

20th ANNUAL

ATLANTA

LUNG CANCER SYMPOSIUM

Immunotherapy for Advanced NSCLC: New Agents and Novel Combinations

Laercio DaSilva, MD, Winship Cancer Institute at Emory University

November 7, 2026

Partners for Advancing Clinical Education

Bio Ascend™

Disclosures

Advisory Board:
Amgen

20th ANNUAL ATLANTA LUNG CANCER SYMPOSIUM

PD-(L)1 and CTLA-4 Antibodies

Partners for Advancing Clinical Education

Bio Ascend™

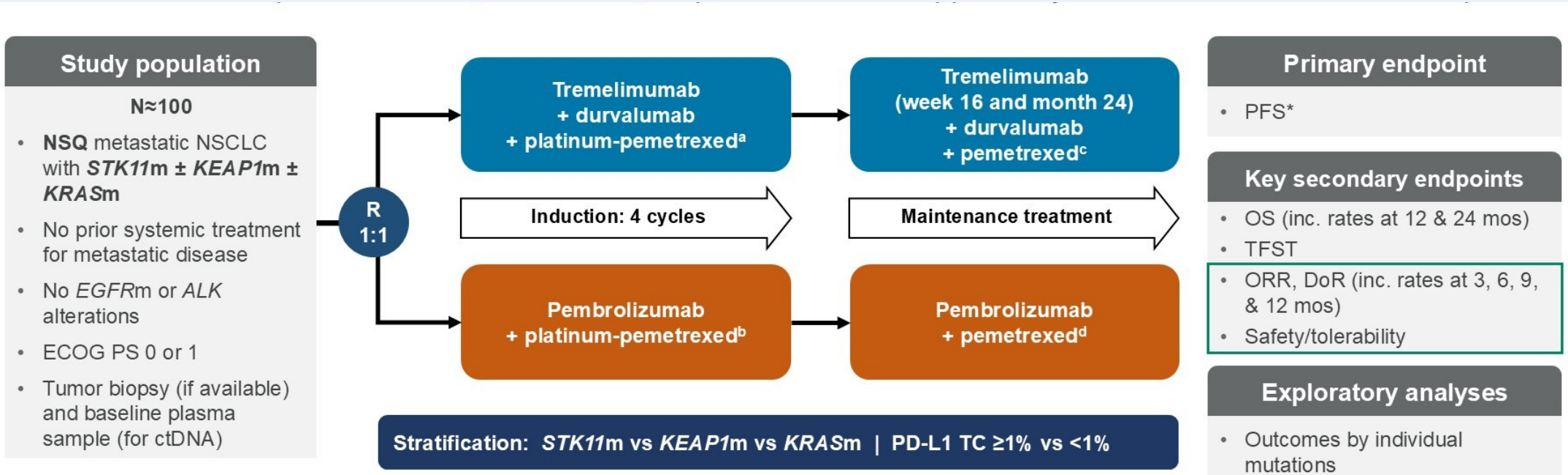
5-Year OS Survival Rates in NSCLC following First Line Immune Checkpoint Inhibitors

	CheckMate 9LA % Alive 5 yrs		CheckMate 227 % Alive 5 yrs		POSEIDON % Alive 5 yrs		KEYNOTE 189 % Alive 5 yrs		KEYNOTE 407 % Alive 5 yrs	
	Ch/ NI	Ch	NI	Ch	Ch/ DT	Ch	Ch/P	Ch	Ch/P	Ch
Total	**18**	11	**24**	14	**16**	7	**19**	11	**18**	10
PD-L1 <1%	**22**	8	**19**	7	**6**	4	**10**	5	11	**13**
PD-L1 >1%	**18**	11	**24**	14	**21**	9	**25**	11	**22**	8
Squam	**18**	7	**16**	5	**7**	3	**NA**	NA	**18**	10
Non-squam	**19**	12	**25**	15	**21**	9	**19**	11	**NA**	NA

Worse outcomes in patients with NSCLC with mutations in STK11, KEAP1, or KRAS

Mutation	POSEIDON (Durvalumab/Tremelimumab/ Chemo vs. Chemo)		CheckMate 9LA (Nivolumab /Ipilimumab /Chemo vs.Chemo		KEYNOTE189(Pembrolizumab / Chemo vs. Chemo	
	HR for OS	Median OS (months)	HR for OS	Median OS	HR	Median OS
STK11m	HR 0.57 (0.32–1.04)	15.0 (8.2–23.8) vs. 10.7 (6.0–14.9)	0.83 (0.51-1.32)	13.8 (8.6-22.7) vs. 10.7 (5.4-14.9)	0.75 (0.37-1.50)	17.4 (4.7 NR) vs. 8.4 (6.6-NR)
KEAP1m	HR 0.43 (0.16–1.25)	13.7 (7.2–26.5) vs. 8.7(5.1–NE}	0.63 (0.32-1.24)	13.2 (6.6–22.7) vs. 6.9 (2.8–11.9)	HR 0.81 (0.44-1.49)	13.3 (7.5-NR) vs. 8.7 (6.6-NR)
KRASm	HR 0.55 (0.36–0.83)	25.7 (9.9–36.7) vs. 10.4 (7.3–12.6)	0.72 (0.49-1.07)	19.2 (11.9-25.5) vs. 13.5 (10-	0.79 (0.45–1.38)	21 (16-NR) vs. 14.1 (8.1-

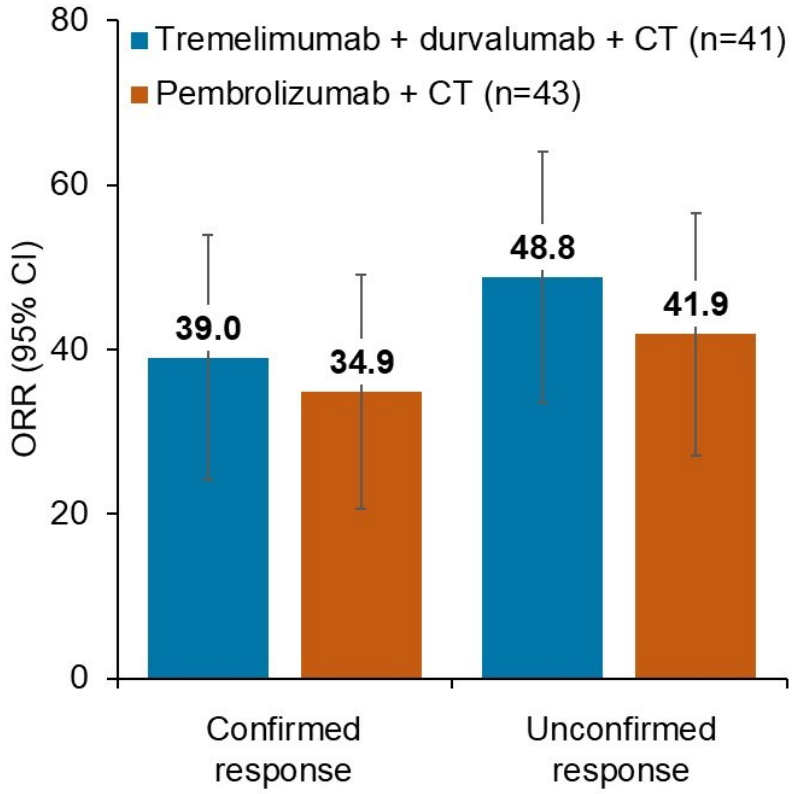
TRITON: Phase 2b randomized, open label, US multicenter study

