2025 DEBATES AND DIDACTICS in Hematology and Oncology



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Updates in the Management of Locally Advanced Unresectable Stage III NSCLC

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2025 Debates and Didactics in Hematology and Oncology

Disclosures

Company Name	Honoraria/ Expenses	Consulting/ Advisory Board	Funded Research	Employee	Other (please specify)
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Varian/Siemens Healthineers			Х		
Genentech		х			
Merck via RTOG Foundation	Х	X			
RefleXion Medical			Х		
BioAscend	Х				

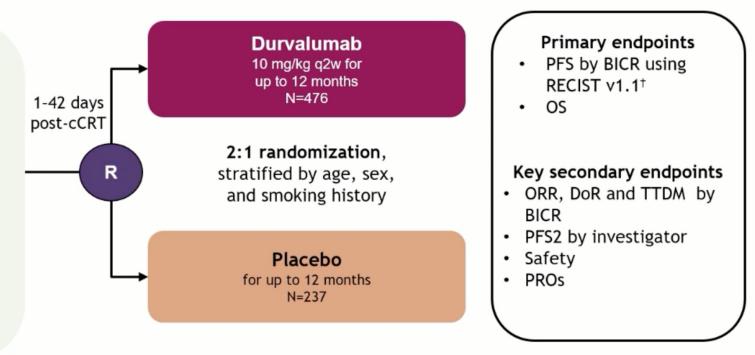
PACIFIC

Phase 3, randomized, double-blind, placebo-controlled, multicenter, international study

- Unresectable, Stage III NSCLC without progression and without G2+ toxicity after definitive platinum-based cCRT (≥2 cycles)
- 18 years or older
- WHO PS score 0 or 1
- If available, archived pre-cCRT tumor tissue for PD-L1 testing*

All-comers population (i.e. irrespective of PD-L1 status)

N=713 randomized



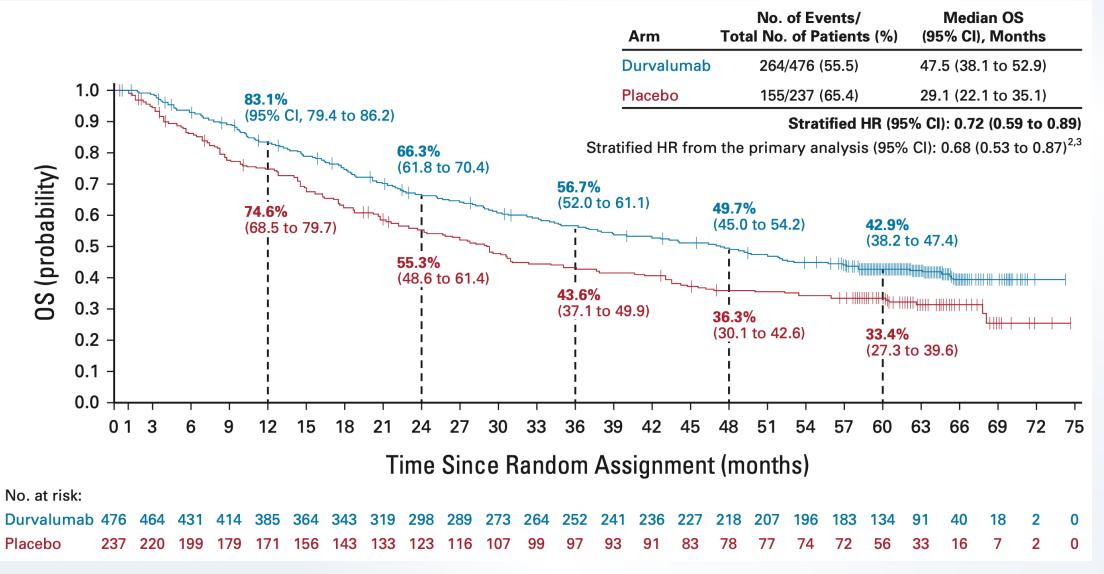
[†]Defined as the time from randomization until the date of objective disease progression or death by any cause in the absence of progression. BICR, blinded independent central review; cCRT, concurrent CRT; PFS2, time to second progression;

RECIST, Response Evaluation Criteria in Solid Tumors; TTDM, time to death or distant metastasis.

Antonia et al. NEJM 2017 & 2018

Antonia et al. N Engl J Med. 2018;379(24):2342-2350.

PACIFIC – 5 Year Outcomes

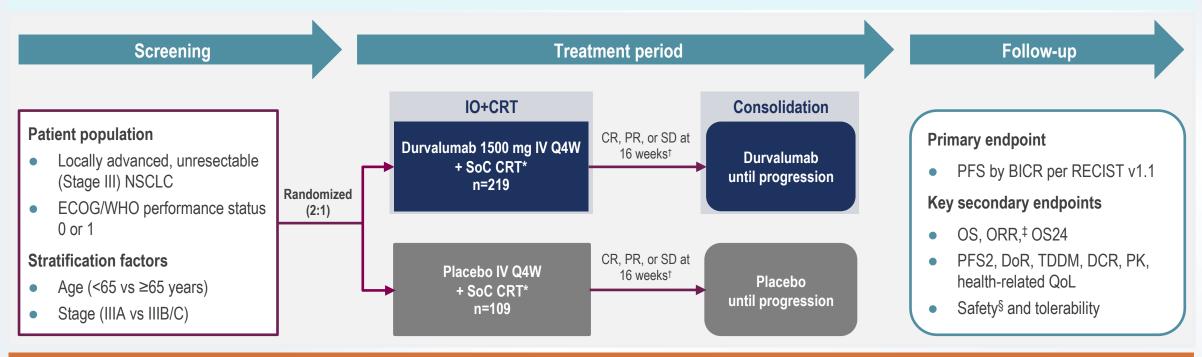


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Spigel et al. J Clin Oncol. 2022;40(12):1301-1311.



PACIFIC-2 (NCT03519971) is a phase 3, randomized, double-blind, placebo-controlled, multicenter, global study of durvalumab + CRT followed by durvalumab versus placebo + CRT followed by placebo



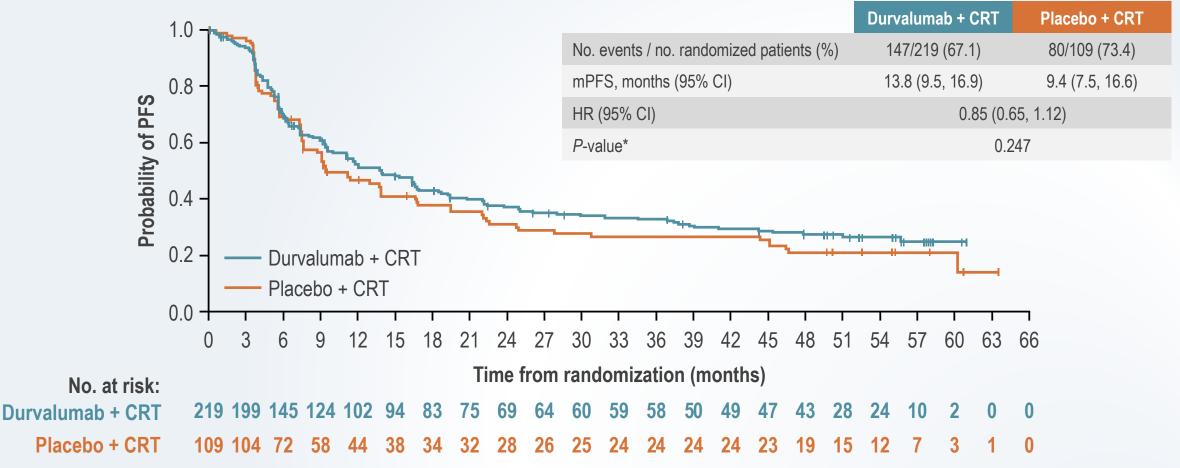
Patients were recruited from **29 March 2018** through **24 June 2019** across 106 sites in Asia, Eastern Europe, and the Americas, including: Brazil, Czech Republic, Hungary, India, Japan, Mexico, Peru, Philippines, Poland, Republic of Korea, Russia, Turkey, Thailand, and Vietnam.



