

MCM Tampa Bay Edition

# Stage III Unresectable NSCLC: Any Progress Beyond PACIFIC?

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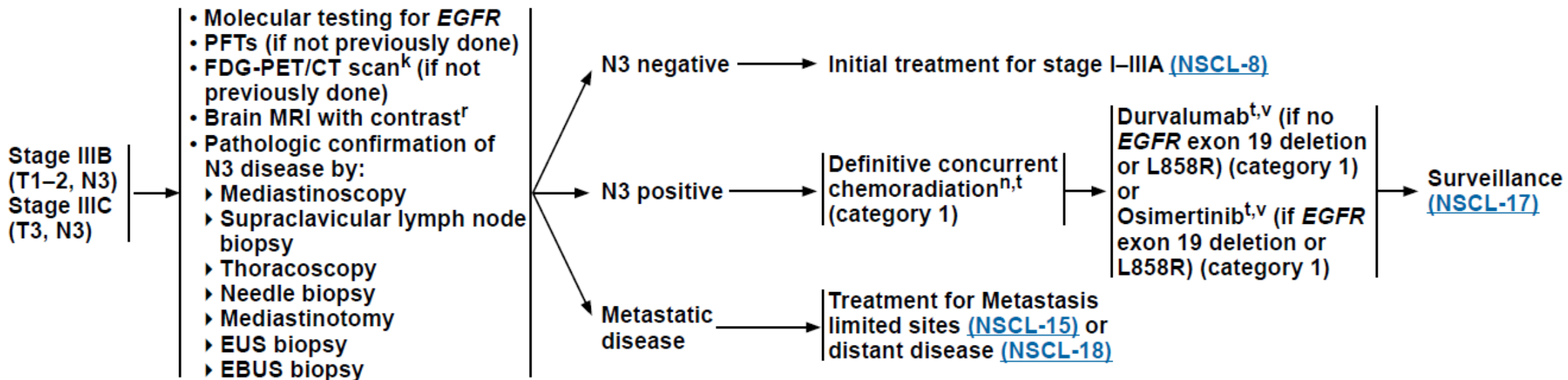


Icahn  
School of  
Medicine at  
**Mount  
Sinai**

**CLINICAL ASSESSMENT**

**PRETREATMENT EVALUATION**

**INITIAL TREATMENT**

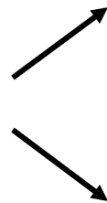


# PACIFIC Study Design

Randomized, double-blind, placebo-controlled phase III trial

Primary endpoints: PFS by BICR, OS

Adult patients with locally advanced, unresectable, stage III NSCLC without progression following  $\geq 2$  cycles platinum-based chemotherapy concurrent with radiation therapy; WHO PS 0/1 (N = 713)



**Durvalumab 10 mg/kg IV Q2W**  
for up to 12 mo  
(n = 476)

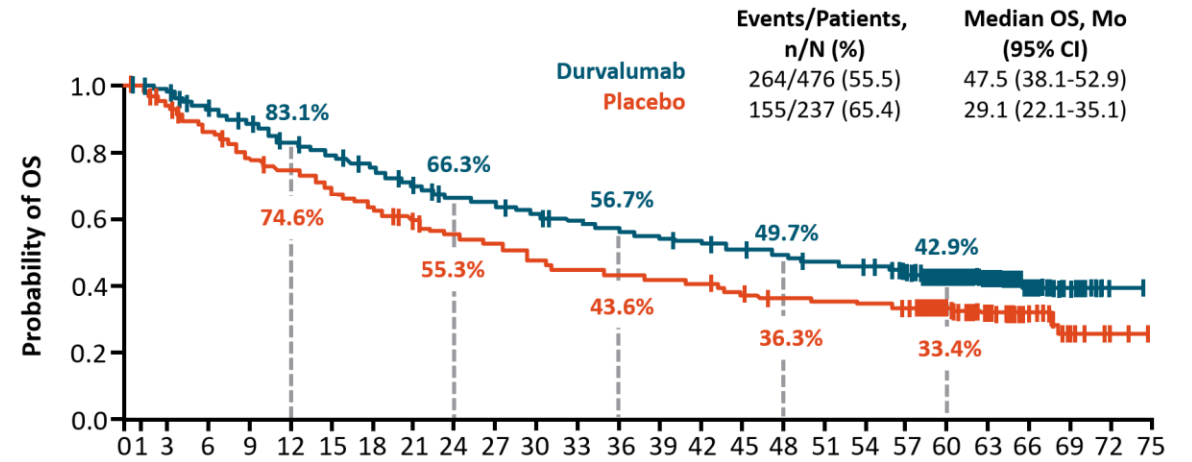
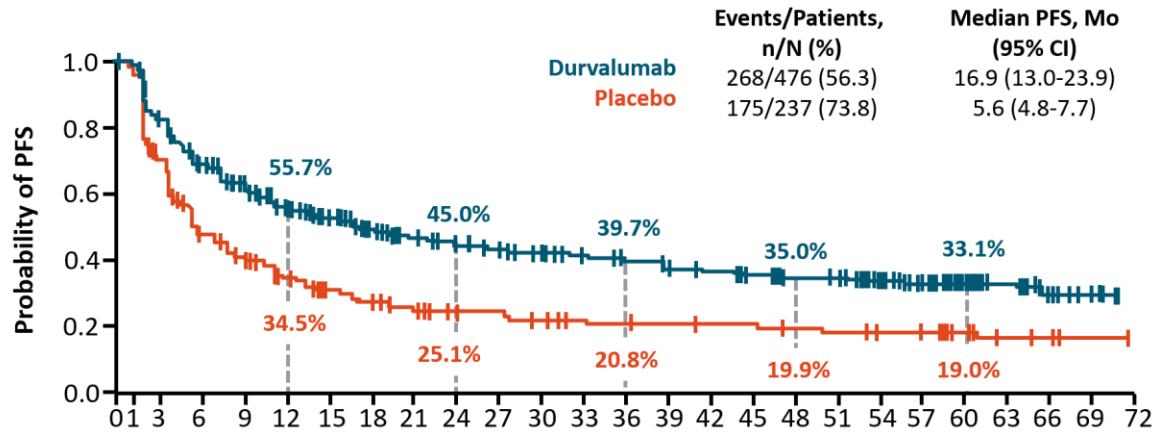
**Placebo IV Q2W**  
for up to 12 mo  
(n = 237)