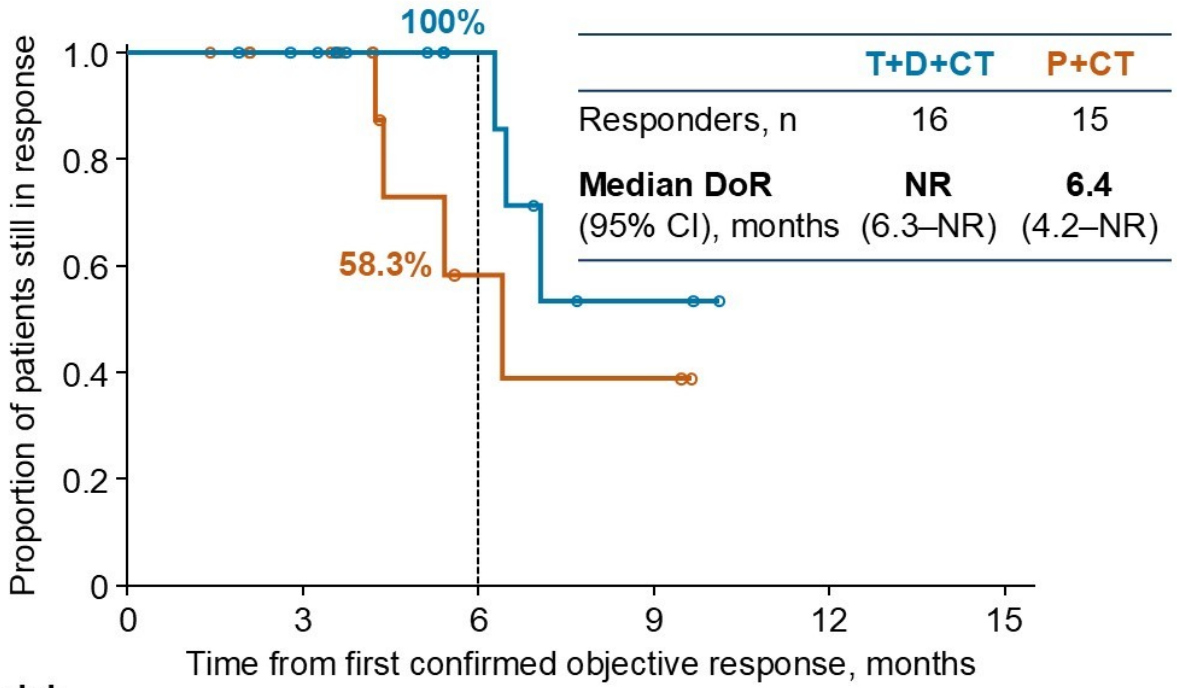


*Sponsor remains blinded to PFS at this interim analysis. TRITON was resized due to challenges with enrollment; consequently the study was amended from phase 3b to 2b and the primary endpoint was changed from OS to PFS

Skoulidis, ASCO 2026

TRITON: Efficacy





	T+D+CT	P+CT
Responders, n	16	15
Median DoR (95% CI), months	**NR** (6.3–NR)	**6.4** (4.2–NR)

No. at risk

T+D+CT	16	14	7	2	0	0
P+CT	15	12	3	2	0	0

Data cut off: Nov 12, 2025

Confirmed ORR defined as the percentage of patients with an investigator-assessed response of CR or PR recorded at one visit and confirmed by repeat imaging not less than 4 weeks after the assessment when the response was first observed, with no evidence of progression between the initial and CR/PR confirmation visit

CR, complete response; IA, interim analysis; NR, not reached; PR, partial response

Skoulidis, ASCO 2026

TRITON: Safety

Incidence of AEs was similar between arms, with low rates of AEs leading to discontinuation

	D+T+CT n=41	P+CT n=43
Median (range) safety follow-up for D/P, months	5.6 (0.0–14.0)	5.1 (0.0–17.5)
Any-grade all-cause AEs, n (%)	41 (100)	42 (97.7)
Grade 3/4 AEs*	31 (75.6)	27 (62.8)
Serious AEs	26 (63.4)	26 (60.5)
AEs leading to treatment discontinuation†	1 (2.4)	2 (4.7)
AEs leading to death	2 (4.9)	5 (11.6)
Any-grade treatment-related AEs‡, n (%)	36 (87.8)	38 (88.4)
Grade 3/4 AEs*	17 (41.5)	18 (41.9)
Serious AEs	11 (26.8)	11 (25.6)
AEs leading to treatment discontinuation†	1 (2.4)	2 (4.7)
AEs leading to death	0	1 (2.3)§
Any imAEs¶, n (%)	6 (14.6)	7 (16.3)
Grade 3/4 imAEs	0	3 (7.0)

Data cut off: Nov 12, 2025
*Maximum reported CTCAE grade; †Includes patients who permanently discontinued at least one study drug; ‡AEs assessed by the investigator as possibly related to any study treatment; §Sepsis; ¶imAEs identified from AEs of special interest and AEs of possible interest using a programmatic approach
imAE, immune-mediated AE