BICR, blinded independent central review; CR, complete response; CRT, chemoradiotherapy; DCR, disease control rate; DoR, duration of response; ECOG, Eastern Cooperative Oncology Group; Gy, gray; IV, intravenous; NSCLC, non-small cell lung cancer; ORR, objective response rate; OS, overall survival; OS24, overall survival at 24 months; PFS, progression-free survival; PFS2, time from randomization to second progression; PK, pharmacokinetics; PR, partial response; Q4W, once every 4 weeks; QoL, quality of life; RECIST, Response Evaluation Criteria in Solid Tumors; SD, stable disease; SoC, standard of care; TDDM, time to death or distant metastasis; WHO, World Health Organization.

*Platinum-based chemotherapy regimens include: cisplatin/etoposide, carboplatin/paclitaxel, pemetrexed/cisplatin (non-squamous only), or pemetrexed/carboplatin (non-squamous only), alongside radiation therapy (5 fractions/week for ~6 weeks [±3 days; total 60 Gy]). †Investigator assessed per RECIST v1.1. ‡Following a protocol amendment, ORR was moved from a primary endpoint to a key secondary endpoint. \$Will be reviewed by an independent data monitoring committee in an unblinded manner.

PFS by BICR (ITT Population)





BICR, blinded independent central review; CI, confidence interval; HR, hazard ratio; ITT, intention-to-treat; mPFS, median PFS; PFS, progression-free survival; RECIST, Response Evaluation Criteria in Solid Tumors. Per RECIST v1.1. Tick marks on the curves indicate censored observations. *Based on the Lan and DeMets approach that approximates the O'Brien Fleming spending functions; the 2-sided p-value boundary for declaring statistical significance is 0.0416 for an overall 5% alpha.

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Summary of Adverse Events (Safety Population)

AE category, n (%)	Durvalumab + CRT (n=219)	Placebo + CRT (n=108)
Any AE	216 (98.6)	108 (100)
Maximum grade 3 or 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 discontinuation of durvalumab/placebo [†]	56 (25.6)	13 (12.0)
0 to ≤4 months from start of treatment (approximates the duration of IO+CRT and ends at the first post-baseline scan)	31 (14.2)	6 (5.6)
>4 to ≤16 months from start of treatment (approximates the duration of consolidation IO in the SoC PACIFIC regimen)	12 (5.5)	6 (5.6)
>16 months from start of treatment (approximates treatment beyond the duration of consolidation IO in the SoC PACIFIC regimen)	13 (5.9)	1 (0.9)

- The most common treatment-emergent AEs with **durvalumab** + SoC CRT were:
 - Anemia (42.0%), pneumonitis or radiation pneumonitis (28.8%), neutropenia (27.4%), and nausea (25.6%)
- The most common treatment-emergent AEs with **placebo** + SoC CRT were:
 - Anemia (38.0%), constipation (28.7%), pneumonitis or radiation pneumonitis (28.7%), and neutropenia (25.9%)
- Combined rates of pneumonitis or radiation pneumonitis were similar in the **durvalumab** arm (28.8%) and **placebo** arm (28.7%)
 - Grade ≥3 pneumonitis or radiation pneumonitis occurred in 10 patients (4.6%) in the durvalumab arm and 6 (5.6%) in the placebo arm

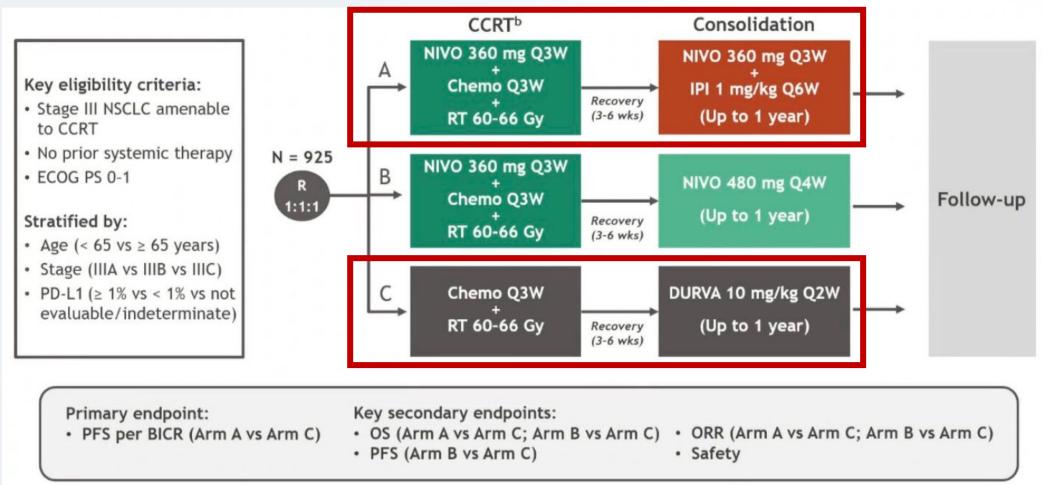


AE, adverse event; CRT, chemoradiotherapy; CTCAE, Common Terminology Criteria for Adverse Events; IO, immunotherapy; SAE, serious adverse event; SoC, standard of care.

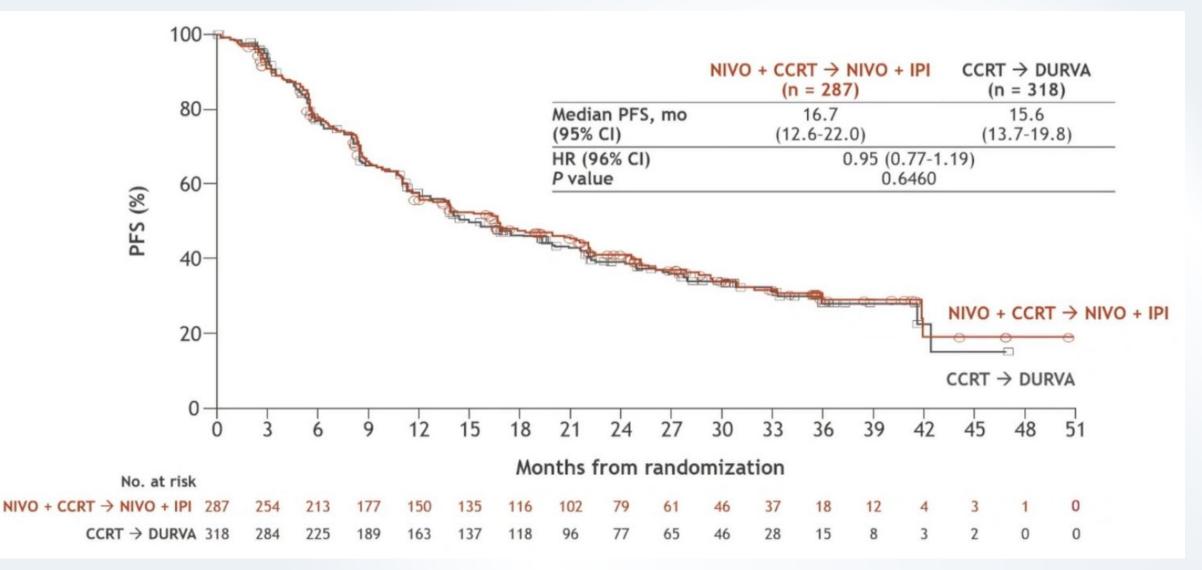
Per CTCAE v5.0. *Excludes any patients who experienced any AE of maximum CTCAE grade 5. †At any time, regardless of discontinuation of CRT.