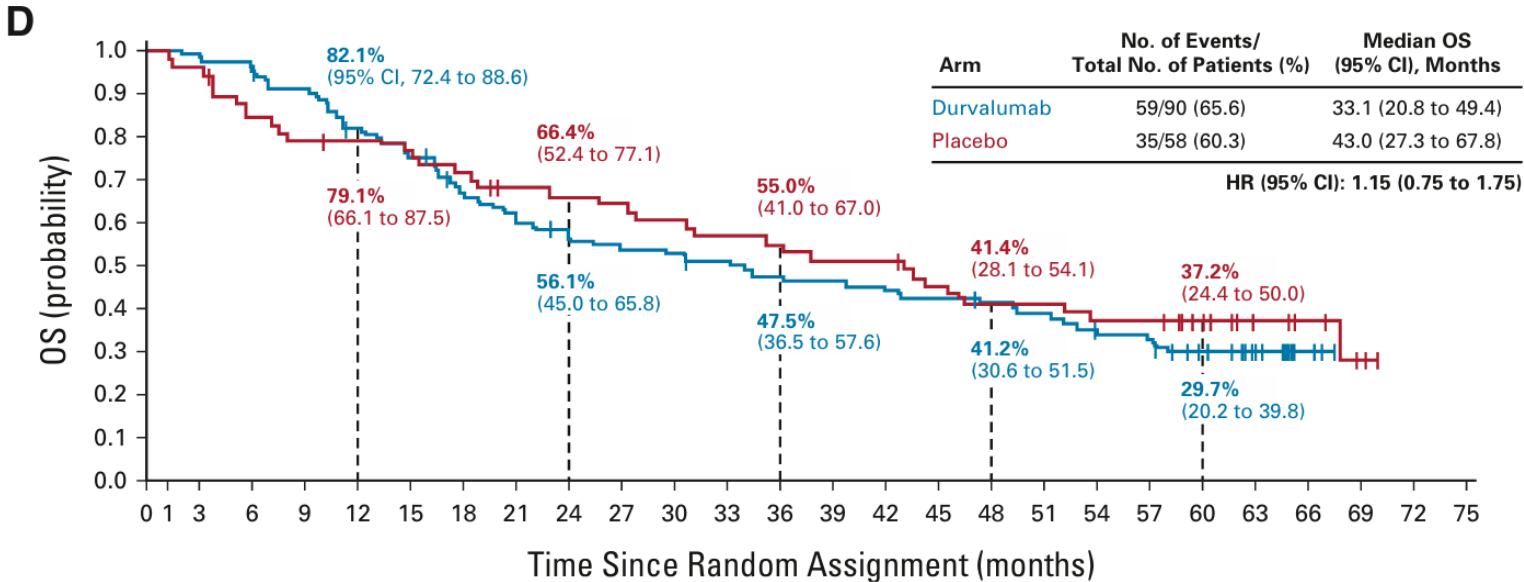
*Until disease progression or unacceptable toxicity*



# PACIFIC 5-Yr Update OS and PFS

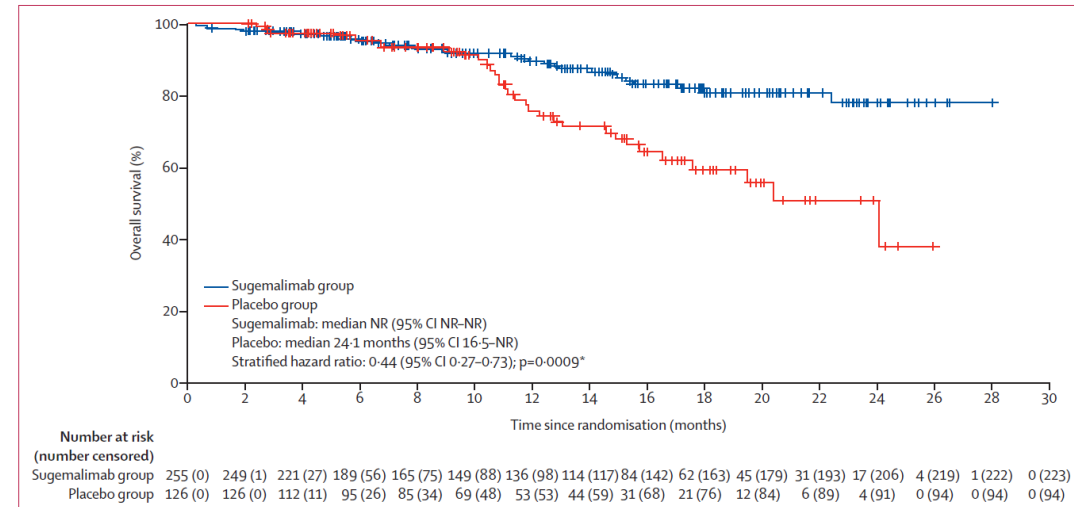
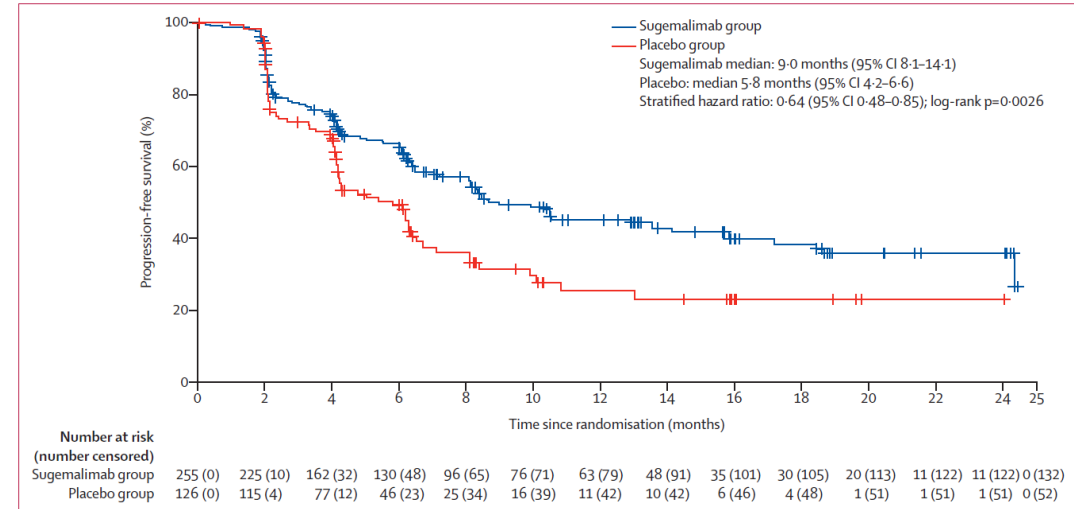


# PACIFIC Overall Survival in PDL-1 Negative NSCLC

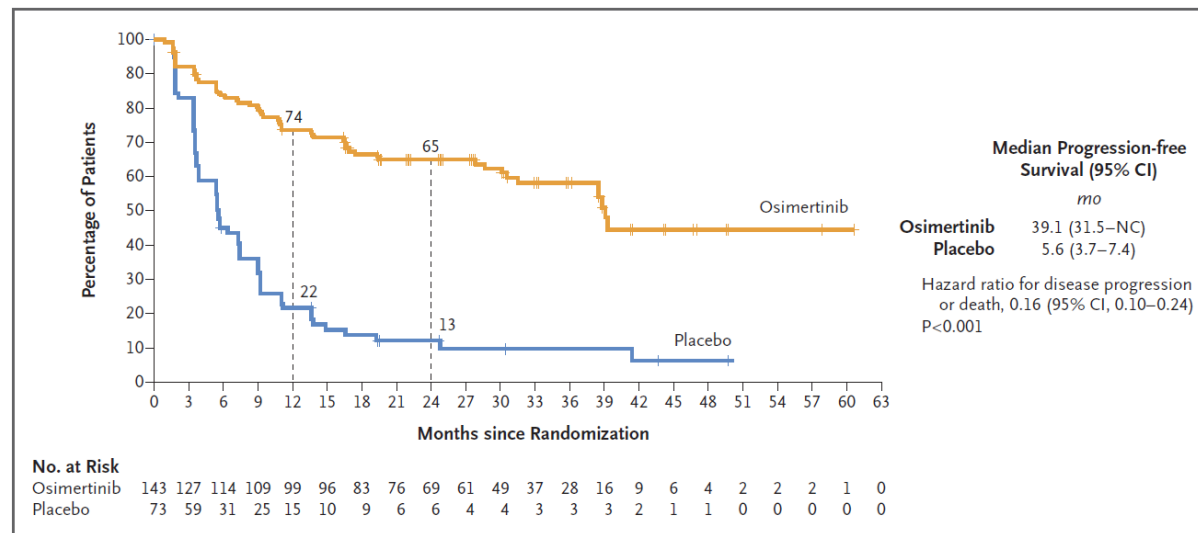
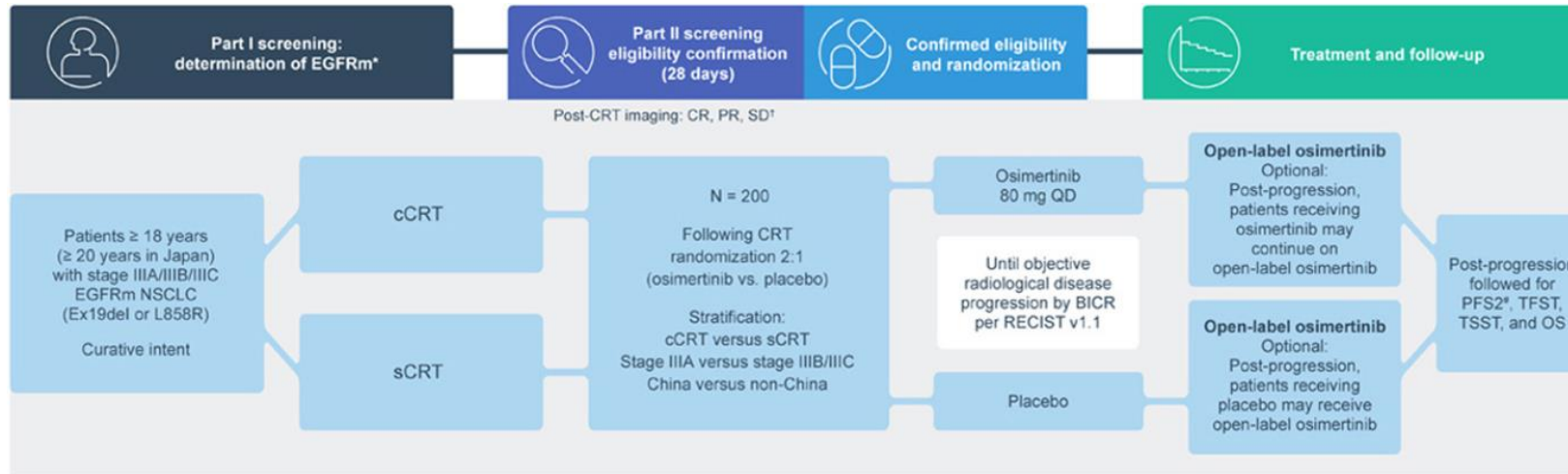