ASCO AMERICAN SOCIETY OF CLINICAL ONCOLOGY
KNOWLEDGE CONQUERS CANCER

Skoulidis, ASCO 2026

PRESERVE-003: Gotistobart

Background

Unmet medical need in 2L+ sqNSCLC

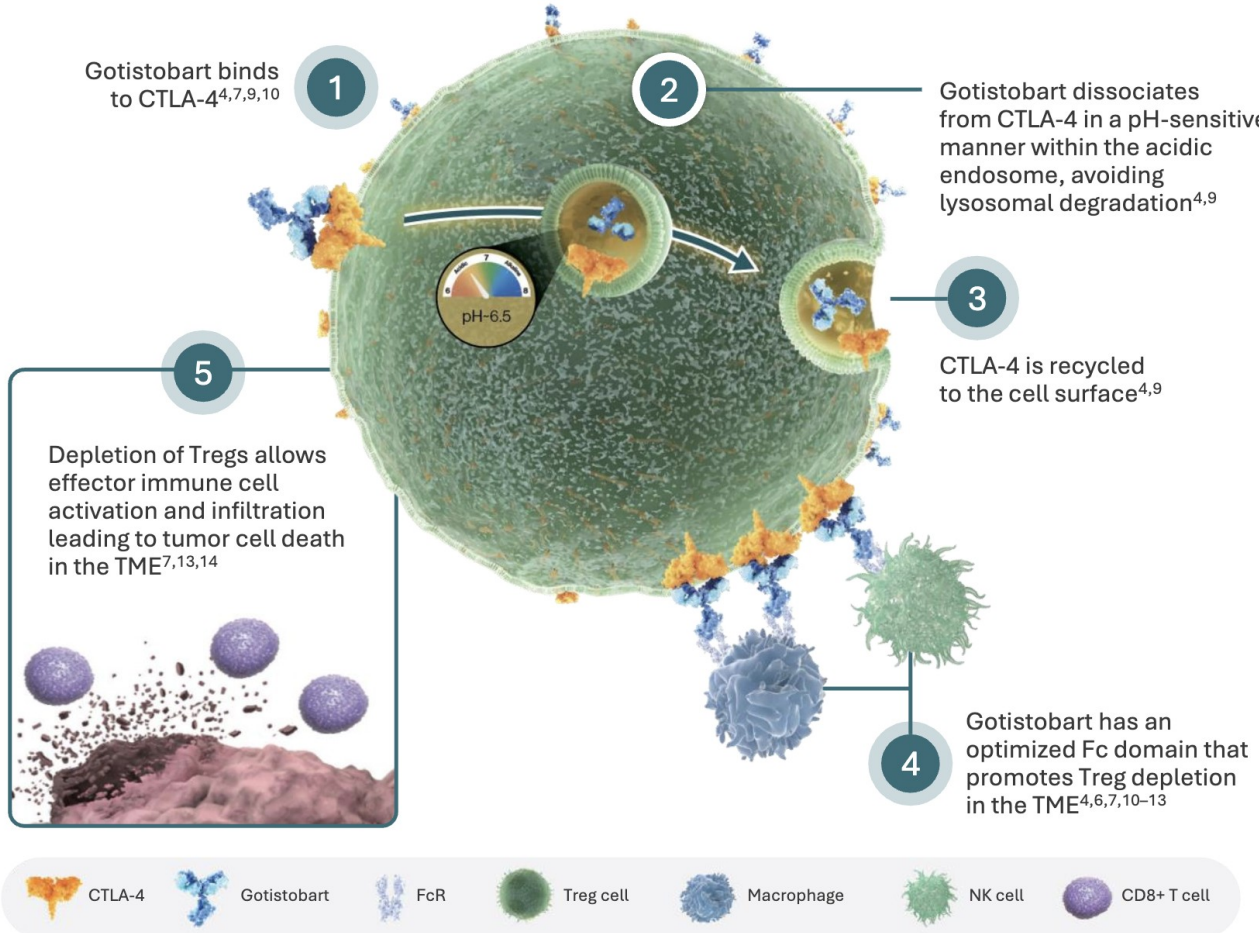
- Limited use of targeted therapies in sqNSCLC
- Docetaxel monotherapy: median OS ~8.0–9.4m, ORR 10.5–12.7%[1–3]
- Multiple trials have failed in the 2L+ metastatic sqNSCLC setting

Gotistobart: novel anti-CTLA-4 with differentiated MoA

- pH-sensitive: preserves/enriches CTLA-4 on tumor-infiltrating regulatory T cells (Tregs)
- Optimized Fc domain enhances intratumoral Treg depletion with minimal peripheral immune activation[4–7]

Gotistobart demonstrated efficacy in 2L+ sqNSCLC

- Gotistobart demonstrated a clinically meaningful OS benefit and durable antitumor activity versus docetaxel in Stage 1 of the PRESERVE-003 Phase 3 trial in patients with sqNSCLC who had progressed on PD-(L)1 inhibitors[8,9]



Balaraman, WCLC 2026

PRESERVE-003 study

- ≥18 years of age, Stage 3 & 4, metastatic NSCLC
- Prior PD-(L)1
- Prior platinum-based chemotherapy
- Prior IO–IO allowed
- RECIST 1.1 measurable lesions

R* n=217

Stage 1: Non-pivotal part (enrollment completed)

- **Gotistobart** 3 mg/kg, Q3W (n=10)
- **Gotistobart 6 mg/kg** with 2 loading doses of 10 mg/kg, Q3W (n=103)
- **Docetaxel** 75 mg/m^2, Q3W (n=104)

Stage 2: Pivotal part (sqNSCLC only)

R (1:1) n=414

- **Gotistobart 6 mg/kg** with 2 loading doses of 10 mg/kg, Q3W
- **Docetaxel** 75 mg/m^2, Q3W

• **Primary endpoint:** OS. • **Secondary endpoints:** ORR and PFS (both investigator-assessed per RECIST 1.1); safety (treatment-emergent AEs, treatment related AEs, irAEs, and AEs leading to discontinuation). • **Exploratory endpoints:** PK and E–R relationship

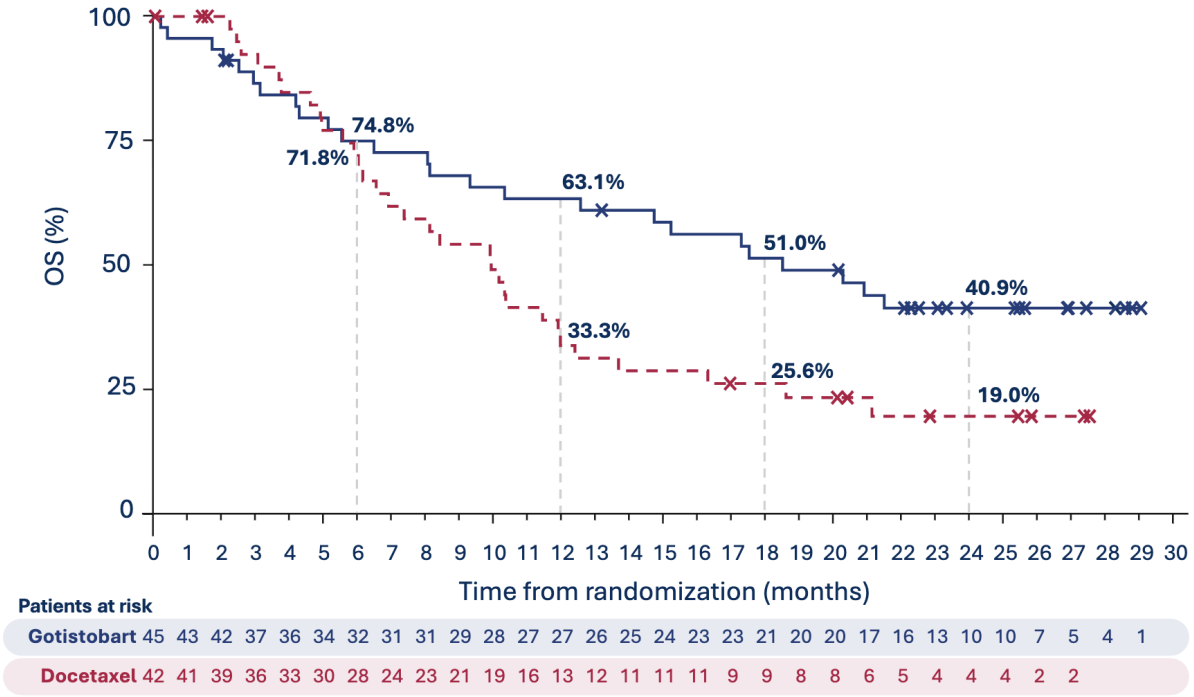
We report updated median OS, PK, and E-R analysis from the non-pivotal part.