CheckMate 73L

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 NSCLC



PFS – CRT + Nivo -> Nivo/Ipi vs CRT -> Durva (BICR)

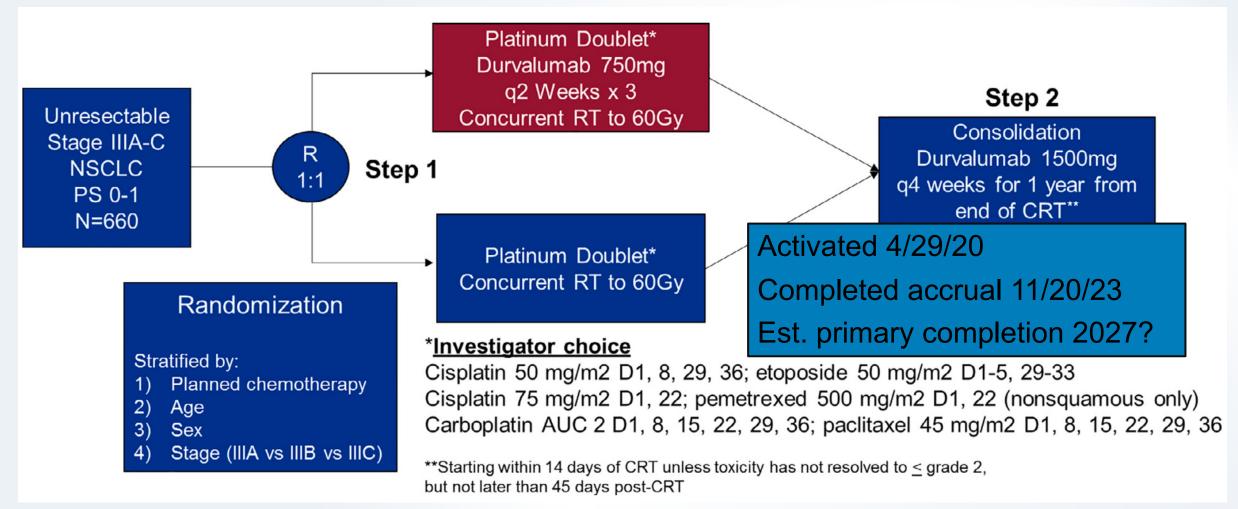


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Peters et al. Abstract 650 ESMO IO 2024

EA5181

Randomized Phase III Trial of MEDI4736 (durvalumab) as Concurrent and Consolidative Therapy or Consolidative Therapy Alone for Unresectable Stage 3 NSCLC

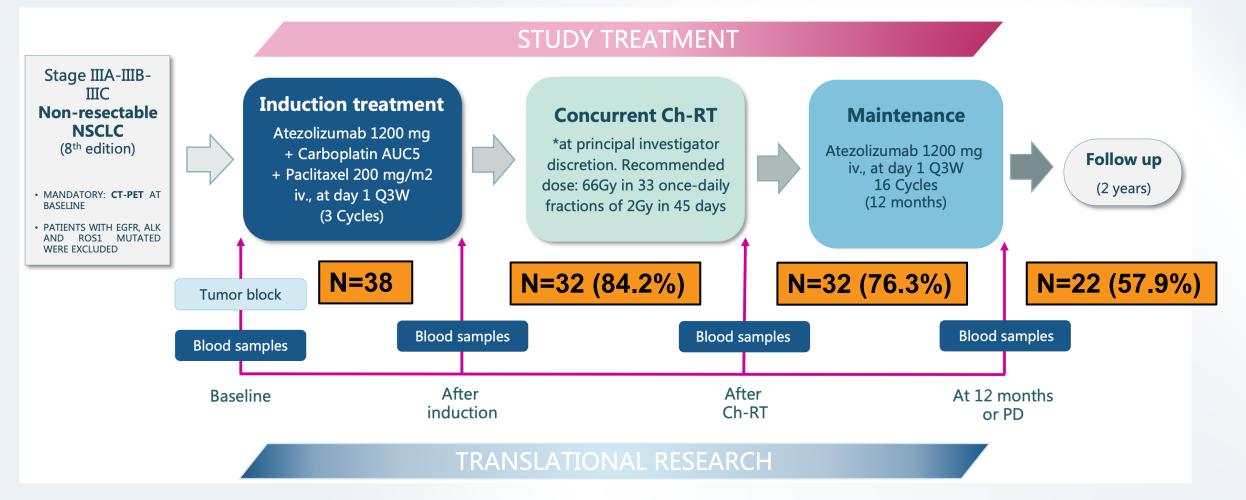


Summary of Selected CRT + Concurrent IO Studies

Study	Control	Experimental	1° Endpoint	Endpoint Met?
PACIFIC-2	CRT	CRT w/ IO -> IO	PFS	X
CheckMate 73L (arm C vs A)	CRT -> IO	CRT w/ IO -> IO/IO	PFS	X
EA5181	CRT -> IO	CRT w/ IO -> IO	OS	Pending 2027?

APOLO

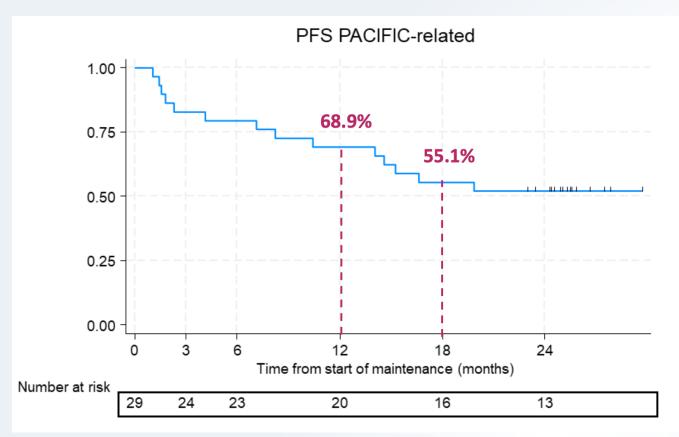
Atezolizumab + induction chemotherapy + chemo-radiotherapy and atezolizumab maintenance in non-resectable stage IIIA-IIIB-IIIC NSCLC



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Provencio et al. 0A12.05 WCLC 2024

'PACIFIC-related' PFS



2024 World Conference SEPTEMBER 7-10, 2024 SAN DIEGO, CA USA **PFS** from the start of maintenance treatment starting time in ITT population was **68.9%** (95%CI: 48.8-82.4%) at **12 months** and **55.1%** (95%CI: 35.6-71%) at **18 months**.

Median for follow-up: 29.6 months (95%CI: 28.8-29.8)

 PACIFIC

 12-mo PFS 55.9%

 18-mo PFS 44.2%

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PACIFIC-BRAZIL (LACOG 2218)

Intensified chemo-immuno-radiotherapy with durvalumab for stage III NSCLCs: a single arm phase II study

ELIGIBILITY CRITERIA	INDUCTION CHEMO-IMMUNOTHERAPY	CONCURRENT CONSOLIDATION CHEMO-IMMUNO-RADIOTHERAPY IMMUNOTHERAPY
 ✓ Non-small cell lung cancer ✓ Stage III (TNM 8th ed.)[†] ✓ PS 0-1 	Carboplatin AUC 6 IV+ Paclitaxel 200mg/m ² IV+ Durvalumab 1500mg/m ² IV q3w for 2 cycles	Carboplatin AUC 2 IV weekly for 6 weeks + Paclitaxel 50 mg/m ² IV weekly for 6 weeks + Durvalumab 1500mg/m ² q3w for 2 cycles + Intensity-modulated radiation therapy to 60 Gy in 30 fractions over 6 weeks‡
✓ FEV1 ≥ 1.2 liters/second (or ≥ 50% predicted value)	PRIMARY ENDPOINT:	12-month progression-free survival
✓ Predicted lung V20 <35%, cardiac V50 ≤25%	SECONDARY ENDPOINTS:	Overall survival, overall response rate, duration of response, patterns of failure, efficacy (iRECIST as opposed to RECIST version 1.1), toxicity (CTCAE version 5)
\checkmark No previous local or systemic therapy	EXPLORATORY ENDPOINTS:	Predictive biomarkers of response/survival