# Sugemalimab versus placebo after concurrent or sequential chemoradiotherapy in patients with locally advanced, unresectable, stage III non-small-cell lung cancer in China (GEMSTONE-301): interim results of a randomised, double-blind, multicentre, phase 3 trial

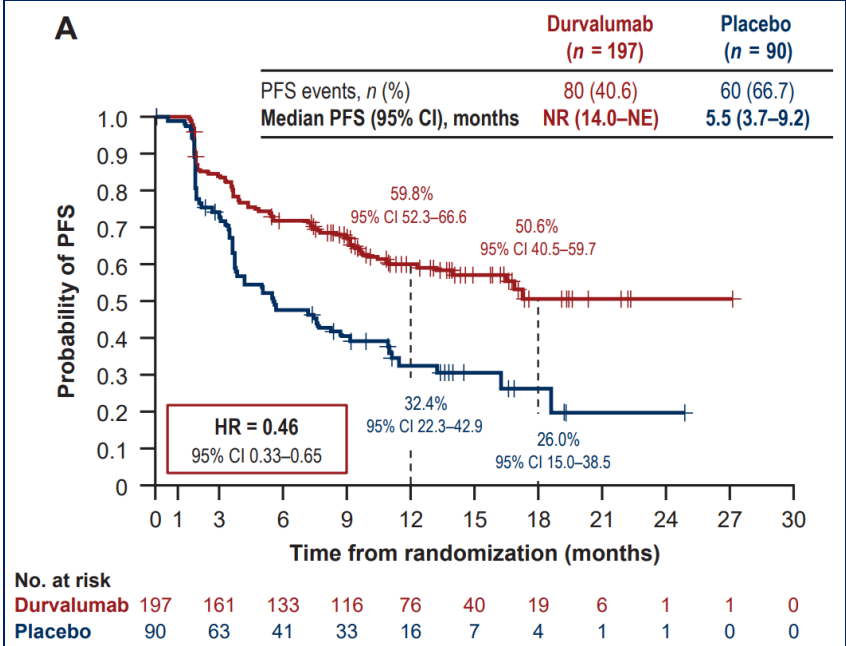
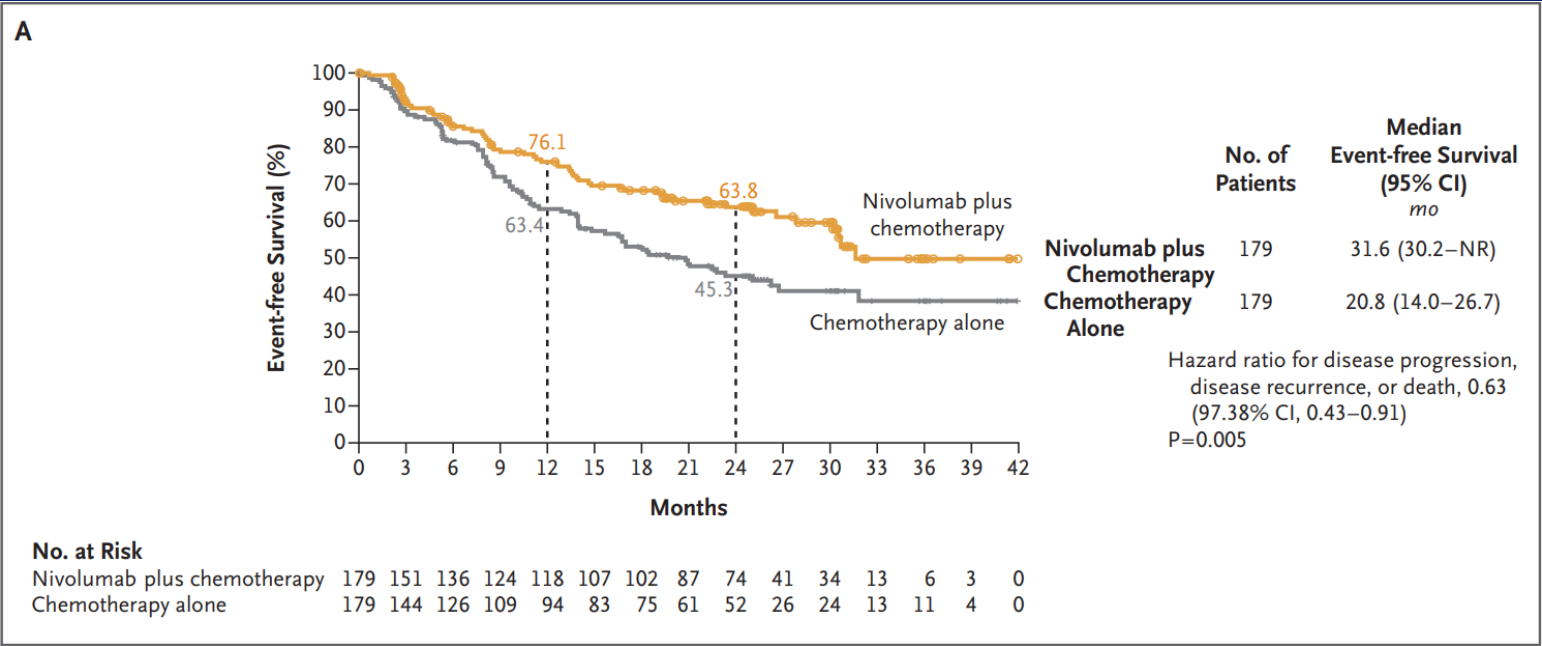
564 patients randomized to consolidation sugemalimab (anti-PDL1) or placebo