Balaraman, WCLC 2026

PRESERVE-003, a 2-stage, randomized, multicenter phase 3 trial

Median OS in patients with sqNSCLC

With a median follow-up of 25.4 months, median OS was 18.5 months with gotistobart versus 10.0 months with docetaxel (HR=0.56 [95% CI: 0.33, 0.95])



	Gotistobart (n=45)	Docetaxel (n=42)
Events, n (%)	25 (55.6)	31 (73.8)
Alive, n (%)*	16 (35.6)	7 (16.7)
Median OS, months (95% CI)	**18.5 (9.3, NE)**	**10.0 (6.2, 12.0)**
HR (95% CI)	**0.56 (0.33, 0.95); Nominal 2-sided p=0.0295†**	
Median duration of follow-up, months (Q1, Q3)‡	25.4 (22.5, 27.5)	25.5 (20.1, 27.4)

Balaraman, WCLC 2026

PD-(L)1 and CTLA-4 Bispecific Antibodies Under Development

Drug Name	
Cadonilimab*	PD-1/ CTLA-4
Volrustomig	PD-1/ CTLA-4
Tuvonralimab (QL1706)	PD-1/ CTLA-4
Vudalimab (XmAb20717)	PD-1 /CTLA-4
Danvilostomig (SI-B003)	PD-1 /CTLA-4
Lorigerlimab	PD-1 /CTLA-4
KN046	PD-L1 /CTLA-4

20th ANNUAL ATLANTA LUNG CANCER SYMPOSIUM

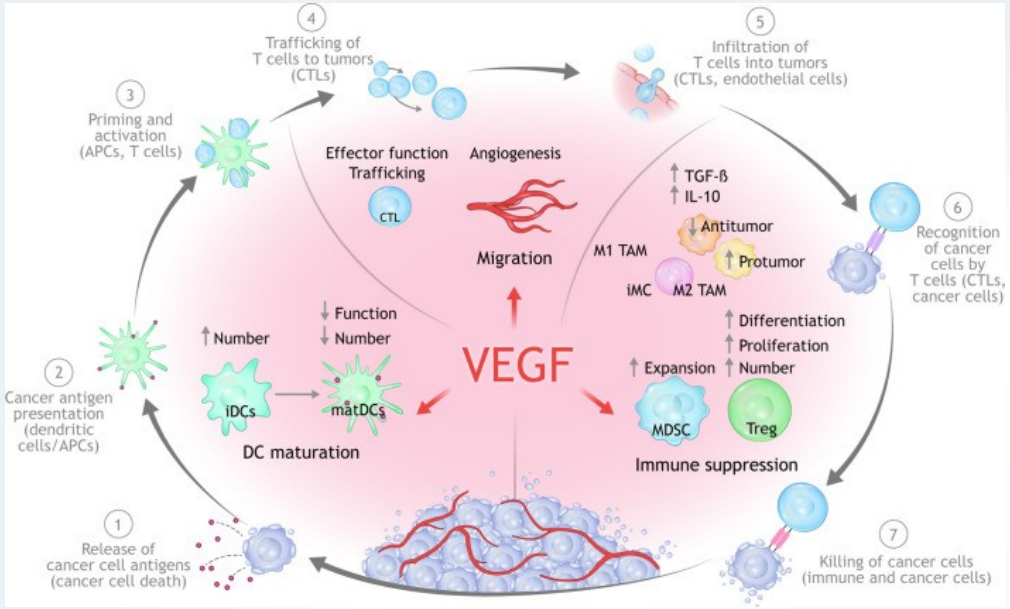
PD-(L)1 and VEGF Bispecific Antibodies

Partners for Advancing Clinical Education

Bio Ascend™

Rationale for adding VEGF to anti-PD-(L)1 checkpoint inhibitors

- Normalization of tumor vasculature
- Reversal of VEGF-mediated immunosuppression, including:
  - Promoting dendritic cell differentiation and maturation
  - Enhanced T cell trafficking and function (decreased exhaustion)
  - Decreased recruitment of immunosuppressive cells (MDSCs, Tregs, M2-like macrophages)
- *Bispecific antibodies may promote on-target cooperative activity*



Hack et al, Front Immunol, 2020

HARMONi-6

Key Eligibility Criteria

- Pathologically confirmed sq-NSCLC
- Stage IIIB-IV
- No prior systemic therapy
- No EGFR mutations or ALK rearrangements
- ECOG PS 0 or 1

Stratification Factors:

- Stage: IIIB/IIIC vs. IV
- PD-L1 TPS: ≥1% vs. <1%

R
1: 1

N=532

Ivonescimab (20 mg/kg, Q3W)
+ Carboplatin (AUC 5, Q3W)
+ Paclitaxel (175 mg/m^2, Q3W)
up to 4 cycles

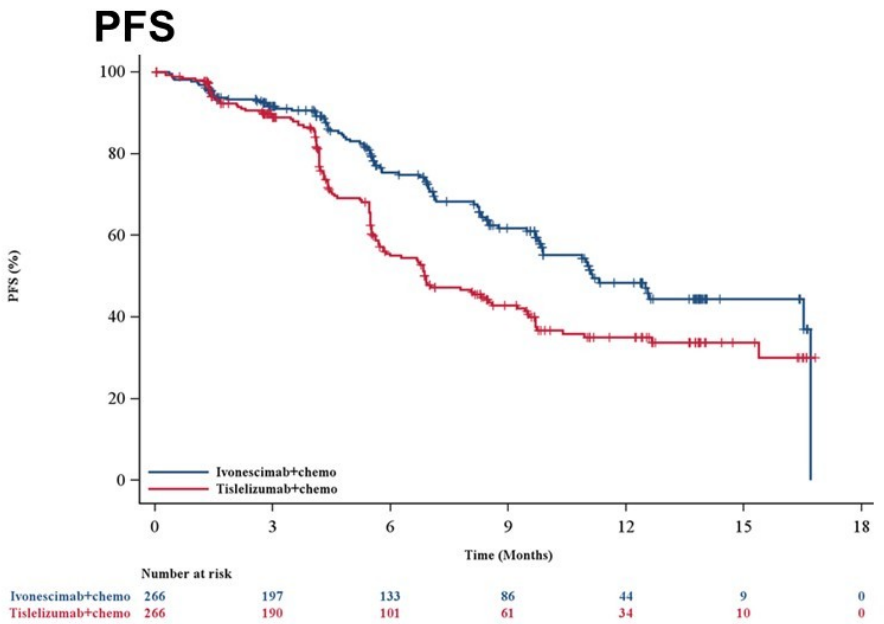
→ **Ivonescimab**
(20 mg/kg, Q3W)
up to 24 months