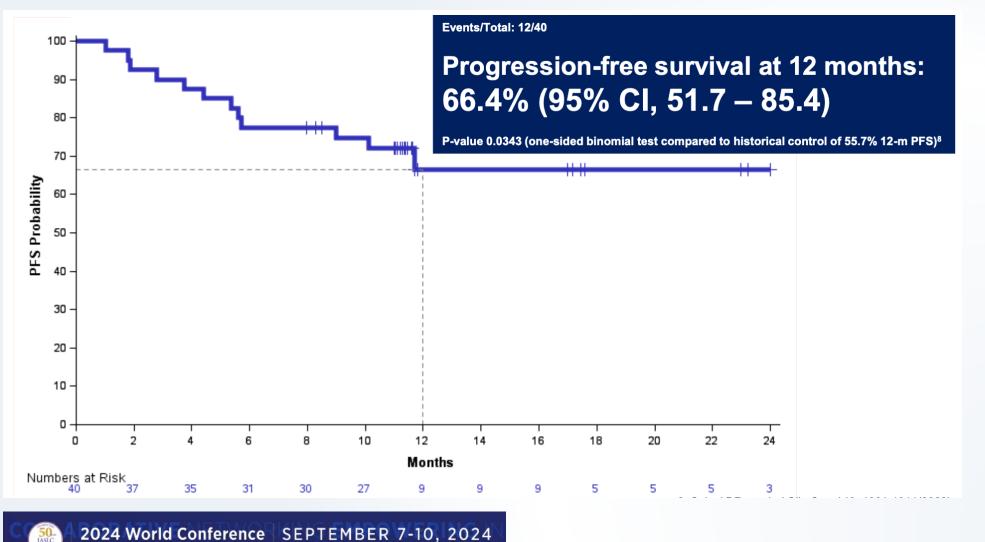
N= 49

†PET-CT was mandatory, invasive mediastinal staging was strongly encouraged. ‡Image guided radiation therapy (IGRT) was strongly encouraged.



William et al. 0A12.06 WCLC 2024

Pre-planned sensitivity landmark analysis: PFS from consol. IO



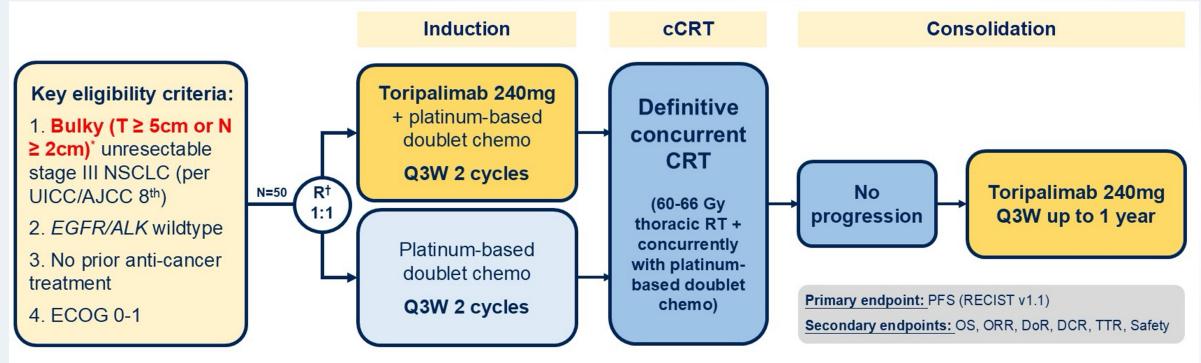
SAN DIEGO, CA USA

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on Lung Cancer

InTRist (GCOG0074)

Randomized Phase II trial evaluating induction toripalimab plus chemotherapy followed by concurrent chemoradiotherapy and consolidation toripalimab in bulky unresectable stage III NSCLC



* Primary tumor ≥5 cm in the greatest dimension, or metastatic lymph nodes ≥2 cm in the shortest diameter † Stratification factor: squamous vs non-squamous

cCRT, concurrent CRT; RT, radiotherapy; PFS, progression-free survival; OS, overall survival; ORR, objective response rate; DoR, duration of response; DCR, disease control rate; TTR, time to response



PRESENTED BY: YU Wang, MD

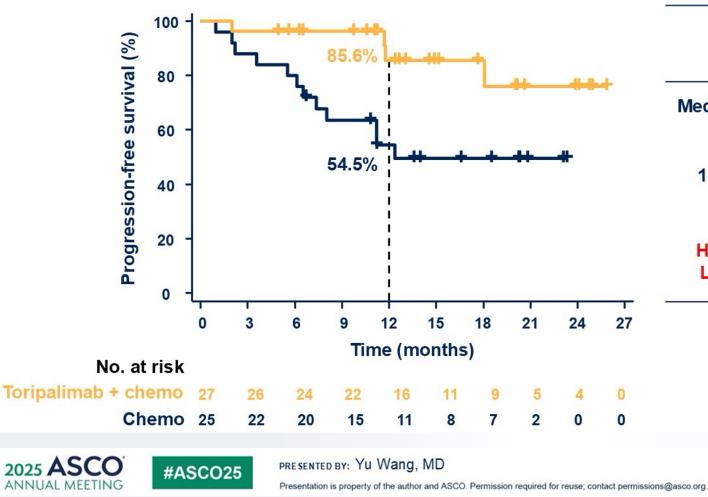
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#ASCO25

Primary Endpoint – PFS

- Toripalimab + chemo - Chemo



		Toripalimab + chemo	Chemo
Median PFS, mo (95% Cl)		NR (NR-NR)	12.4 (8.0-NR)
	r PFS, % 95% Cl)	85.6 (71.6-100.0)	54.5 (37.7-78.7)
HR (95% CI) Log-rank <i>P</i>		0.26 (0.08-0.81) 0.012	
	Mediar	n follow-up 14.7 r	nonths
	ORR af	ter induction	tx
77.8 vs 4		40 % (p=0.00	6)
	G3+ pn	eumonitis	

11.1 vs 4%

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Selected Induction ChemoImmunotherapy (ICIO) Studies

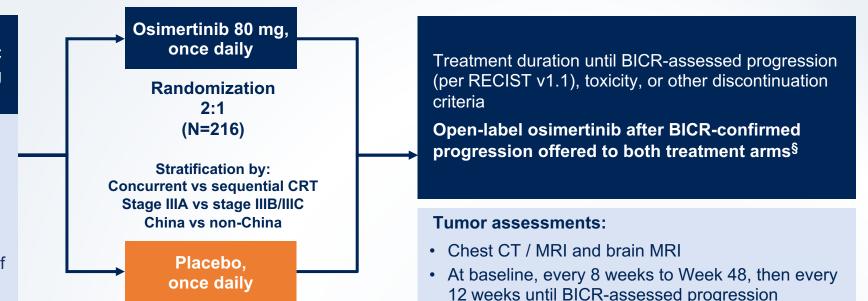
Study	Ν	Treatment	Arm (s)	1º Endpoint	Outcome
APOLO	38	ICIO -> CRT -> IO (1y	r atezo)	PFS	12-mo PFS 68.4%
PACIFIC- BRAZIL	49	ICIO -> CRT + IO -> IO (1yr durva)		PFS	12-mo PFS 68.1%
InTRist	52	IC -> CRT -> IO	ICIO -> CRT -> IO	PFS	12mo PFS 85.6 vs 54.5%
AFT-57	158	Atezo x2 -> CRT -> atezo (1 yr)	Atezo/tira x2 -> CRT -> atezo/tira (1 yr)	PFS	Enrolling