# Osimertinib after Chemoradiotherapy in Stage III EGFR-Mutated NSCLC



# Checkmate 816 vs Pacific EFS/PFS for Stage IIIA

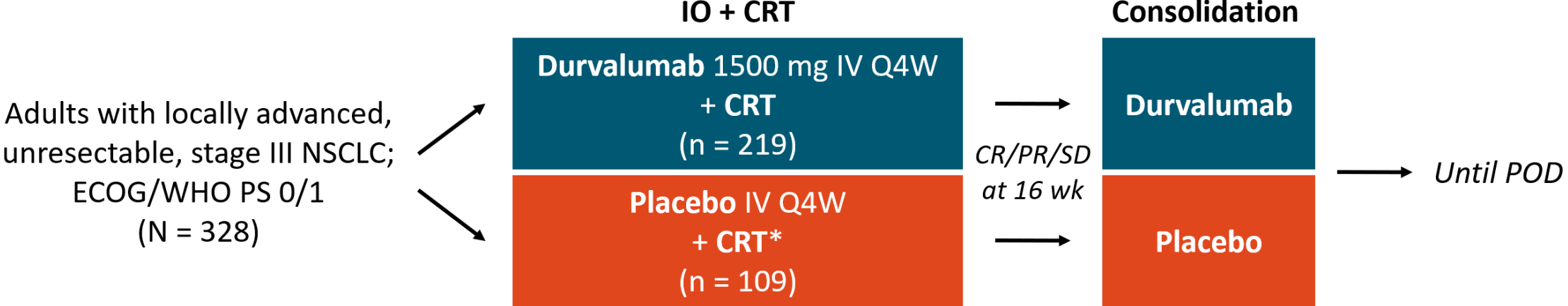




# What has not worked?



# PACIFIC-2 Study Design

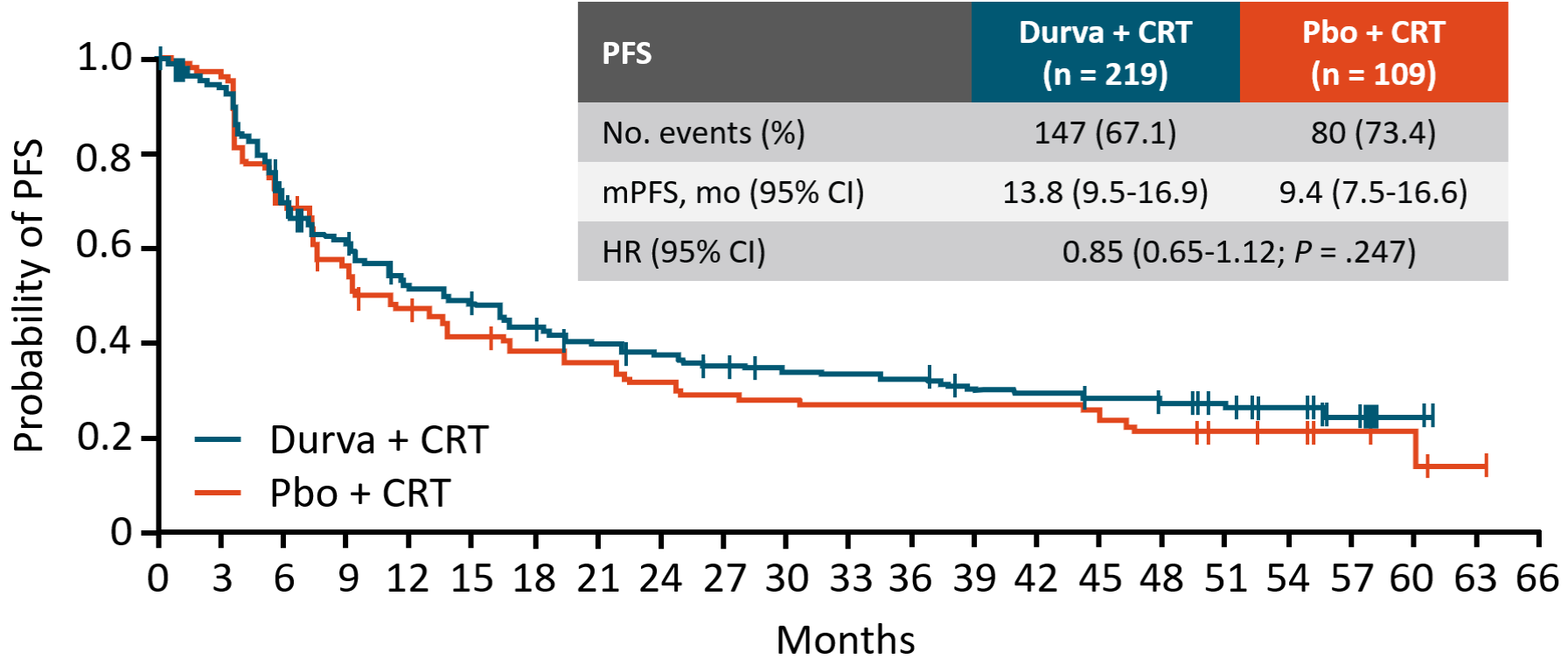


# PACIFIC-2 Baseline Characteristics

Characteristics, n (%)		Durva + CRT (n = 219)	Pbo + CRT (n = 109)	Characteristics, n (%)		Durva + CRT (n = 219)	Pbo + CRT (n = 109)
Age group	▪ <50 yr	18 (8.2)	12 (11.0)	EGFR mutation	▪ Positive	7 (3.2)	6 (5.5)
	▪ ≥50 to <65 yr	107 (48.9)	50 (45.9)		▪ Negative	112 (51.1)	60 (55.0)
	▪ ≥65 to <75 yr	75 (34.2)	40 (36.7)		▪ Unknown	100 (45.7)	43 (39.4)
	▪ ≥75 yr	19 (8.7)	7 (6.4)				
Median age, yr (range)	63.0 (36-84)	63.0 (38-84)	AJCC stage (8th ed)	▪ IIIA	76 (34.7)	37 (33.9)	
Male	166 (75.8)	80 (73.4)		▪ IIIB	109 (49.8)	51 (46.8)	
Race	▪ White	141 (64.4)	62 (56.9)		▪ IIIC	33 (15.1)	20 (18.3)
	▪ Black	2 (0.9)	0		▪ IV	1 (0.5)	1 (0.9)
	▪ Asian	65 (29.7)	39 (35.8)	Primary tumor	▪ TX	2 (0.9)	1 (0.9)
	▪ American Indian or Alaska Native	7 (3.2)	7 (6.4)		▪ T1	15 (6.8)	10 (9.2)
	▪ Other	4 (1.8)	1 (0.9)		▪ T2	37 (16.9)	13 (11.9)
ECOG/WHO PS 1	121 (55.3)	56 (51.4)	▪ T3		39 (17.8)	32 (29.4)	
Squamous histology	121 (55.3)	52 (47.7)	▪ T4		126 (57.5)	53 (48.6)	
PD-L1 status*	▪ <1%	86 (39.3)	36 (33.0)	Regional LNs	▪ N0	25 (11.4)	7 (6.4)
	▪ ≥1%	113 (51.6)	60 (55.0)		▪ N1	16 (7.3)	14 (12.8)
	▪ Unknown	20 (9.1)	13 (11.9)		▪ N2	124 (56.6)	60 (55.0)
					▪ N3	54 (24.7)	28 (25.7)
			M1b		1 (0.5)	1 (0.9)	



# PACIFIC-2 PFS



# PACIFIC-2: OS and ORR

Outcome	Durva + CRT (n = 219)	Pbo + CRT (n = 109)
<b>OS</b>		
▪ No. events (%)	142 (64.8)	69 (63.3)
▪ Median OS, mo (95% CI)	36.4 (26.2-45.6)	29.5 (23.2-45.1)
▪ HR (95% CI)	1.03 (0.78-1.39; <i>P</i> = .823)	
<b>ORR, %</b>	60.7	60.6

