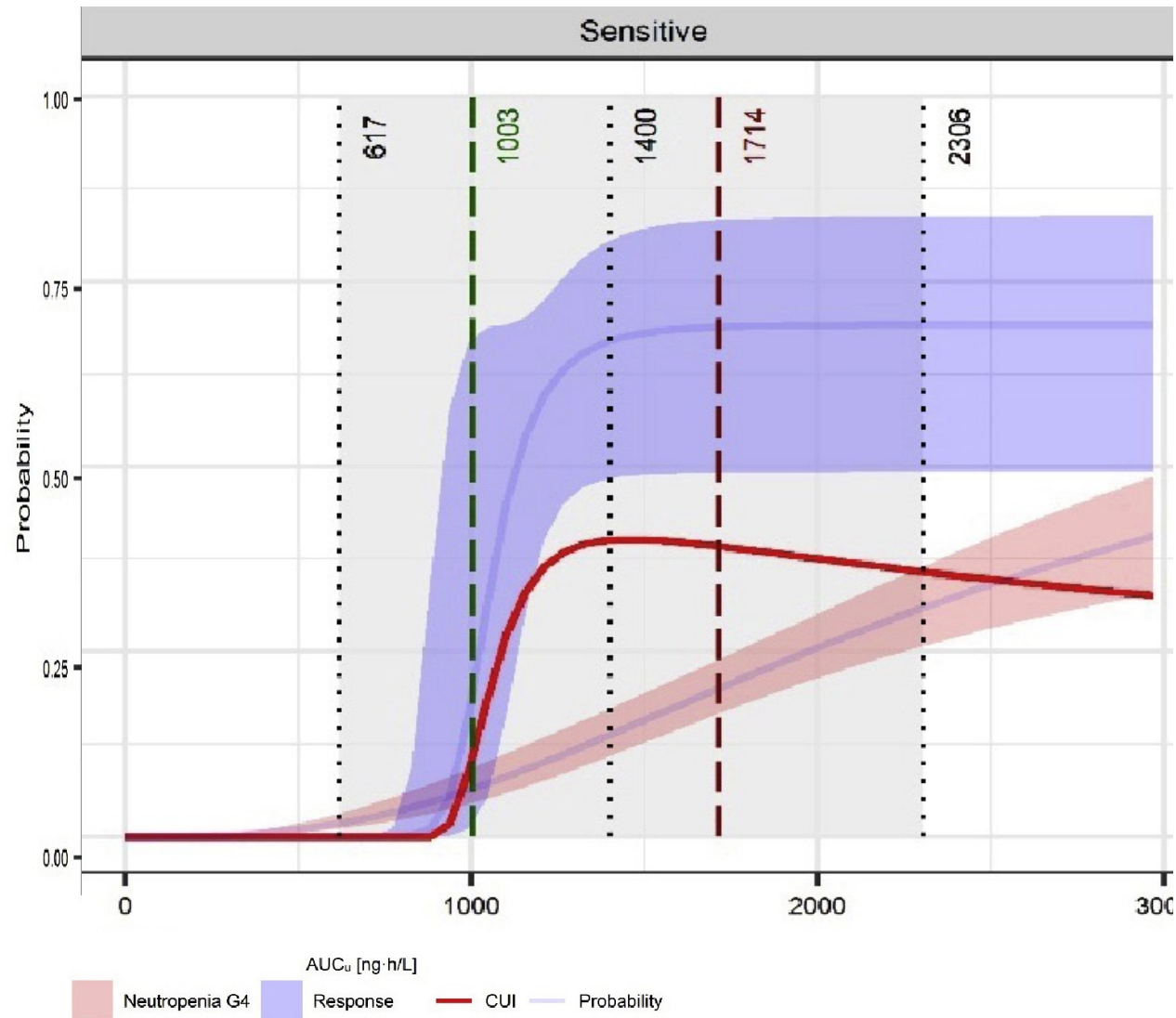
Should the dose of the next cycle be reduced?

Yes

No



# Why Lurbinectedin was not dose-reduced



Exposure in AUC (X axis) vs.  
Probability of response and G4  
NTP (Y axis)

## Case Presentation – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin (continued)

### Followup

- Pegfilgrastim given as secondary PPx.
- C2 went well.
- Imaging after two cycles showed PD.
- Options of hospice, topotecan (preceded by trilaciclib) or a phase I clinical trial discussed.
- The patient chose hospice.
- Major comfort complaint was SOB; this was effectively palliated with a fan and morphine.

## Agenda

**Case – Dr Paz-Ares: A 69-year-old woman with newly diagnosed extensive-stage small-cell lung cancer (ES-SCLC) who receives carboplatin/etoposide/atezolizumab**