Tislelizumab (200 mg, Q3W)
+ Carboplatin (AUC 5, Q3W)
+ Paclitaxel (175 mg/m^2, Q3W)
up to 4 cycles

→ **Tislelizumab**
(200 mg, Q3W)
up to 24 months

Endpoints:

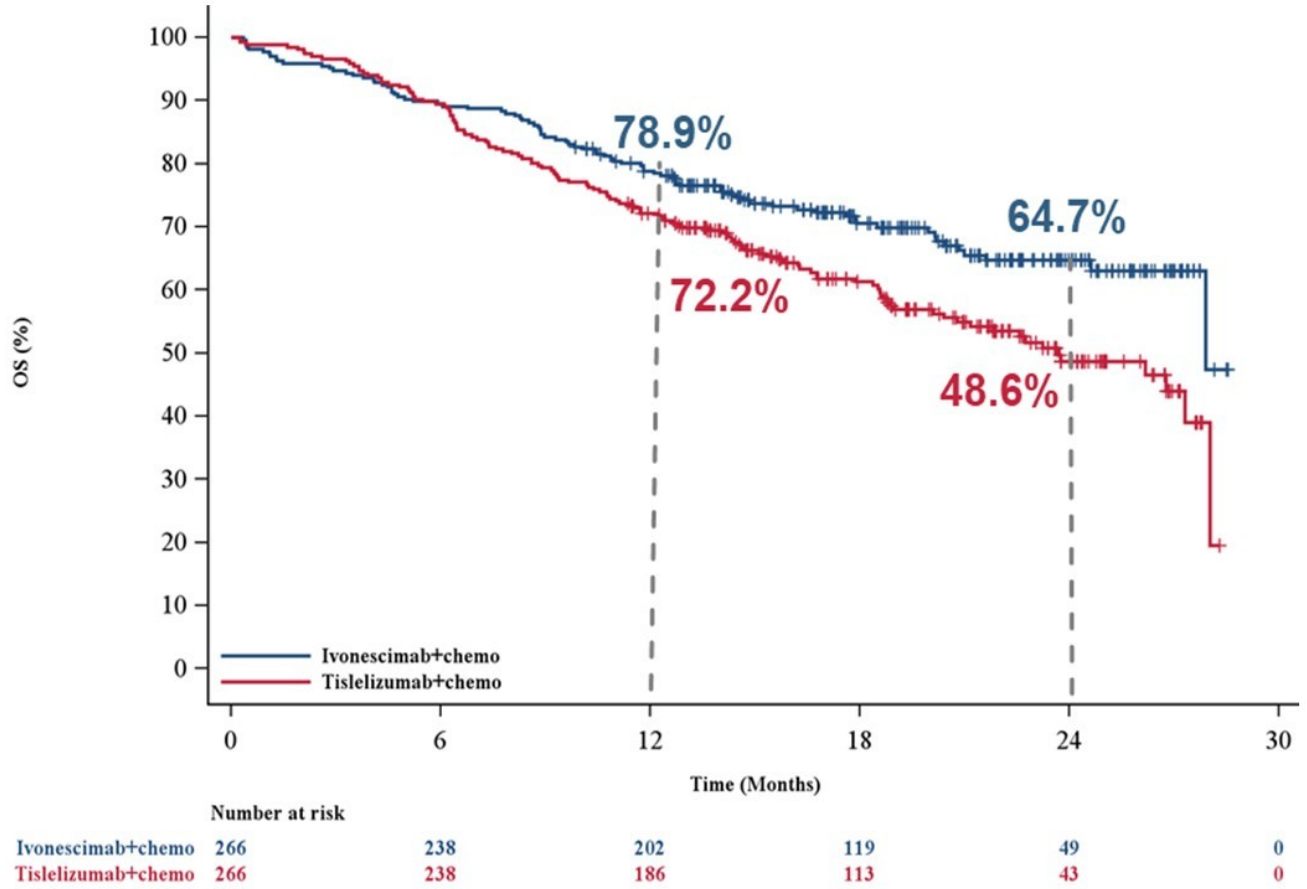
- **Primary endpoint: PFS by IRRC per RECIST v1.1**
- **Key secondary endpoint: OS**
- Secondary endpoints: PFS by INV, ORR, DCR, DoR, TTR and safety



- PFS advantage – 11.1 vs. 6.9 months (HR 0.60; p<0.0001) – not updated with this longer follow-up
- The prespecified interim OS analysis was conducted at 204 events (boundary 0.0049).

Lu et al, ASCO 2026

HARMONi-6: Interim overall survival



	Ivonescimab + chemo (N=266)	Tislelizumab + chemo (N=266)
mOS, months (95% CI)	**27.89*** (27.89, NE)	23.69 (20.11, NE)
Stratified HR (95% CI)	**0.66** (0.50, 0.87)	
p-value	**0.0017**	

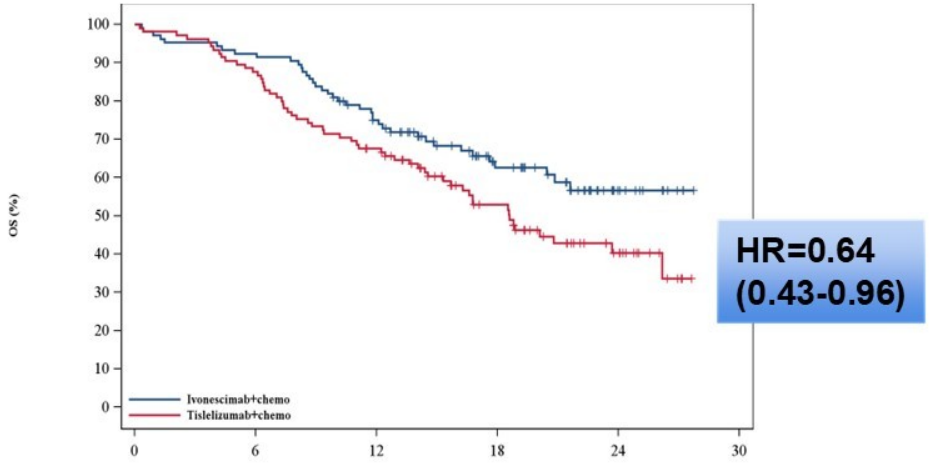
- Median Follow-up only ~21 mos
- Requires Longer Follow-up