LAURA

Patients with locally advanced, unresectable stage III* EGFRm NSCLC with no progression during / following definitive CRT[†] treatment

Key inclusion criteria:

- ≥18 years (Japan: ≥20)
- WHO PS 0 / 1
- Confirmed locally advanced, unresectable stage III* NSCLC
- Ex19del / L858R[‡]
- Maximum interval between last dose of CRT and randomization: 6 weeks



Endpoints

2024 **ASCO**

ANNUAL MEETING

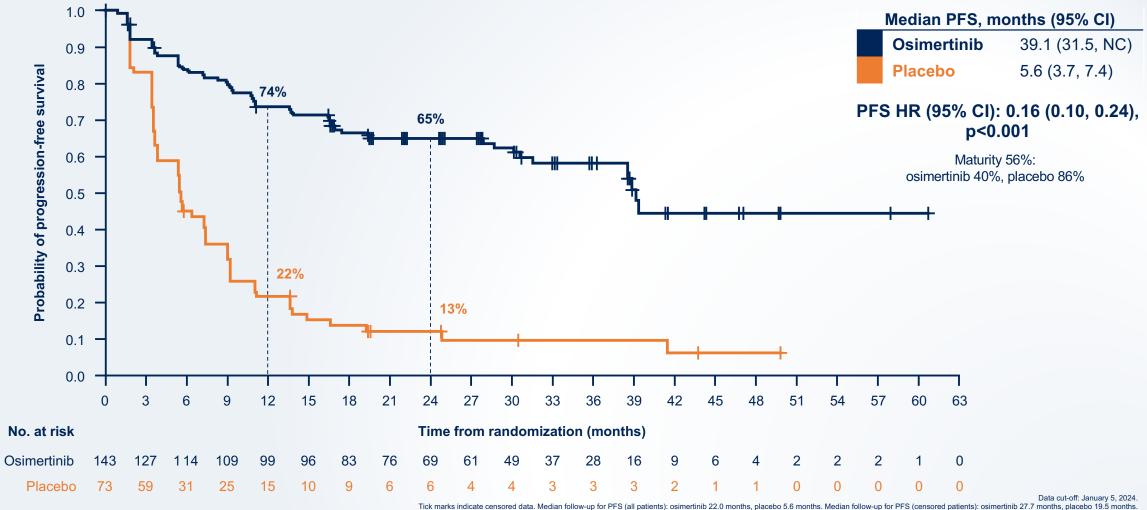
- Primary endpoint: PFS assessed by BICR per RECIST v1.1 (sensitivity analysis: PFS by investigator assessment)
- · Secondary endpoints included: OS, CNS PFS, safety

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*According to AJCC / UICC staging (8th edition); [†]Concurrent or sequential CRT comprising ≥2 cycles of platinum-based chemotherapy (or 5 doses of weekly platinum-based chemotherapy) and a total dose of radiation of 60 Gy ±10%; [‡]Central or FDA-approved local testing (from a CLIA-approved laboratory, or accredited local laboratory for sites outside of USA) based on tissue; [§]If deriving clinical benefit (osimertinib arm); by the judgement of treating physician (placebo arm).

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Progression-Free Survival (BICR)



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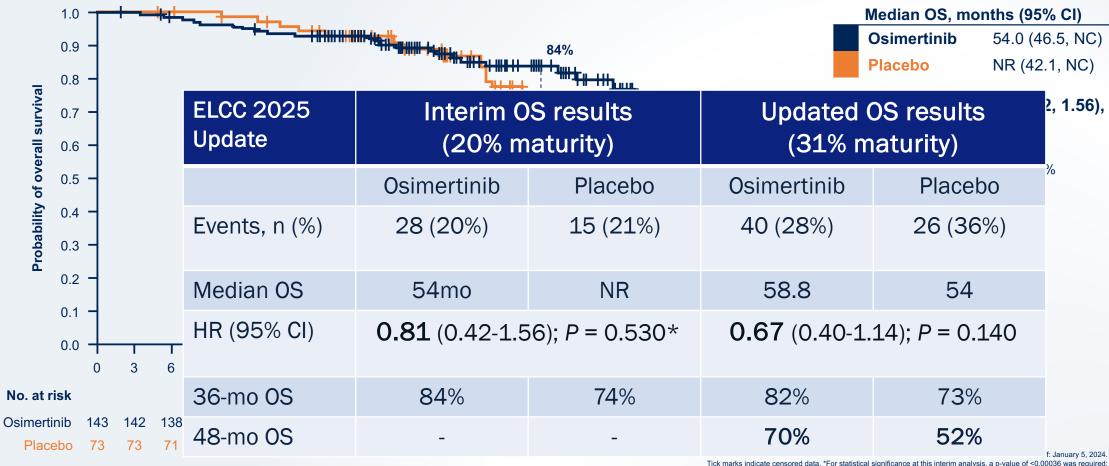
#ASCO24

2024 **ASCO**

ANNUAL MEETING

Overall Survival (OS)

• In the placebo arm, 81% of patients with BICR-confirmed progression crossed over to osimertinib



Median follow-up for OS (all patients): osimertinib 29.5 months, placebo 28.1 months. Median follow-up for OS (censored patients): osimertinib 30.9 months, placebo 28.1 months.

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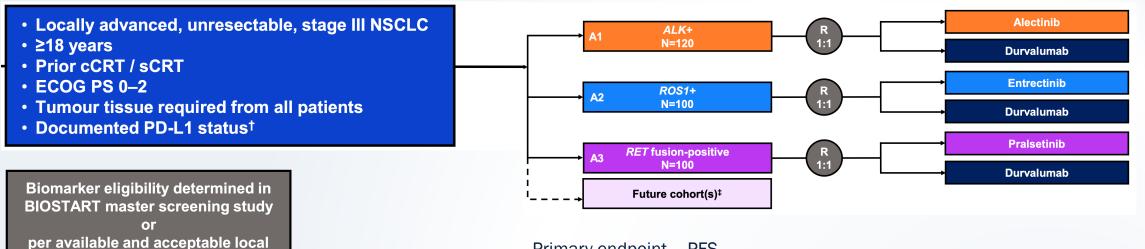
#ASCO24

2024 **ASCO**

ANNUAL MEETING

HORIZON-01

A phase I-III platform study evaluating the safety and efficacy of multiple therapies in patients with biomarker-defined locally advanced, unresectable, stage III non-small cell lung cancer (NSCLC)



Primary endpoint – PFS Target enrollment N=320

Stratification factors:

- Disease staging (stage IIIA vs. stage IIIB or IIIC)
- Type of CRT (cCRT vs. sCRT)

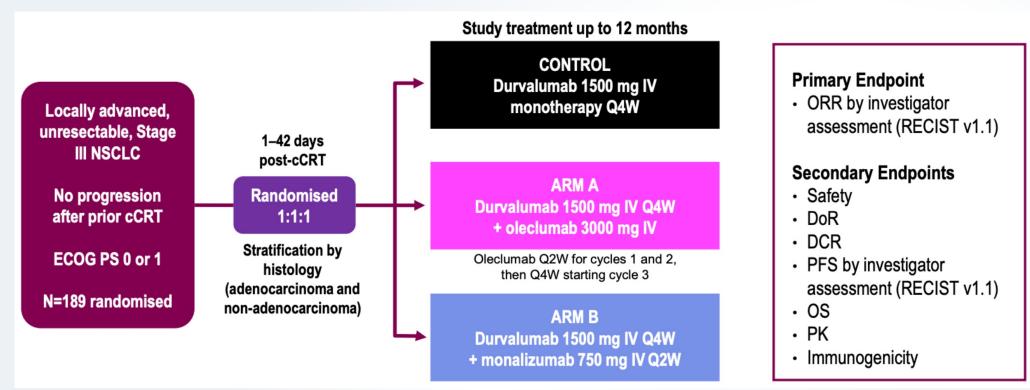
tissue-based test result*

• PD-L1 expression (TC score <1% vs. ≥1% vs. unknown)[†]