- No significant difference in OS between arms (*P* = .823)
  - Subgroup analyses suggested potential OS benefit with durva + CRT in same patients who had PFS benefit: women, aged <65 yr, in Europe, with smaller tumors (<450 cm<sup>3</sup>)
- No significant difference in ORR between arms (*P* = .976)

# PACIFIC-2: Safety

AE, n (%)	Durva + CRT (n = 219)	Pbo + CRT (n = 108)
Any AE	216 (98.6)	108 (100)
▪ Maximum grade 3/4	117 (53.4)	64 (59.3)
▪ Outcome of death	30 (13.7)	11 (10.2)
▪ SAE	103 (47.0)	56 (51.9)
Any AE leading to d/c of durva/pbo from start of treatment (approximate treatment period)	56 (25.6)	13 (12.0)
▪ 0 to 4 mo (durva + CRT → first postbaseline scan)	31 (14.2)	6 (5.6)
▪ >4 to ≤16 mo (consolidation durva in SoC PACIFIC regimen)	12 (5.5)	6 (5.6)
▪ >16 mo (after consolidation durva in SoC PACIFIC regimen)	13 (5.9)	1 (0.9)

## ▪ Most common TEAEs:

- Durva + CT: anemia (42.0%), pneumonitis/radiation pneumonitis (28.8%, grade ≥3: 4.6%), neutropenia (27.4%), nausea (25.6%)
- Pbo + CT: anemia (38.0%), constipation (28.7%), pneumonitis/radiation pneumonitis (28.7%, grade ≥3: 5.6%), neutropenia (25.9%)

# PACIFIC-2: Time to Onset of AEs and Type of Fatal AEs

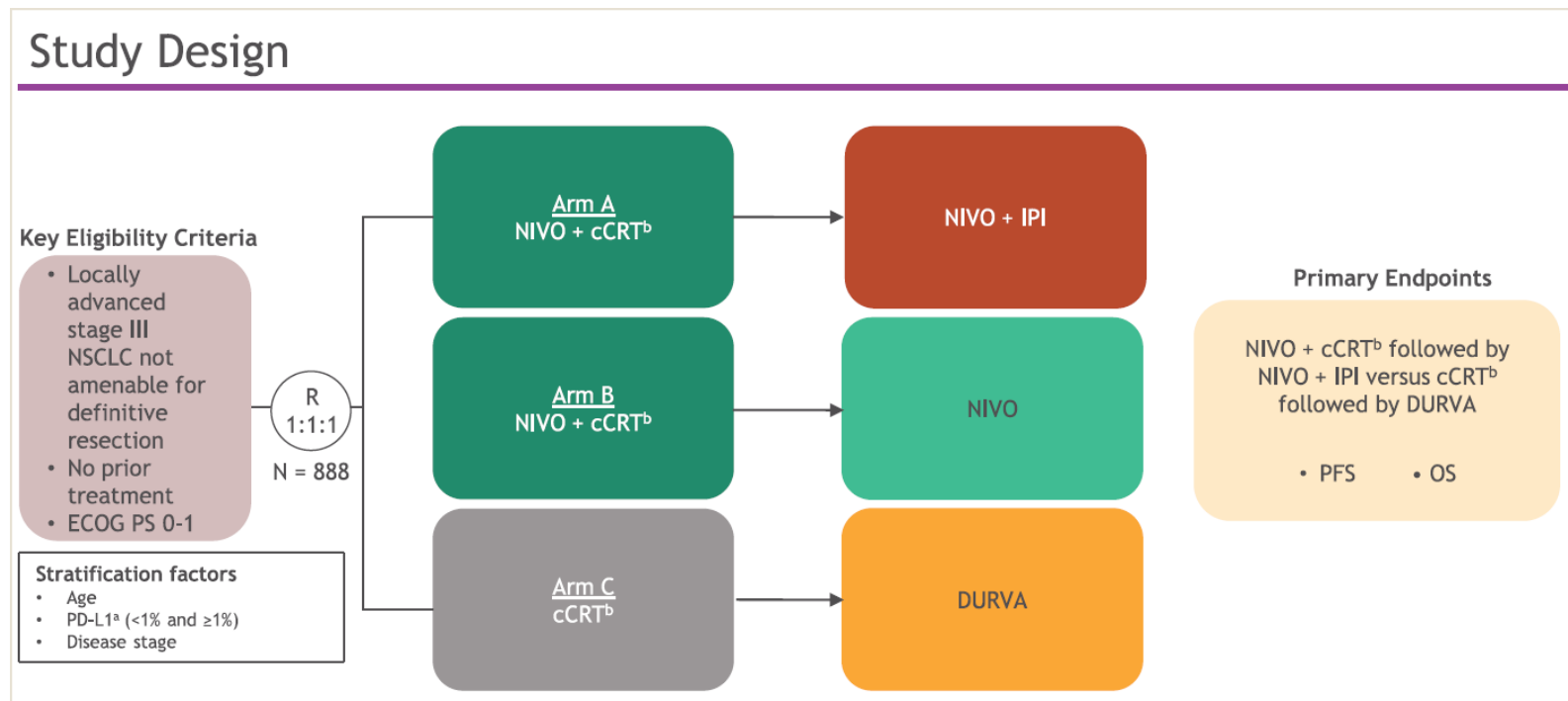
Time to Onset of AE, n (%)	Any		Maximum Grade 3/4		Leading to Death	
	Durva + CRT (n = 219)	Pbo + CRT (n = 108)	Durva + CRT (n = 219)	Pbo + CRT (n = 108)	Durva + CRT (n = 219)	Pbo + CRT (n = 108)
Any time	216 (98.6)	108 (100)	117 (53.4)	64 (59.3)	30 (13.7)	11 (10.2)
0 to ≤4 mo	216 (98.6)	107 (99.1)	125 (57.1)	57 (52.8)	15 (6.8)	5 (4.6)
>4 to ≤16 mo	142 (64.8)	74 (68.5)	34 (15.5)	16 (14.8)	5 (2.3)	5 (4.6)
>16 mo	67 (30.6)	32 (29.6)	16 (7.3)	13 (12.0)	10 (4.6)	1 (0.9)

- More grade 3/4 AEs and AEs leading to death occurred from 0 to ≤4 mo with durva + CRT
  - Infection was main type of fatal AE driving difference between arms
  - Fatal hemoptysis/pulmonary hemorrhage also more common (in 2.3% vs 0% with placebo)

Type of Fatal AEs With Onset of 0 to ≤4 Mo, n (%)	Durva + CRT (n = 219)	Pbo + CRT (n = 108)
Infections/infestations	6 (2.7)	0
Cardiac disorders	1 (0.5)	1 (0.9)
Respiratory, thoracic, and mediastinal disorders	7 (3.2)	3 (2.8)
Injury, poisoning, and procedural complications	1 (0.5)	1 (0.9)

# CheckMate 73L: A Phase 3 Study Comparing Nivolumab Plus Concurrent Chemoradiotherapy Followed by Nivolumab With or Without Ipilimumab Versus Concurrent Chemoradiotherapy Followed by Durvalumab for Previously Untreated, Locally Advanced Stage III Non-Small-Cell Lung Cancer

- 925 patients randomized
- No benefit in OS or PFS





# Where are we going?



# COAST: An Open-Label, Phase II, Multidrug Platform Study of Durvalumab Alone or in Combination With Oleclumab or Monalizumab in Patients With Unresectable, Stage III Non-Small-Cell Lung Cancer