Lu et al, ASCO 2026

HARMONi-6 Exploratory results for PD-L1 negative tumors

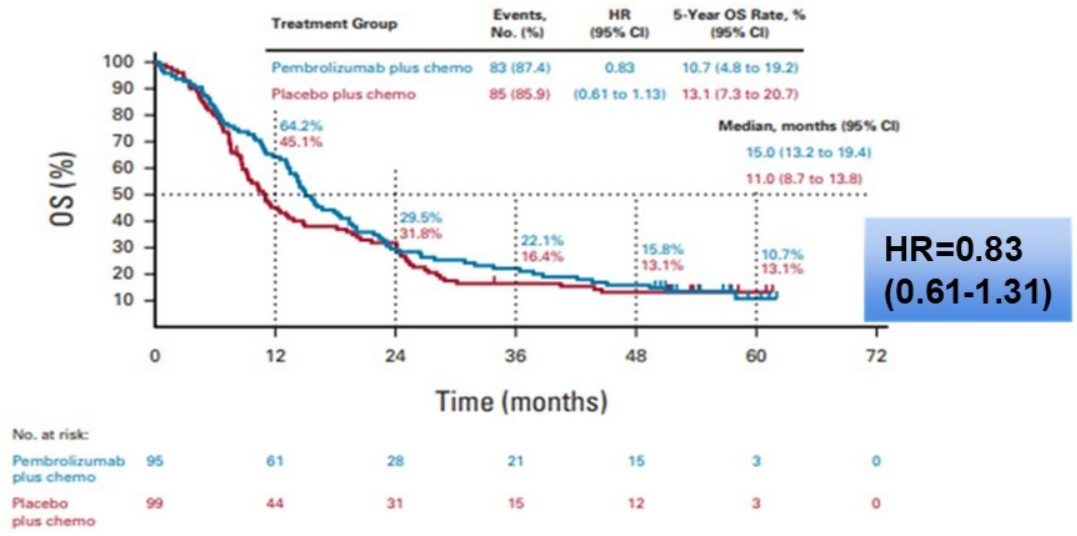
	HARMONi-6 Ivonescimab + chemotherapy	RATIONALE-307 Tiselizumab + chemotherapy	KN-407 Pembrolizumab + chemotherapy Chinese	KN-407 Pembrolizumab + chemotherapy Global
OS HR	0.64 (0.43-0.96)	0.73 (0.45-1.19)	0.50 (0.25-1.01)	0.83 (0.61-1.13)

HARMONi-6



HR=0.64 (0.43-0.96)

KN-407



HR=0.83 (0.61-1.31)

This subgroup analysis was descriptive and not formally powered.

Lu et al, ASCO 2026

HARMONi-6: Key Ivonescimab toxicities

Possibly VEGF-Related AEs#	Ivonescimab + chemo (N=266)			
	Any Grade	Grade 1	Grade 2	Grade ≥3
Proteinuria	113 (42.5)	35 (13.2)	60 (22.6)	18 (6.8)
Haemorrhage	66 (24.8)	39 (14.7)	20 (7.5)	7 (2.6)
Hypertension	39 (14.7)	7 (2.6)	22 (8.3)	10 (3.8)
Arterial thromboembolism	4 (1.5)	1 (0.4)	0	3 (1.1)
Venous thromboembolism	2 (0.8)	0	2 (0.8)	0
Fistula	1 (0.4)	0	1 (0.4)	0

- Grade ≥ 3 and serious TRAEs were more common with Ivonescimab
- No difference in treatment related deaths or hematologic toxicities between arms
- Grade 3 and higher VEGF-related AEs were relatively uncommon.

Lu et al, ASCO 2026

ROSETTA LUNG-02

Trial design and baseline characteristics

Global phase 2/3, multicenter, randomized, open-label study in patients with 1L NSCLC (NCT06712316)[1]

Key eligibility criteria

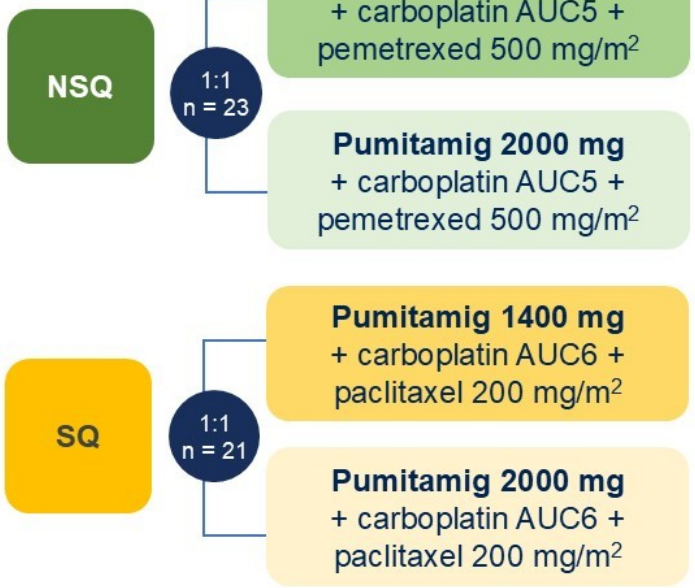
- Histologically or cytologically confirmed stage IIIB/IIIC or IV NSCLC without actionable genomic alterations
- No previous systemic therapy for NSCLC
- ≥1 measurable lesion per RECIST v1.1
- ECOG PS 0–1
- Any PD-L1 status

Phase 2 primary endpoints

- Safety, ORR, best percentage change in tumor size

Data cut-off was April 13, 2026
Median follow-up (range) was 9.0 months (0.0–12.8) overall