**Case – Dr Weiss: A 46-year-old woman with newly diagnosed ES-SCLC who receives carboplatin/etoposide/durvalumab**

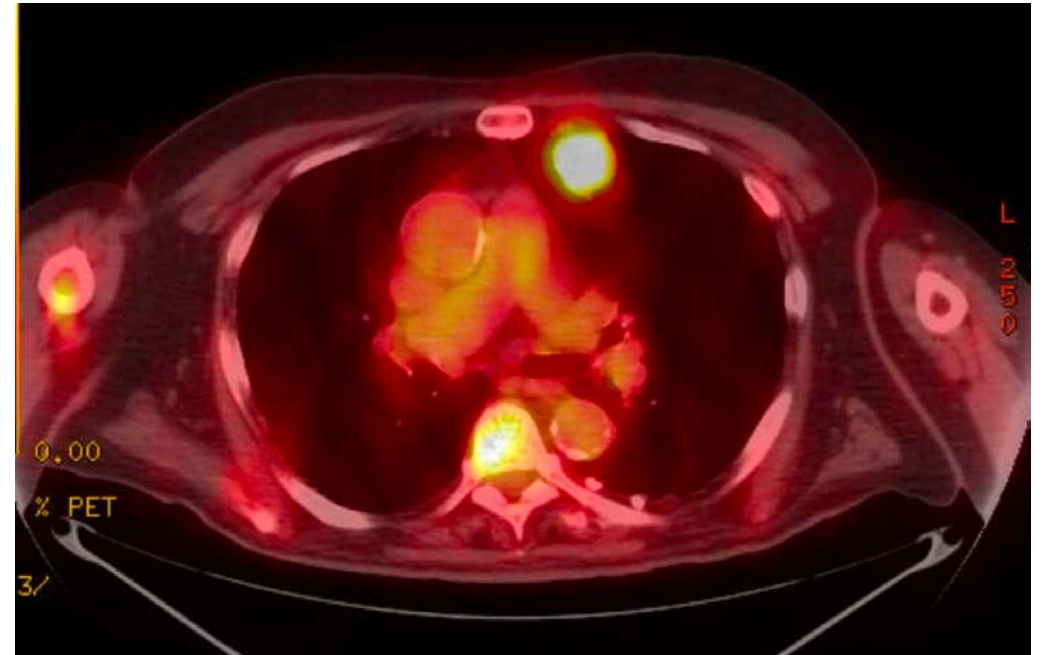
**Case – Dr Paz-Ares: A 63-year-old man with ES-SCLC who receives carboplatin/etoposide/durvalumab and then experiences disease progression**

**Case – Dr Weiss: A 70-year-old man with progressive SCLC who receives lurbinectedin**

**Case – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression**

## Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression

- An 82-year-old man presented to his cardiologist with increased DOE.
- CXR showed LUL mass, mediastinal LAD leading to CT then PET.
- PET showed left upper mass with mediastinal and upper abdominal nodal metastases and diffuse osseous metastases.
- MRI brain clear.
- Biopsy showed SCLC.

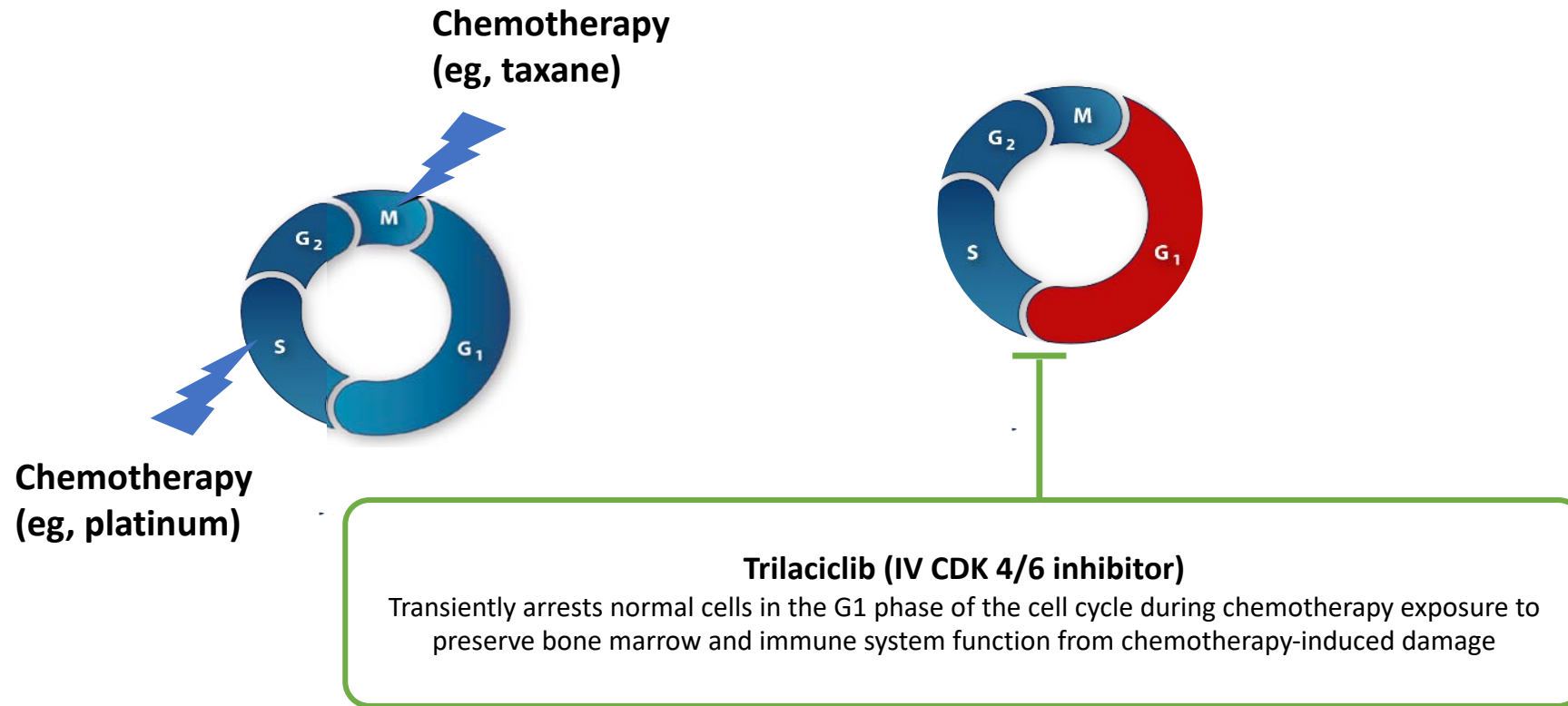


# Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression (cont)

## Fitness

- MMP: CAD with h/o MI, DM, CHF.
- PS: Bad side of ECOG 1 pre-cancer, now good side of 2. Spends roughly ½ of day in bed or some recumbent position.
- Basic GA: Fully intact in ADLs, dependent on very supportive wife for IADLs. Get up and go 10 seconds.
- Values: Enjoys life and wants to live more. He is particularly motivated to see his grandchildren grow older and to play golf (can't play 9 holes and needs a cart, but is very proud of his game).
- Baseline labs: WBC 7.4, Hgb 14.7, Plt 154; Creat 0.67 (GFR>60).
- Patient enrolls on a clinical trial, G128-02: CbP/VP16 +/- Trilaciclib