186 patients randomized after chemoradiation

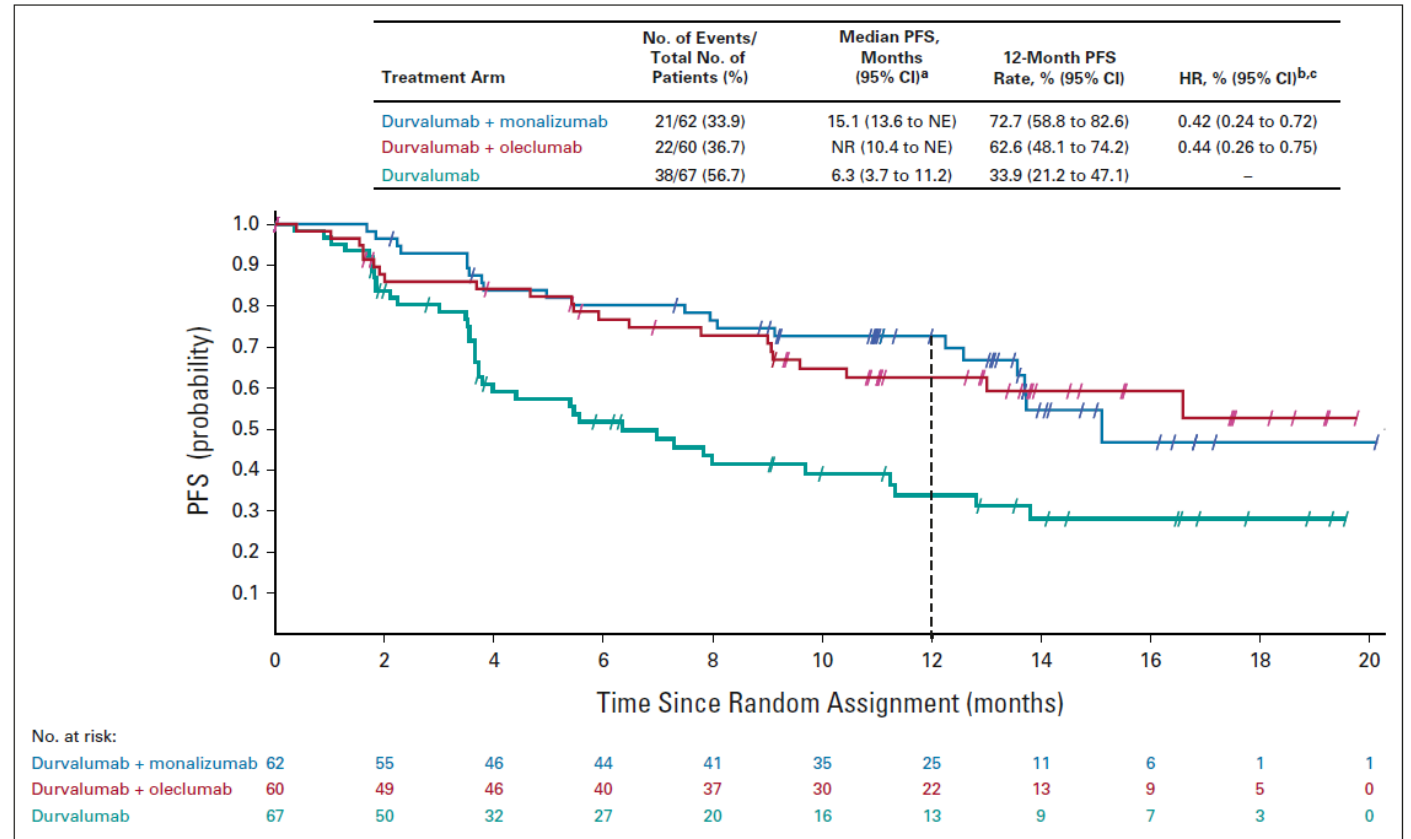
**ARM A**  
Durvalumab IV Q4W  
+ oleclumab IV Q4W\*