Phase 2 part: 4 cycles Q3W followed by maintenance*



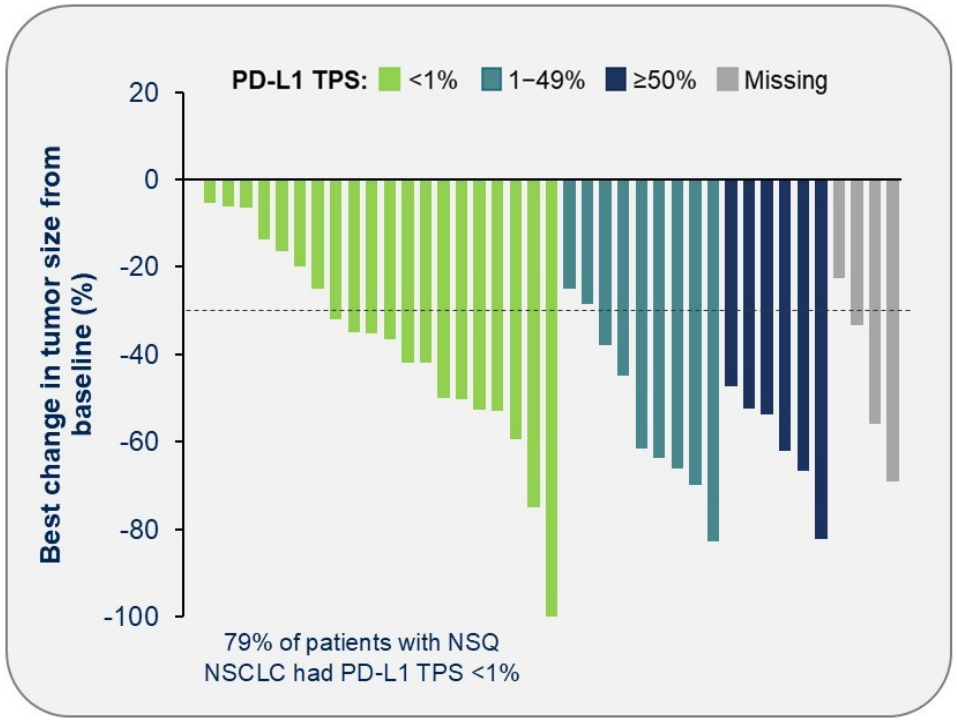
		All NSCLC N = 44
Age, years, median (range)		66.0 (41–87)
Sex, n (%)	Female	15 (34.1)
Race, n (%)	White	28 (63.6)
	Asian	15 (34.1)
	Black	1 (2.3)
Histology, n (%)	NSQ	23 (52.3)
	SQ	21 (47.7)
Smoker, n (%)	Never	3 (6.8)
	Former	37 (84.1)
	Current	4 (9.1)
ECOG PS, n (%)	0	17 (38.6)
	1	27 (61.4)
Brain metastasis, n (%)	Present	4 (9.1)
Liver metastasis, n (%)	Present	6 (13.6)

PD-L1 TPS, † %	NSQ	SQ	All
<1%	**78.9**	35.3	58.3
1–49%	5.3	47.1	25.0
≥50%	15.8	17.6	16.7

High number of patients with PD-L1 <1%, particularly in NSQ histology (79%)

Pumitamig early efficacy data

	Overall NSCLC (NSQ + SQ)				
	TPS <1% (n = 21)	TPS 1–49% (n = 9)	TPS ≥50% (n = 6)	Missing* (n = 4)	Overall (N = 40)
uORR, % (95% CI)	61.9 (38.4–81.9)	77.8 (40.0–97.2)	100.0 (54.1–100.0)	75.0 (19.4–99.4)	72.5 (56.1–85.4)
cORR, % (95% CI)	**47.6** (25.7–70.2)	77.8 (40.0–97.2)	100.0 (54.1–100.0)	50.0 (6.8–93.2)	62.5 (45.8–77.3)
cBOR, n (%)					
CR	0	1 (11.1)	0	0	1 (2.5)
PR	10 (47.6)	6 (66.7)	6 (100.0)	2 (50.0)	24 (60.0)
SD	11 (52.4)	2 (22.2)	0	2 (50.0)	15 (37.5)

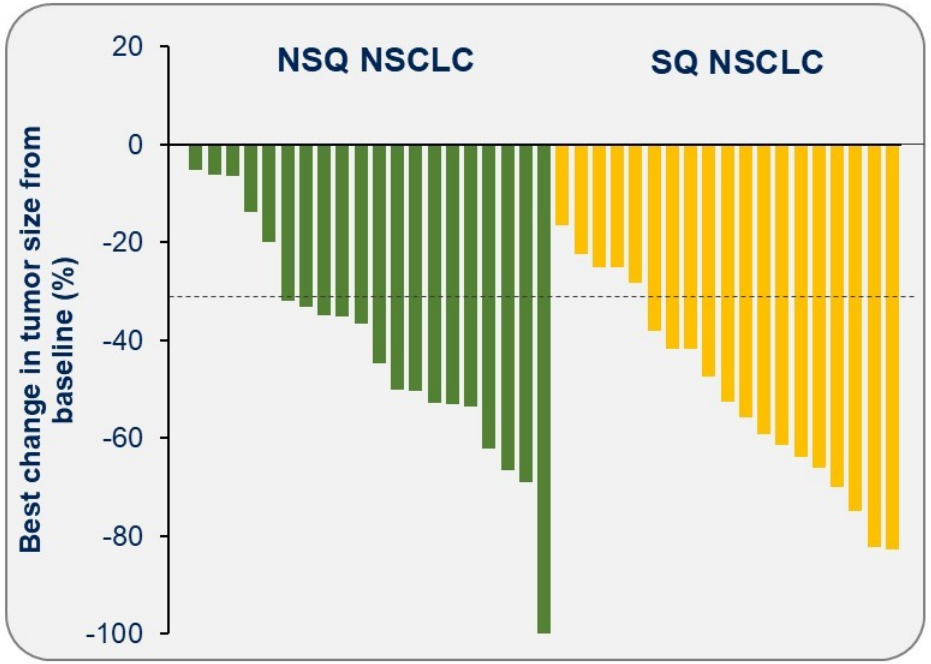


Encouraging ORR across all PD-L1 levels, including in the 21 patients (58%) with PD-L1 TPS <1%, a subgroup characterized by a poor response to anti-PD-1/PD-L1 treatment

Peters, et al., ASCO 2026

Pumitamig early efficacy data

	NSQ NSCLC			SQ NSCLC		
	1400 mg (n = 11)	2000 mg (n = 10)	Overall (n = 21)	1400 mg (n = 11)	2000 mg (n = 8)	Overall (n = 19)
uORR,* % (95% CI)	81.8 (48.2–97.7)	60.0 (26.2–87.8)	71.4 (47.8–88.7)	81.8 (48.2–97.7)	62.5 (24.5–91.5)	73.7 (48.8–90.9)
cORR, % (95% CI)	63.6 (30.8–89.1)	50.0 (18.7–81.3)	57.1 (34.0–78.2)	72.7 (39.0–94.0)	62.5 (24.5–91.5)	68.4 (43.4–87.4)
cBOR, n (%)						
CR	0	0	0	0	1 (12.5)	1 (5.3)
PR	7 (63.6)	5 (50.0)	12 (57.1)	8 (72.7)	4 (50.0)	12 (63.2)
SD	4 (36.4)	5 (50.0)	9 (42.9)	3 (27.3)	3 (37.5)	6 (31.6)
cDCR, % (95% CI)	100.0 (71.5–100.0)	100.0 (69.2–100.0)	100.0 (83.9–100.0)	100.0 (71.5–100.0)	100.0 (63.1–100.0)	100.0 (82.4–100.0)