Therapeutic	Administration	Dose*	
Alectinib Oral [†]		600 mg BID in 28-day cycles for ≤3 years	
Entrectinib	Oral	600 mg QD in 28-day cycles for ≤3 years	
Pralsetinib Oral		400 mg QD in 28-day cycles for ≤3 years	
Durvalumab	IV infusion	1500 mg Q4W in 28-day cycles for ≤1 year	

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 NSCLC



• A planned sample size of 60 patients per arm was designed to provide acceptable precision in estimating antitumor activities in an early phase setting

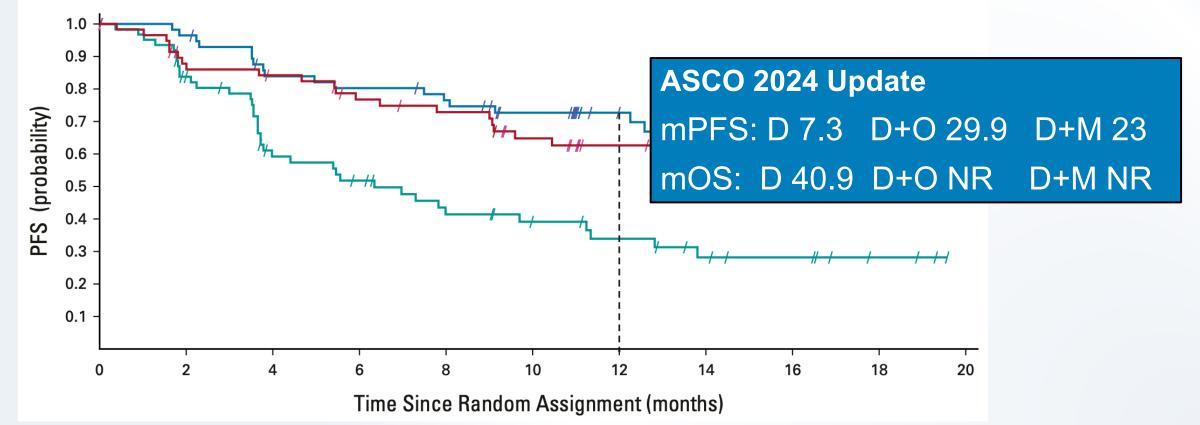
• Between Jan 2019 and Jul 2020, 189 patients were randomized of whom

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Herbst et al. J Clin Oncol 2022;40(29):3383-3393.

COAST Results

Treatment Arm	No. of Events/ Total No. of Patients (%)	Median PFS, Months (95% Cl) ^a	12-Month PFS Rate, % (95% Cl)	HR, % (95% Cl) ^{b,c}
Durvalumab + monalizumab	21/62 (33.9)	15.1 (13.6 to NE)	72.7 (58.8 to 82.6)	0.42 (0.24 to 0.72)
Durvalumab + oleclumab	22/60 (36.7)	NR (10.4 to NE)	62.6 (48.1 to 74.2)	0.44 (0.26 to 0.75)
Durvalumab	38/67 (56.7)	6.3 (3.7 to 11.2)	33.9 (21.2 to 47.1)	_

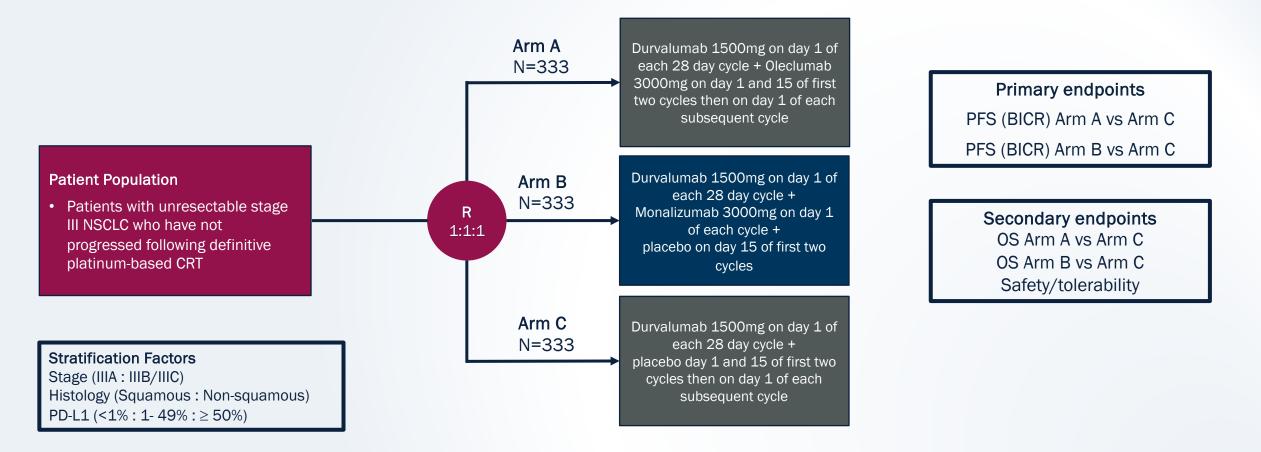


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Herbst et al. J Clin Oncol 2022;40(29):3383-3393.

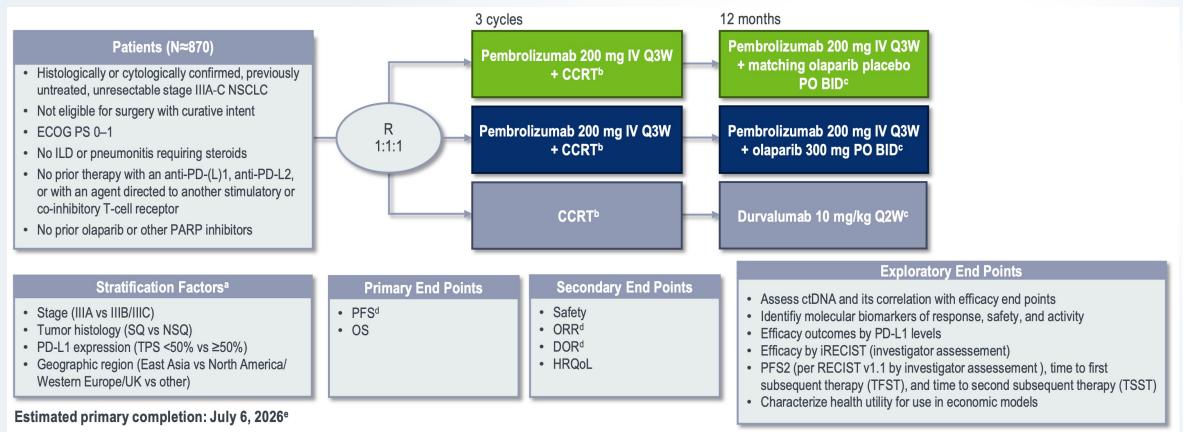
PACIFIC-9

Phase III, double-blind, multicenter international study of durvalumab + oleclumab and durvalumab + monalizumab for the treatment of patients who have not progressed following concurrent chemoradiation treatment for locally-advanced, unresectable NSCLC



KEYLYNK-012

Phase 3, randomized, double-blind, placebo-controlled study of pembrolizumab in combination with concurrent CRT followed by pembrolizumab ± olaparib vs CCRT followed by durvalumab in patients with unresectable, locally advanced, stage III NSCLC