# Trilaciclib Mechanism of Action

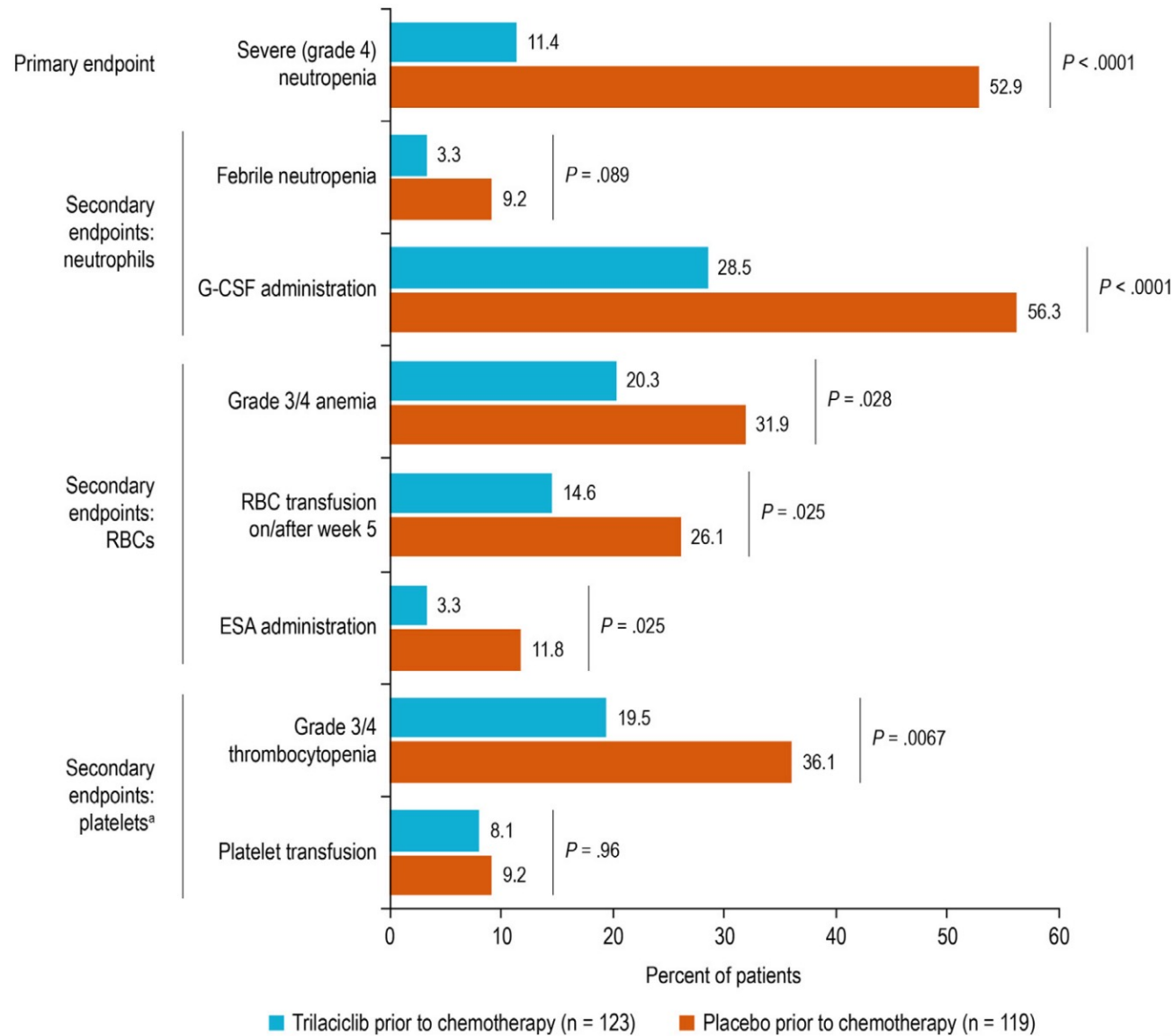


# G1T28-02

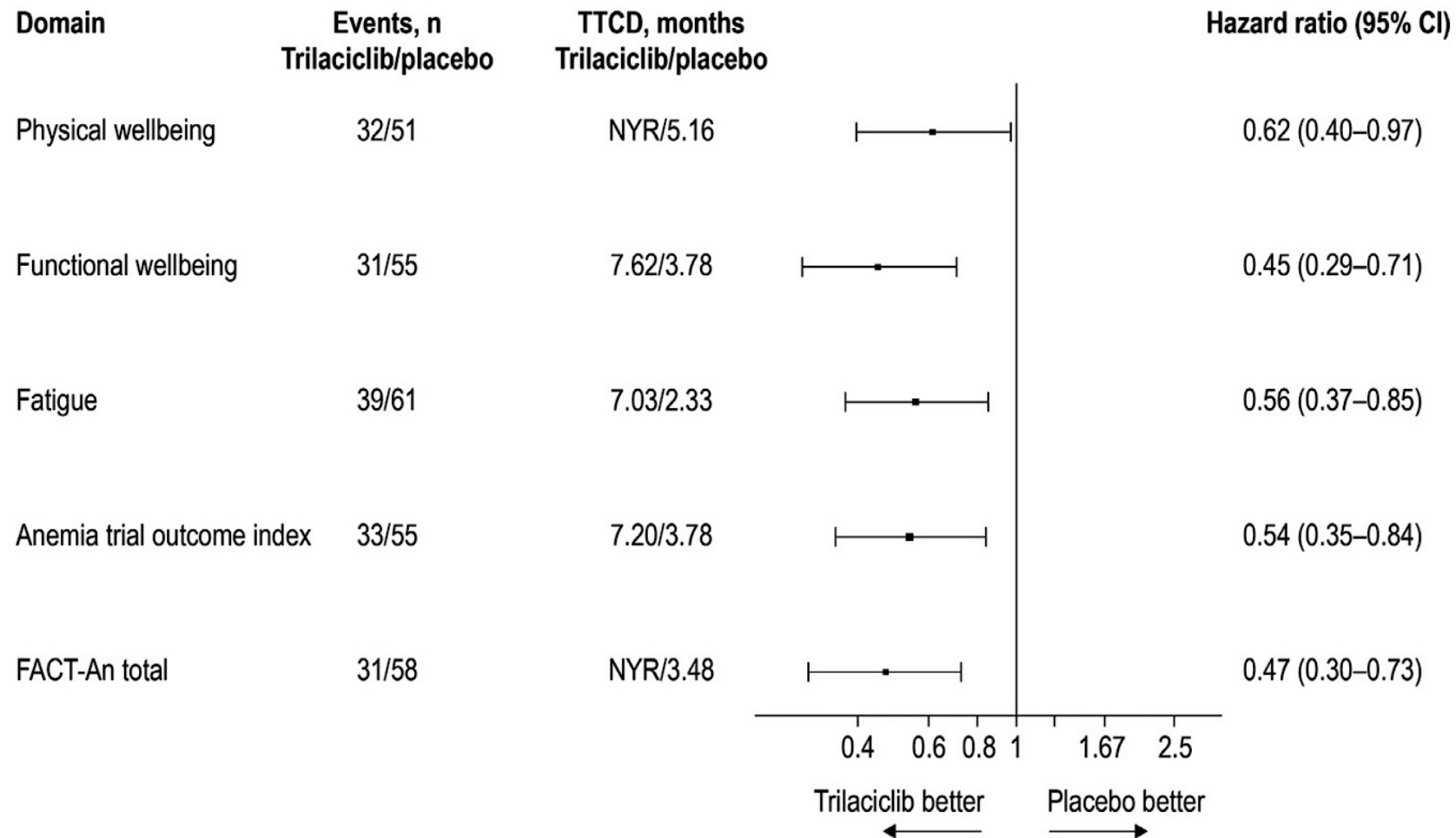
Study	Patient Population	Treatment Schedule
G1T28-05 (NCT03041311)	Newly diagnosed (first-line) ES-SCLC	Trilaciclib 240 mg/m <sup>2</sup> IV QD prior to chemotherapy on days 1-3 of each 21-day E/P/A IV cycle <sup>a</sup> for up to four cycles followed by atezolizumab monotherapy (without trilaciclib) Q21D Placebo IV QD prior to chemotherapy on days 1-3 of each 21-day E/P/A IV cycle for up to four cycles followed by atezolizumab monotherapy (without placebo) Q21D