\*Oleclumab Q2W for cycles 1 and 2, then Q4W starting cycle 3

**ARM B**  
Durvalumab IV Q4W  
+ monalizumab IV Q4W†

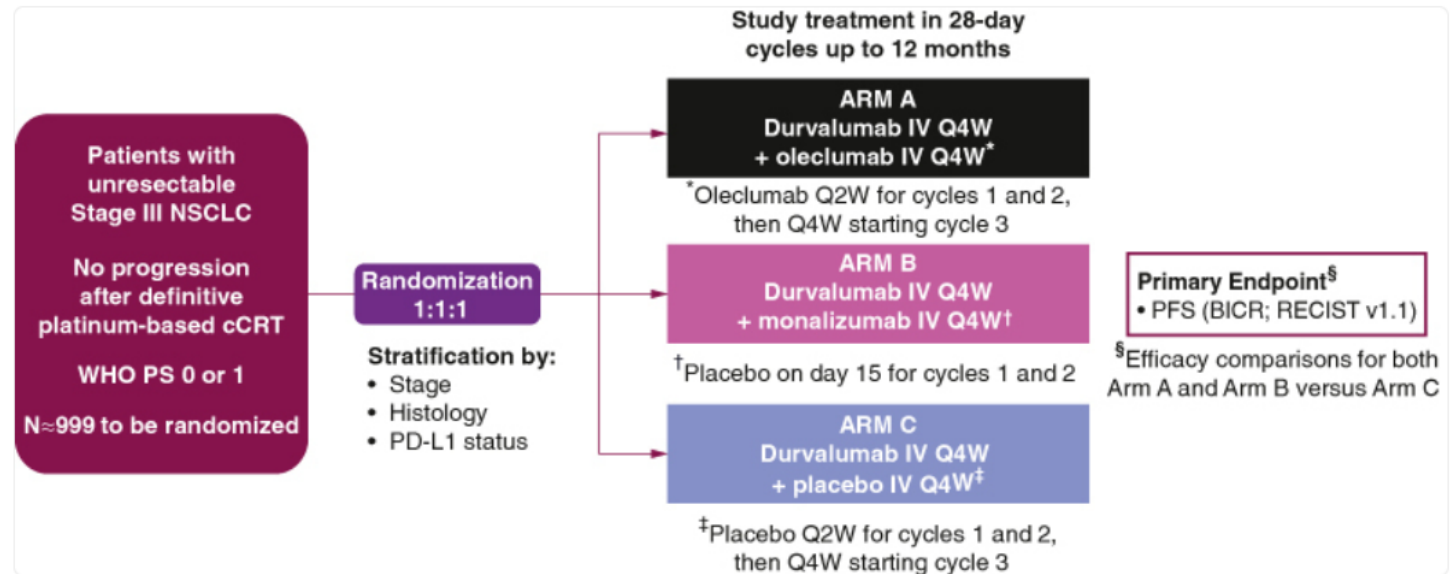
†Placebo on day 15 for cycles 1 and 2

**ARM C**  
Durvalumab IV Q4W  
+ placebo IV Q4W†



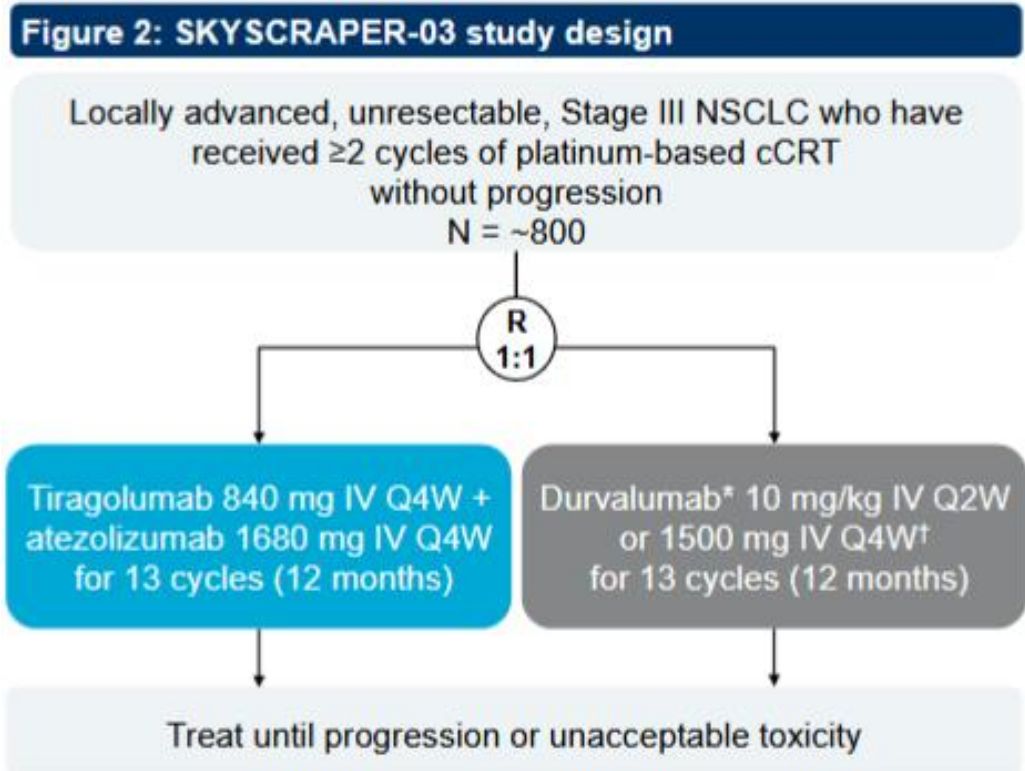
# Phase 3 study of durvalumab combined with oleclumab or monalizumab in patients with unresectable stage III NSCLC (PACIFIC-9)

Recruitment goal of 999 patients



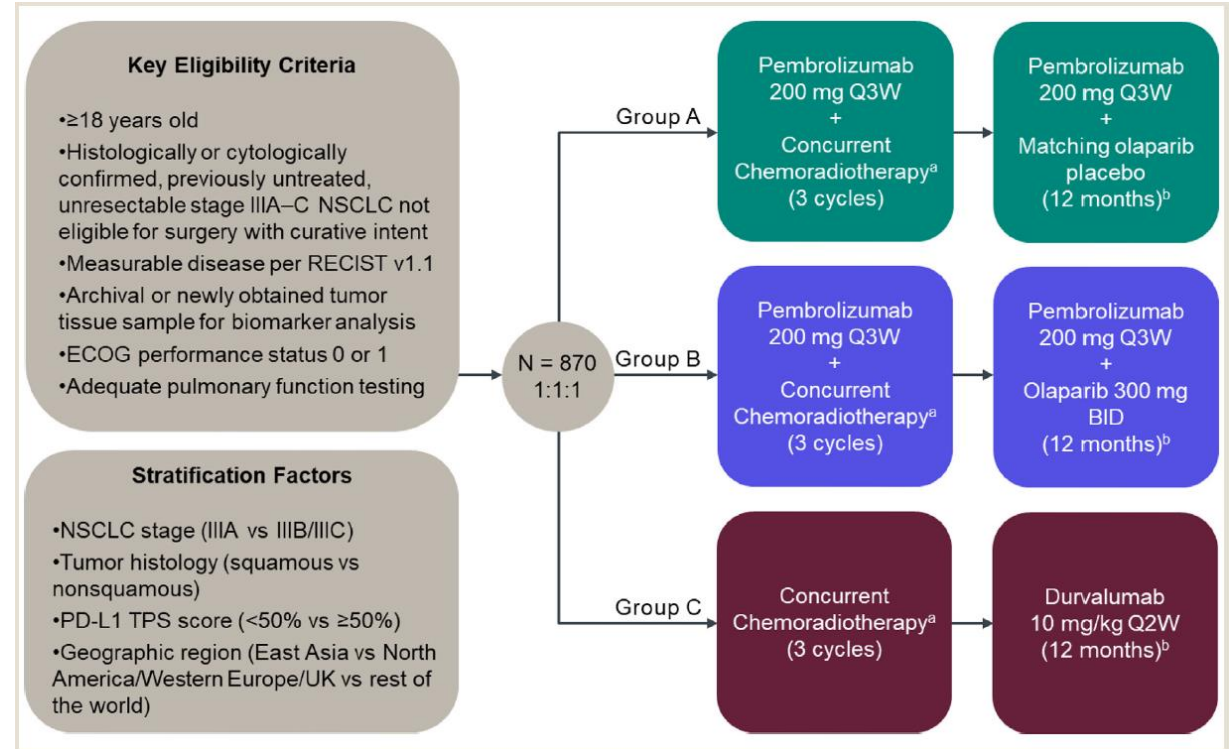
# Phase III, open-label randomised study of atezolizumab + tiragolumab vs durvalumab in patients with locally advanced, unresectable, stage III NSCLC who have not progressed after platinum-based concurrent chemoradiation (SKYSCRAPER-03)

Estimated accrual 800 patients



# KEYLYNK-012: Study of Pembrolizumab and Concurrent Chemoradiotherapy Followed by Pembrolizumab With or Without Olaparib for Stage III Non-Small-Cell Lung Cancer

Estimated enrollment of 870 patients



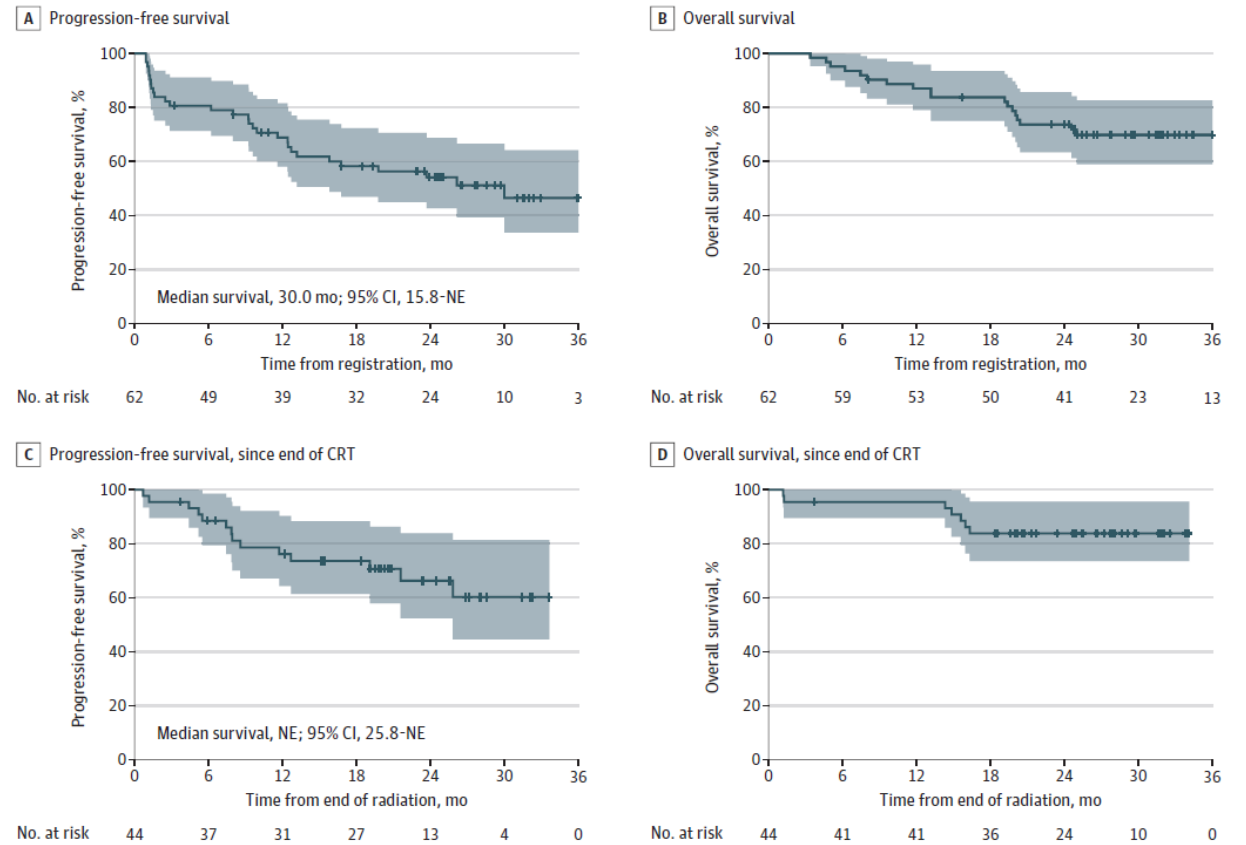
# Different approaches



# Atezolizumab Before and After Chemoradiation for Unresectable Stage III Non-Small Cell Lung Cancer: A Phase II Nonrandomized Controlled Trial (AFT-16)