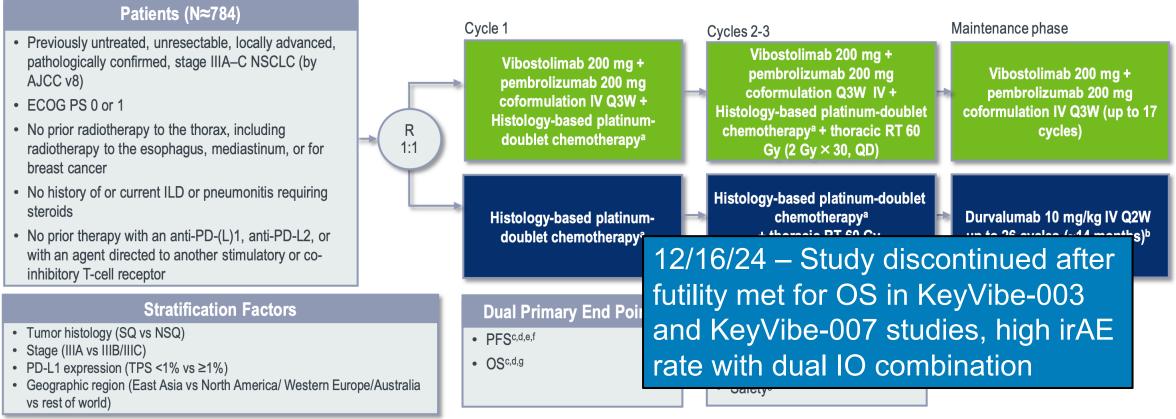


^aStratification occurs at randomization. ^bPlatinum doublet chemotherapy and concurrent standard thoracic radiotherapy (60 Gy in 2 Gy fractions; during cycles 2 and 3). ^bPlatinum doublet options (per investigator's choice) include cisplatin + pemetrexed (NSQ histology only), cisplatin + etoposide, and carboplatin + paclitaxel. ^cPatients in Groups A and B may receive a maximum of 20 cycles of pembrolizumab (Q3W) and patients in Group C may receive a maximum of 26 cycles of durvalumab (Q2W).^dAssessed per RECIST v1.1 by BICR. ^cSubject to change. ClinicalTrials.gov.<u>https://clinicaltrials.gov/ct2/show/NCT04380636</u>. Accessed June 22, 2022. <u>Jabbour et al. Presented at ASCO 2021</u>. <u>Abstract TPS8580</u>. Jabbour et al. <u>Clin Lung Cancer</u>. 2022;23(6):e342-e346</u>.

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KEYVIBE-006

Phase 3, randomized, open-label study evaluating vibostolimab + pembrolizumab coformulation + CCRT vs CCRT followed by durvalumab in patients with unresectable, locally advanced, stage III NSCLC



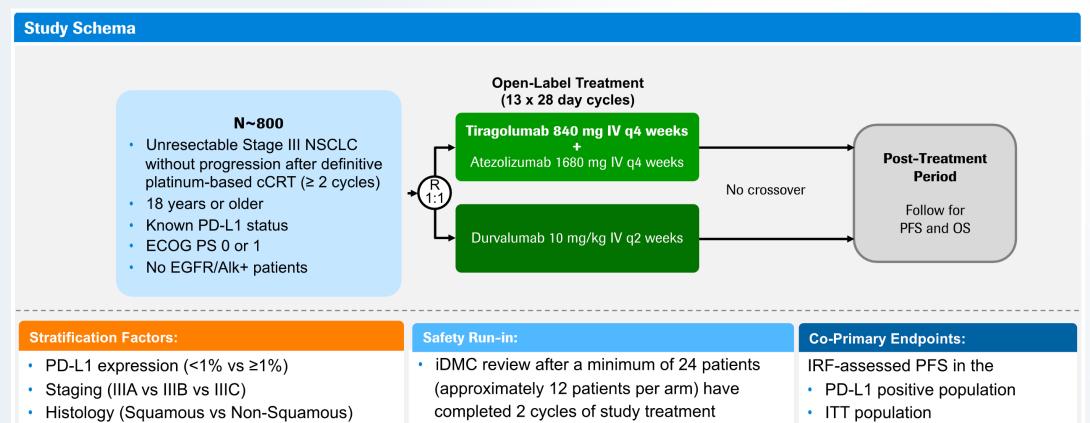
Estimated primary completion: September 1, 2028^h

^aNonsquamous histology only: cisplatin 75 mg/m² and pemetrexed 500 mg/m² (D1 of Cycles 1-3); cisplatin 50 mg/m² (D1, D8 of Cycles 1-2 and D8, D15 of Cycle 3) and etoposide 50 mg/m² (D1-5 of Cycles 1-2 and D8-12 of Cycle 3); carboplatin AUC 6 mg/mL/min (D1 of Cycle 1) and AUC 2 mg/mL/min (D1, D8, D15 of Cycles 2-3) and paclitaxel 200 mg/m² (D1 of Cycle 1) and 45 mg/m² (D1, D8, D15 of Cycles 2-3). ^b 1 cycle is 14 days and all other cycles are 21-day cycles. ^cIn all patients. ^dIn patients with PD-L1≥1%. ^eUp to approximately 55 months. ^fAssessed per RECIST v1.1 by BICR. ^aUp to approximately 75 months. ^bSubject to change

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SKYSCRAPER-03

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 Platinumbased Concurrent Chemoradiation

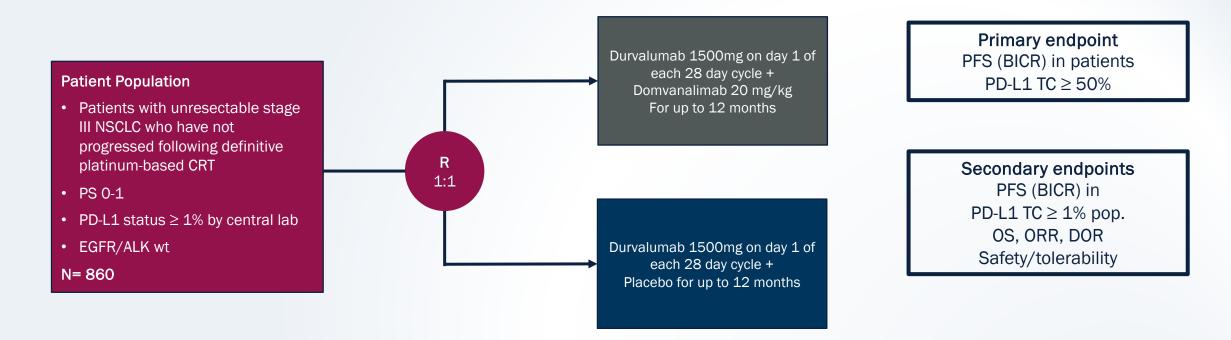


Enrollment will not be paused

• ECOG PS (0 vs 1)

PACIFIC-8

A Phase III, Randomized, Double blind, Placebo-controlled, Multicentre, International Study of Durvalumab plus Domvanalimab (AB154) in Participants with Locally Advanced (Stage III), Unresectable NSCLC



Domvanalimab (AB154) is a Fc-silent humanized IgG1 monoclonal antibody that blocks interaction of the T cell immunoreceptor with Ig and ITIM domains (TIGIT; upregulated by immune cells) with CD112 and CD155

CONCORDE

A Phase Ib Platform Study of DNA Damage Repair Inhibitors (DDRis) in Combination With Conventional Radiotherapy in NSCLC