G1T28-02 (NCT02499770)	Newly diagnosed (first-line) ES-SCLC	Trilaciclib 240 mg/m <sup>2</sup> IV QD prior to chemotherapy on days 1-3 of each 21-day E/P IV cycle <sup>b</sup> Placebo IV QD prior to chemotherapy on days 1-3 of each 21-day E/P IV cycle
G1T28-03 (NCT02514447)	Previously treated (second-/third-line) ES-SCLC	Trilaciclib 240 mg/m <sup>2</sup> IV QD prior to topotecan 1.5 mg/m <sup>2</sup> IV QD on days 1-5 of each 21-day cycle Placebo IV QD prior to topotecan 1.5 mg/m <sup>2</sup> IV QD on days 1-5 of each 21-day cycle



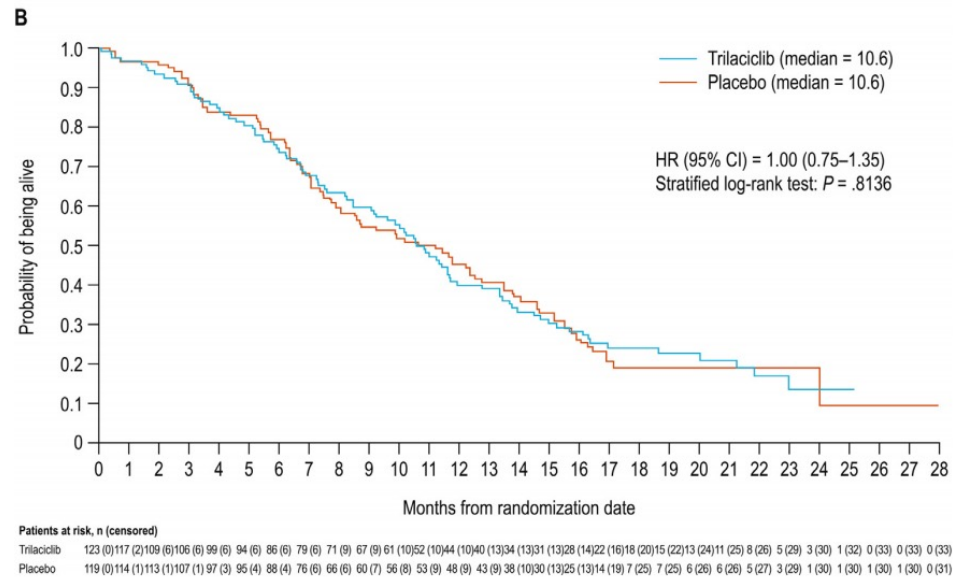
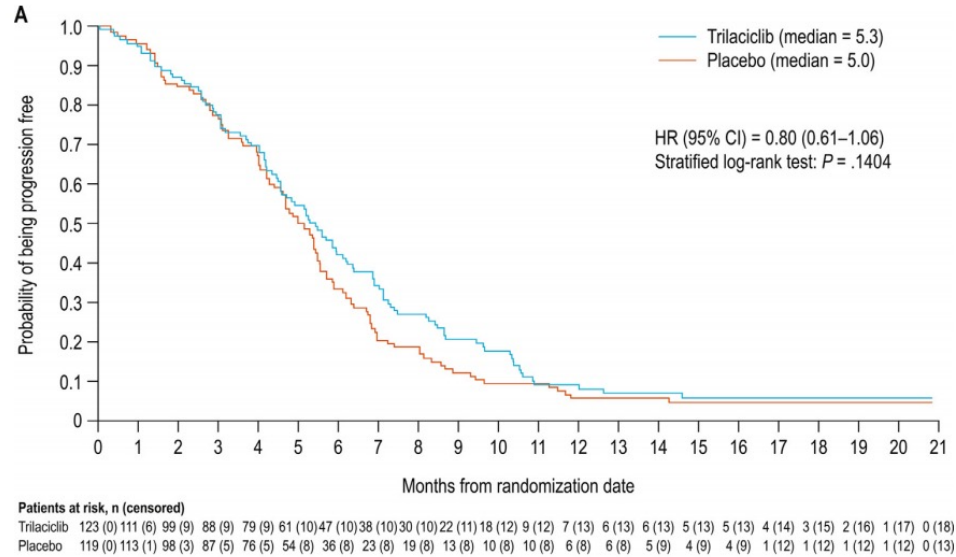
# Pooled Data