- 64 patients enrolled
- 4 cycles of atezolizumab
- chemoradiation with paclitaxel and carboplatin
- 2 cycles of consolidation paclitaxel and carboplatin
- Atezolizumab for 12 months

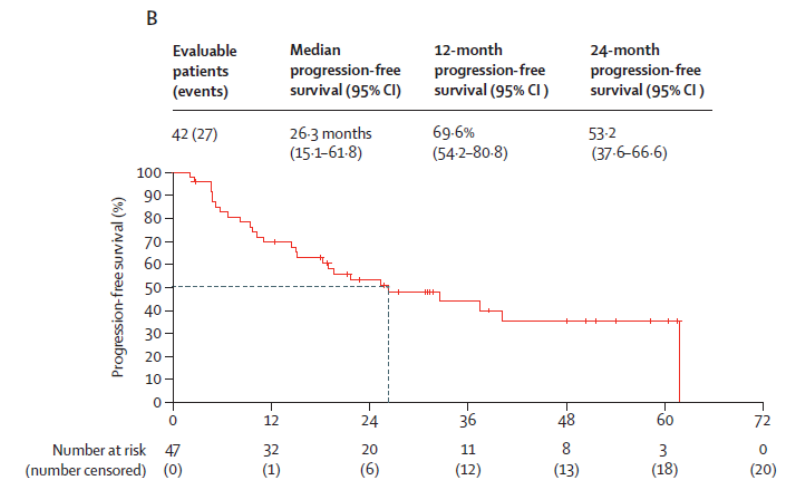
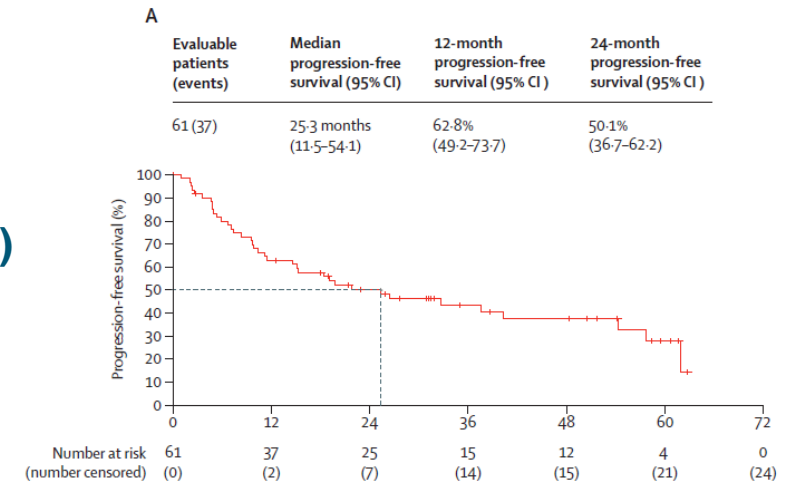
Figure 2. Progression-Free and Overall Survival and Exploratory Analysis of the Patients Who Completed Concurrent Chemoradiation Therapy (CRT)



Shading indicates the 95% CI; tick marks, survival time censored. NE indicates not evaluable.

# Primary lung tumour stereotactic body radiotherapy followed by concurrent mediastinal chemoradiotherapy and adjuvant immunotherapy for locally advanced nonsmall-cell lung cancer: a multicentre, single-arm, phase 2 trial

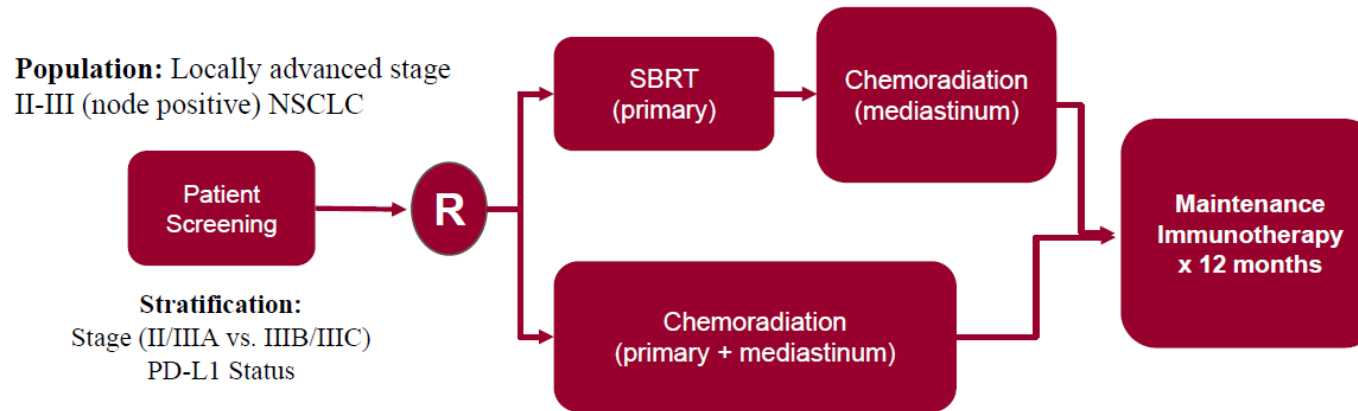
- 61 patients with stage II or 3 unresectable NSCLC.
- SBRT to the primary tumor ( 50-54 Gy in 3-5 fractions)
- Followed by standard chemoradiation (involved lymph nodes)
- Followed by consolidation durvalumab after approval
- Primary endpoint: 1 year PFS





# Adding high-dose, targeted radiation to the usual treatment for locally-advanced, inoperable non-small cell lung cancer

## LU008 Schema: Phase III



- Control arm: chemoradiation to the primary and mediastinal disease (60 Gy/2 Gy) → immunotherapy maintenance x 12 months
- Experimental arm: SBRT to the primary (standard BED  $\geq 100$  Gy dose regimen) → chemoradiation to mediastinal disease (60 Gy/2 Gy) → immunotherapy maintenance x 12 months
  - SBRT to primary tumor:
    - 3 fractions to 54 Gy (BED10 of 151.2 Gy) [peripheral]
    - 4 fractions to 50 Gy (BED10 of 112.5 Gy) [peripheral]
    - 5 fractions to 50 Gy (BED10 of 100 Gy) [peripheral or central]
  - Radiation to involved hilar/mediastinal lymph nodes: 2 Gy x 30 fx to 60 Gy, IMRT or proton therapy
  - Concurrent chemotherapy: carboplatin + paclitaxel, cisplatin + etoposide, cisplatin + pemetrexed, or carboplatin + pemetrexed
  - Maintenance immunotherapy: durvalumab x 12 months [if durvalumab is NOT given, carbo/paclitaxel pts receive 2 cycles of consolidation]



# APOLO: Phase II Trial of Induction Chemo-Immunotherapy Plus Chemoradiotherapy and Maintenance Immunotherapy in Stage III NSCLC

- **38 patients enrolled**
- **Induction**
  - Paclitaxel/carboplatin/atezolizumab
- **Chemoradiation**
- **Consolidation atezolizumab 12 mo**

**PFS at 12 months: 78.1%**

**OS at 12 months: 90.6%**