Primary endpoint: DLT occurring between first dose of RT and 13.5mo post RT

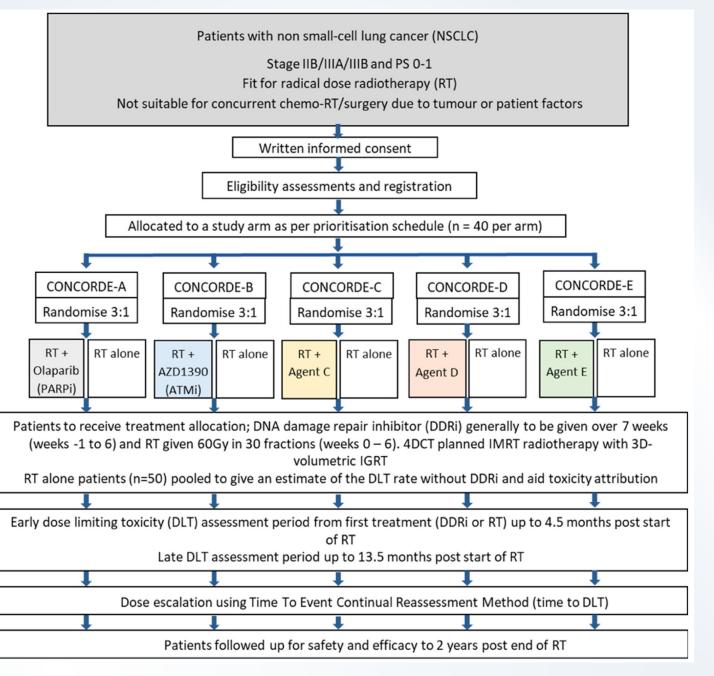
2025 update: N=78 randomized

N=16 Olaparib + RT N=14 AZD1390 + RT N=9 Ceralasertib + RT N=11 Saruparib + RT N=25 RT alone

Arm B closed due to esophageal toxicity







NRG RTOG 1308

Phase III Randomized Trial Comparing Overall Survival After Photon vs Proton Chemoradiotherapy for Inoperable Stage II-IIIB NSCLC

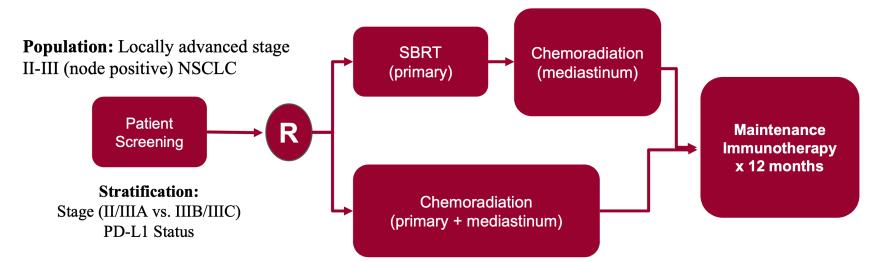
S T R A T I F Y	Stage 1.II 2.IIIA 3.IIIB Histology 1.Squamous 2.Non-Squamous Concurrent Chemotherapy Doublet Type 1.Carboplatin/paclitaxel 2.Cisplatin/etoposide 3. carboplatin/ pemetrexed	R A D O M I Z E	Arm 1: Photon dose—70 Gy*, at 2 Gy (RBE) once daily plus platinum-based doublet chemotherapy** Arm 2: Proton dose—70 Gy (RBE), at 2 Gy once daily plus platinum-based doublet chemotherapy**	Both Arms: Durvalumab or Consolidation chemotherapy x 2 cycles required for patients who receive concurrent carboplatin and paclitaxel***	 Co-Primary: OS, Cardiac AE + lymphocyte reduction 2/3/14 Activated 9/26/23 Closed to accrual Primary endpoint result anticipated late 2026
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PI: Zhongxing Liao *The highest total prescribed dose will be 70 Gy (Relative Biological Effectiveness (RBE)) without exceeding tolerance dose-volume limits of all critical normal structures. The dose range can be 60-70Gy provided the dose constraints of OARs are met.

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NRG-LU008

Phase III Prospective Randomized Trial of Primary Lung Tumor Stereotactic Body Radiation Therapy Followed by Concurrent Mediastinal Chemoradiation for Locally-Advanced Non-Small Cell Lung Cancer



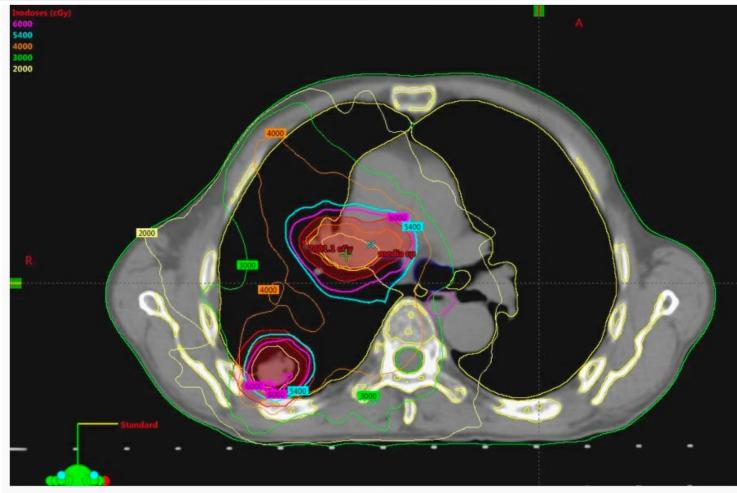
- Control arm: chemoradiation to the primary and mediastinal disease (60 Gy/2 Gy) → immu
- Experimental arm: SBRT to the primary (standard BED ≥100 Gy dose regimen) → chemor
 Gy) → immunotherapy maintenance x 12 months
 - SBRT to primary tumor:
 - 3 fractions to 54 Gy (BED10 of 151.2 Gy) [peripheral]
 - 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]

Co-primary: OS and PFS Activated 5/10/23 N = 171 of 474 planned

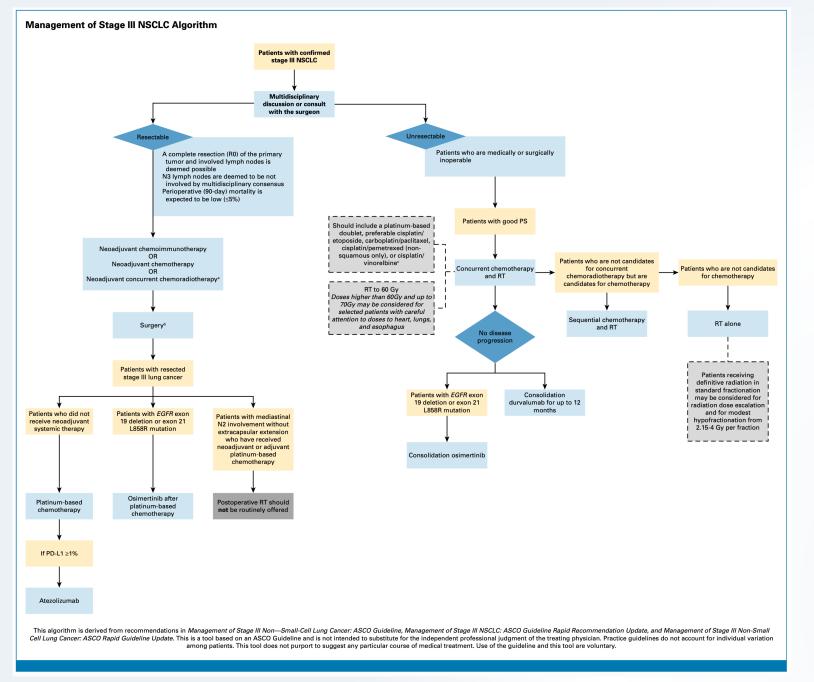
NRG-LU008 Representative Case





Total volume of lung receiving 40 Gy= 332 cc (compared to 590 cc, 44% reduction) Total volume of lung receiving 20 Gy=922 cc (compared to1300 cc, 29% reduction) Total volume of lung receiving 10 Gy=2168 cc (compared to 2360, 8% reduction)

2025 Debates and Didactics in Hematology and Oncology



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Daly et al. J Clin Oncol. 2024;42(25):3058-3060.



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