# PROs



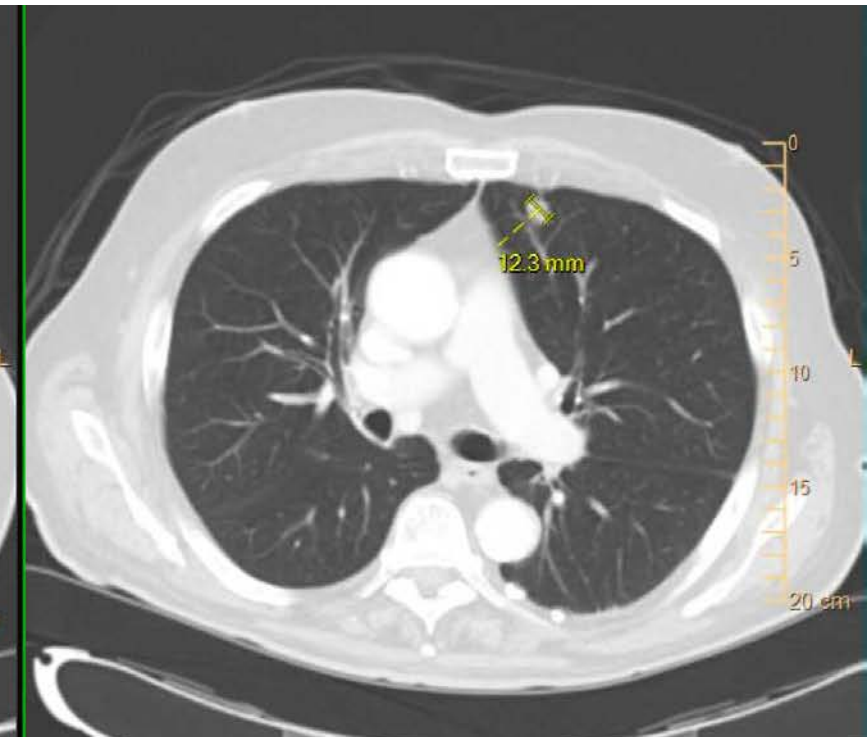
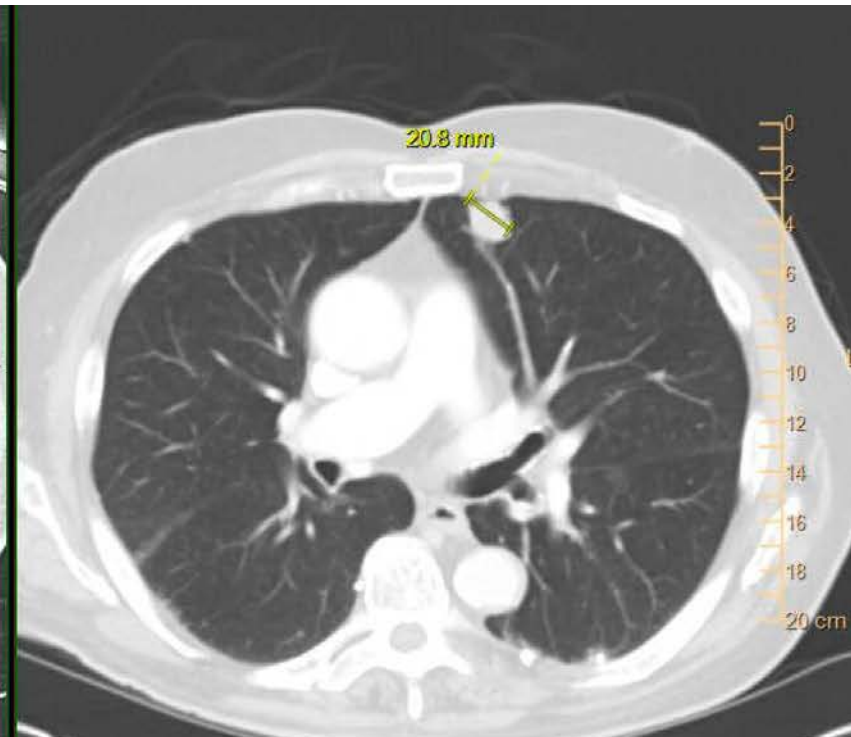
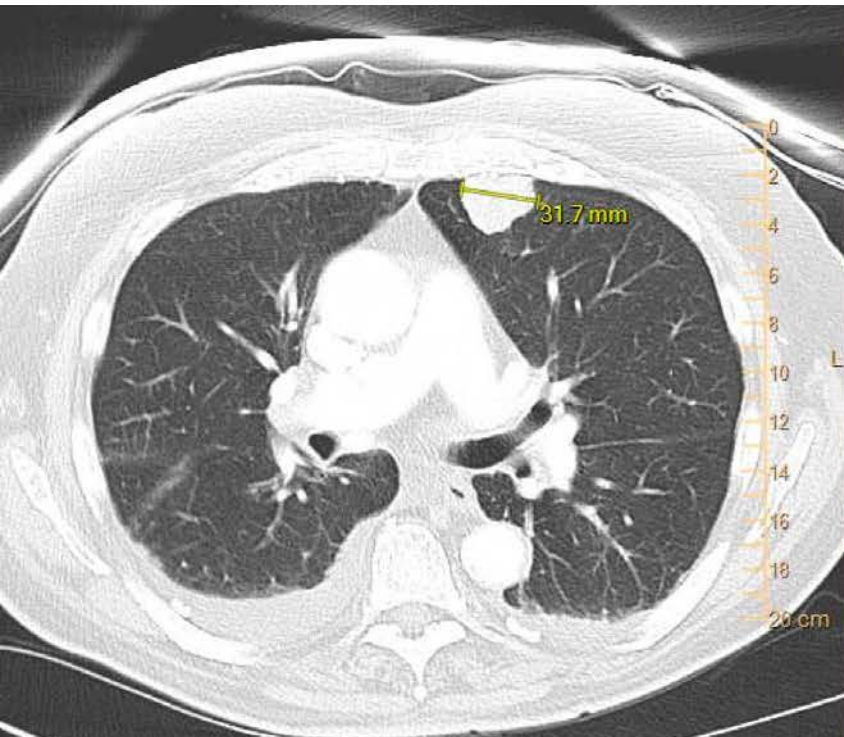
# No impact on PFS or OS



# Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression (cont)

## Progress

	Pre C1	Pre C3	Post C4
WBC	7.4	4.8	3.3
Hgb	14.7	13.2	12.6
Plt	154	246	199



## Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression (cont)

- 2 month FU scan showed additional diminution of cancer.
- There was no evidence of progression for nearly 3 years on serial imaging.
- His other medical problems were active, most notably CHF and cholecystitis, culminating in an admission for sepsis.
- Workup for cholecystectomy reveals recurrent lung mass.
- Oncology discusses GOC. Patient strongly wishes to try to continue to live, citing desire for more time with his wife and grandchildren.
- Oncology recommends cholecystectomy prior to chemotherapy, citing risk of recurrent infections and high risk of death if given chemotherapy without it.
- Local surgeon declines to operate, citing multiple comorbidities and high risk. Academic surgeon reviews the case carefully and concurs.
- Oncology recommends strong consideration of hospice. The patient voices understanding of high risk of infection and death, but strongly requests additional therapy for the chance that he could live longer.

# Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression (cont)

- In the interim, atezolizumab has been approved in 1L (Lurbi has not yet been).
- Trilaciclib is not yet FDA approved and is not available.
- Chemo: CbP/VP16/Atezo; cytotoxics DR 10%.
- Premeds:
  - Antiemetics: Fosaprepitant, ondansetron, dexamethasone
  - Pegfilgrastim post chemo
  - Levofloxacin post chemo
- Pre C1: WBC 3, Hgb 11.1, Plt 348
- Pre C2: WBC 1.7, Hgb 8.2, Plt 7; had petechia, no active bleed.
- Got 1U PRBC inpatient.
- 1 week later: WBC 7.8, Hgb 9.2, Plt 121.
- Patient wanted chemo. MD concerned. Compromise on atezo alone, RTC 1w.
- Following week, WBC 8.5, Hgb 9.7, Plt 200; after discussion of GOC, C2 given w/further DR (CbP AUC 3.5, VP16 60mg/m<sup>2</sup>).

## Case Presentation – Dr Weiss: An 82-year-old man with SCLC who experiences disease progression (cont)

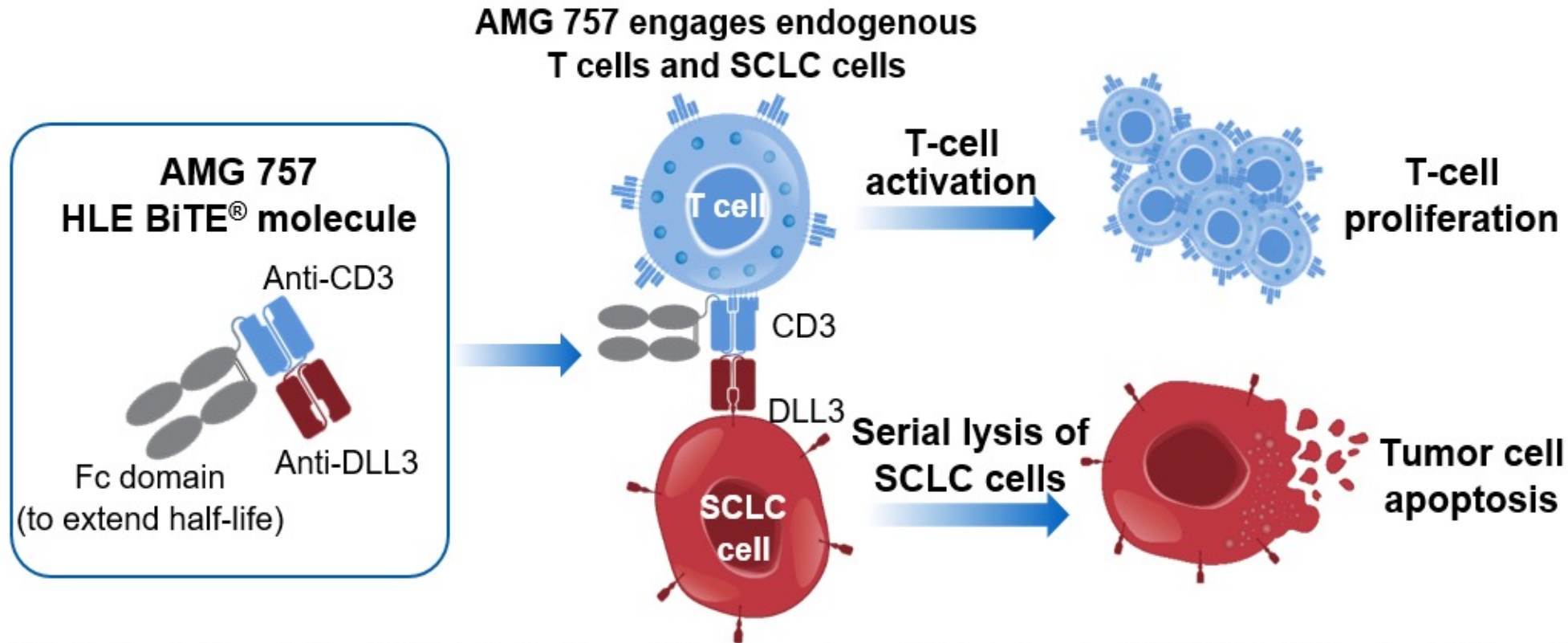
### Followup

- Patient admitted locally with cholecystitis with sepsis.
- Family meeting held via video and decision made for DNR/DNI and hospice care.
- Patient died comfortably, surrounded by family.

# Novel Agents and Strategies



# AMG 757: A Half-life Extended BiTE<sup>®</sup> (bispecific T-cell engager) Immuno-oncology Therapy 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.

- BiTE molecules engage a patient's own T cells to attack and eradicate cancer cells<sup>1-3</sup>

1. Stieglmaier J, et al. *Expert Opin Biol Ther*. 2015;15:1093-1099. 2. Einsele H, et al. *Cancer*. 2020;126:3192-3201. 3. Bargou R, et al. *Science*. 2008;321:974-977. 4.

# Safety profile

Treatment-related AEs	Patients (N = 66)	
	All Grades, n (%)	Grade ≥ 3, n (%) <sup>*</sup>
Any treatment-related AE	56 (85)	18 (27)
Treatment-related AEs in ≥ 10% of patients		
CRS	29 <sup>†</sup> (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)

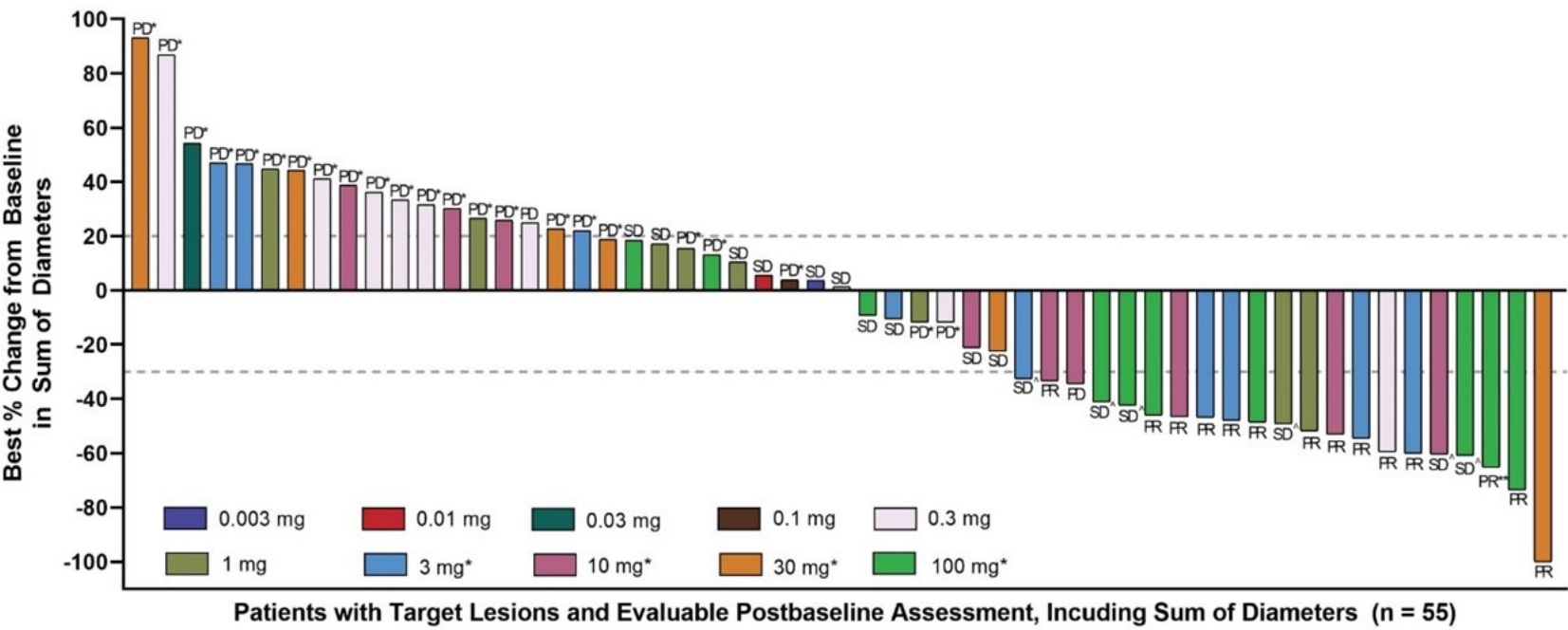
<sup>\*</sup>Includes one patient with grade 5 pneumonitis. <sup>†</sup>Of the 29 patients, 21 had grade 1, 7 had grade 2, and 1 had grade 3 CRS. <sup>‡</sup>Lee 2014 grading. AE, adverse event; CRS, cytokine release syndrome; DLT, dose limiting toxicity.

- 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<sup>‡</sup>
  - 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

**Tarlatamab monotherapy demonstrated a favorable safety profile**



# Antitumor activity



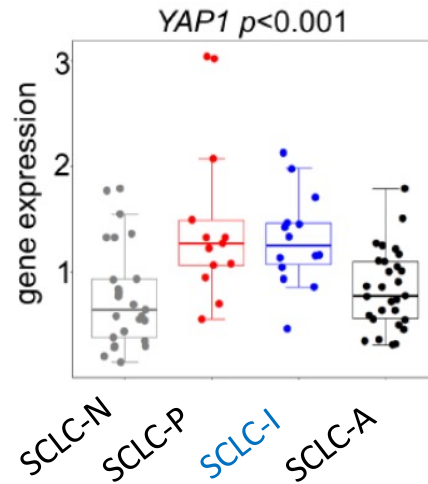
PD\* indicates PD in post baseline scan and came off study without further confirmation scan. PR\*\* indicates the PR is unconfirmed. SD^ indicates patients who had an initial PR, but did not have confirmation of PR on the subsequent scan. \*Step dosing. †Includes patients who received ≥ 1 dose of tarlatamab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

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)

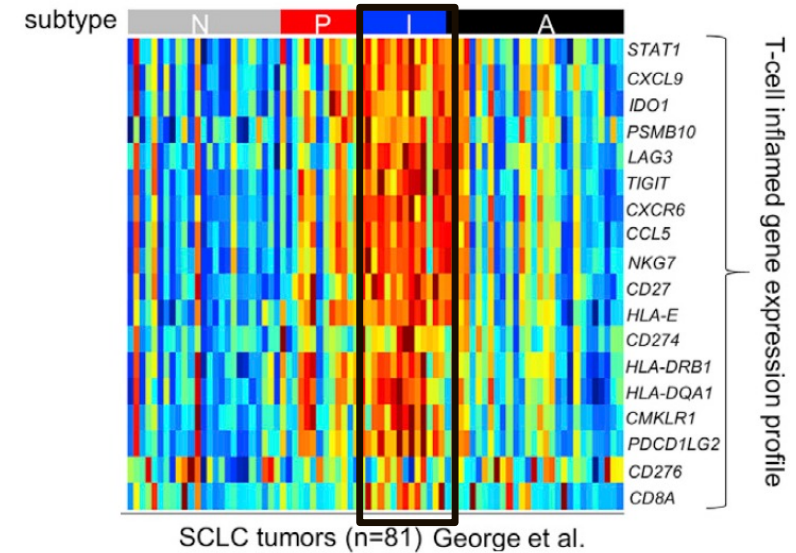
Tumor shrinkage is observed across a range of tarlatamab doses

# SCLC-I: a new subtype with therapeutic implications?

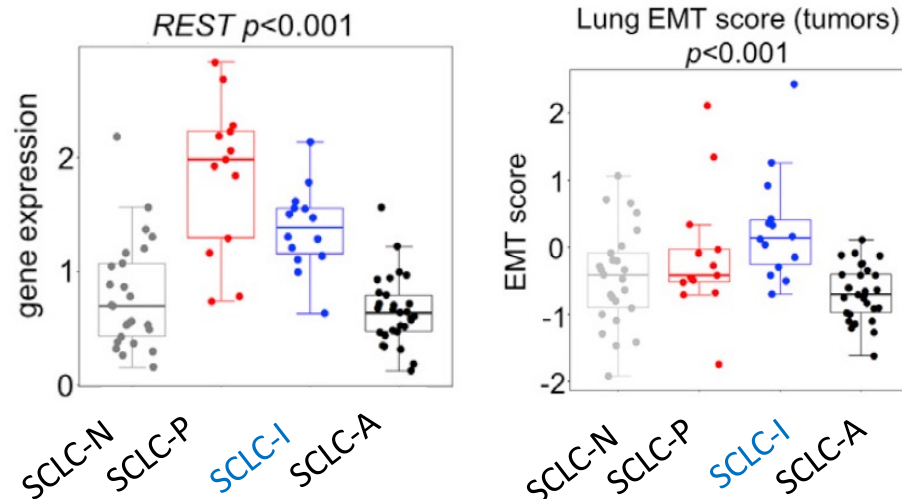
YAP1 expression does not define a particular subtype



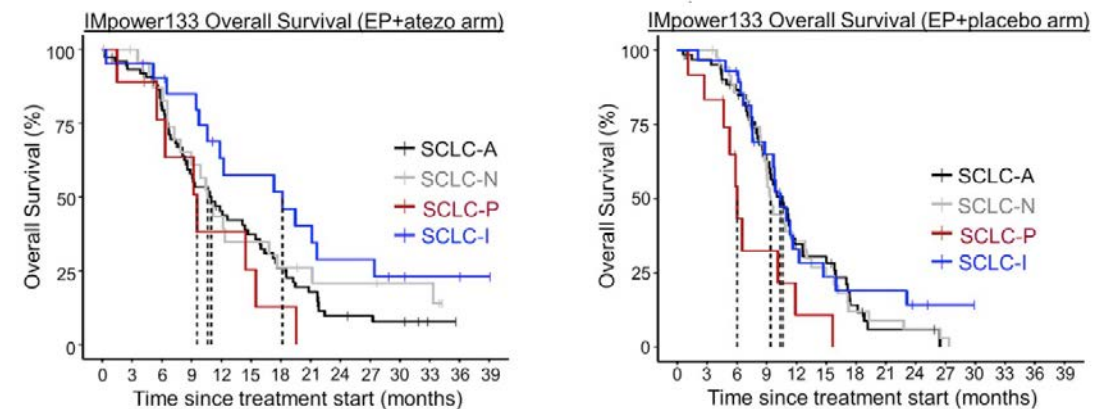
SCLC-I shows an "immune hot" phenotype...



SCLC-I subtype shows Notch activation and an EMT phenotype



...correlating with better response to immunotherapy



Gay et al., Cancer Cell 2021

# **Recent Advances and Real-World Implications in Medical Oncology: A Daylong Multitumor Educational Symposium in Partnership with the North Carolina Oncology Association and the South Carolina Oncology Society**

**Saturday, February 12, 2022  
8:30 AM – 4:00 PM ET**

# Recent Advances and Real-World Implications in Medical Oncology: Agenda

<b>Module 1</b>	<b>Chronic Lymphocytic Leukemia and Lymphomas 8:35 AM</b>
<b>Module 2</b>	<b>Multiple Myeloma 9:40 AM</b>
<b>Module 3</b>	<b>Genitourinary Cancers 10:45 AM</b>
<b>Module 4</b>	<b>Breast Cancer 12:30 PM</b>
<b>Module 5</b>	<b>Gastrointestinal Cancers 1:35 PM</b>
<b>Module 6</b>	<b>Lung Cancer 2:40 PM</b>

***Thank you for joining us!***

***CME and MOC credit information will be emailed  
to each participant within 5 business days.***