Encouraging ORR with either dose in both histologies

Peters, et al., ASCO 2026

20th ANNUAL ATLANTA LUNG CANCER SYMPOSIUM

Immunotherapy and ADC combinations

Partners for Advancing Clinical Education

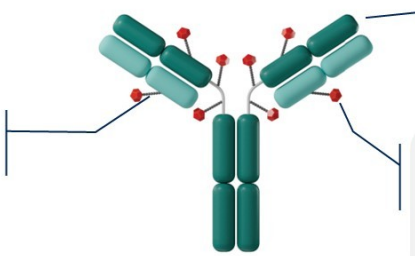
Bio Ascend™

OptiTROP-Lung05

Sac-TMT (TROP2 ADC) design

Unique, bifunctional linker

- Maximizes payload delivery to tumor cells
- Irreversible connection with the antibody ensures minimal payload loss in the circulation
- pH-sensitive cleavage from the payload in the lysosome ensures payload release in the tumor cell



Monoclonal antibody

- Sacituzumab, a humanized anti-TROP2 antibody with high affinity for TROP2

Cytotoxic payload

- Novel, **belotecan-derived** topoisomerase I inhibitor
- Average DAR of 7.4 (range, 7–8)
- Membrane permeability elicits a bystander effect in nearby tumor cells

Randomized, multicenter, open-label, phase 3 trial (NCT06448312)

Key Eligibility

- Locally advanced (stage IIIB/IIIC) or metastatic (stage IV) NSCLC
- No prior systemic antitumor therapy
- No sensitizing *EGFR* or *ALK* alteration
- PD-L1 TPS≥ 1% (IHC 22C3, central lab)
- ECOG score 0 or 1

R 1:1

n = 413

- **Sac-TMT 4 mg/kg Q2W + Pembrolizumab 400 mg Q6W[a] (n = 208)**
- **Pembrolizumab 400 mg Q6W[a] (n = 205[c])**

Endpoints [b]

Primary

- PFS assessed by BICR

Secondary

- OS (key secondary endpoint)
- PFS assessed by investigator
- ORR, DCR, DOR, etc.
- Safety

Stratification factors

- Histology (squamous vs. non-squamous)
- PD-L1 TPS (1-49% vs. ≥ 50%)
- ECOG score (0 vs. 1)

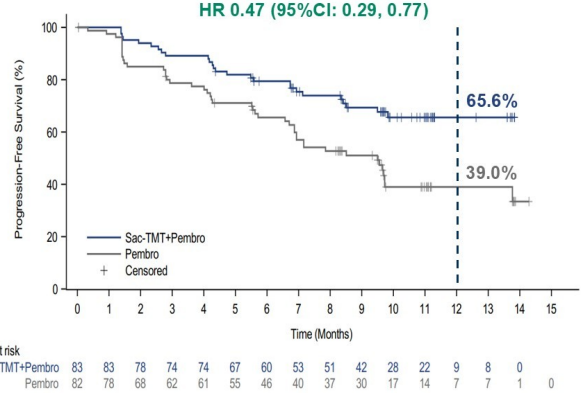
Patients received sac-TMT + pembro or pembro monotherapy until disease progression or unacceptable toxicity

Zhou, ASCO 2026

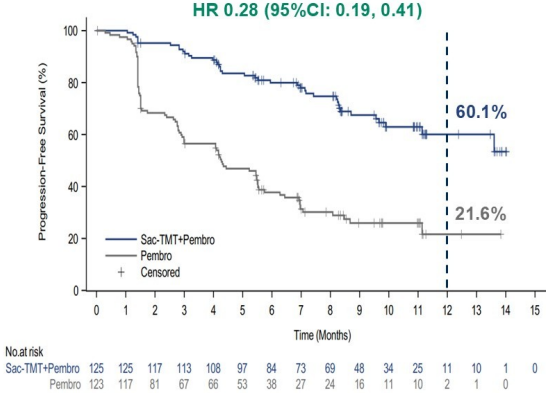
OptiTROP-Lung05: Eficacy

PFS (BICR) by PD-L1 Expression

TPS ≥ 50%	Sac-TMT + Pembro (n = 83)	Pembro (n = 82)
PFS events, n (%)	26 (31.3)	44 (53.7)
Median, mo (95%CI)	NR (NE, NE)	9.5 (6.9, 13.8)

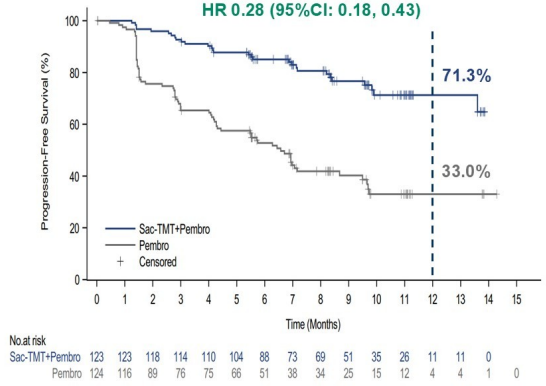


TPS 1-49%	Sac-TMT + Pembro (n = 125)	Pembro (n = 123)
PFS events, n (%)	40 (32.0)	84 (68.3)
Median, mo (95%CI)	NR (11.1, NE)	4.3 (2.9, 5.5)

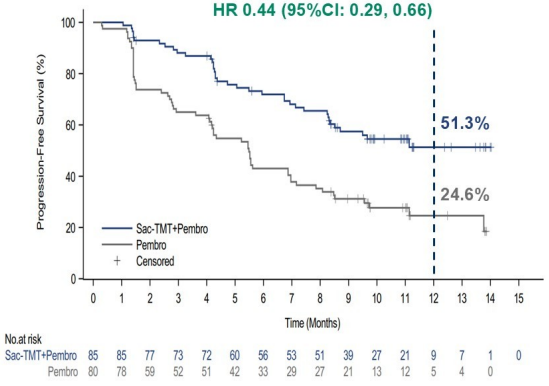


PFS (BICR) by Histology

Non-Squamous	Sac-TMT + Pembro (n = 123)	Pembro (n = 124[a])
PFS events, n (%)	29 (23.6)	70 (56.5)
Median, mo (95%CI)	NR (13.6, NE)	6.6 (4.3, 8.7)



Squamous	Sac-TMT + Pembro (n = 85)	Pembro (n = 80)
PFS events, n (%)	37 (43.5)	58 (72.5)
Median, mo (95%CI)	NR (8.3, NE)	5.5 (4.1, 7.0)

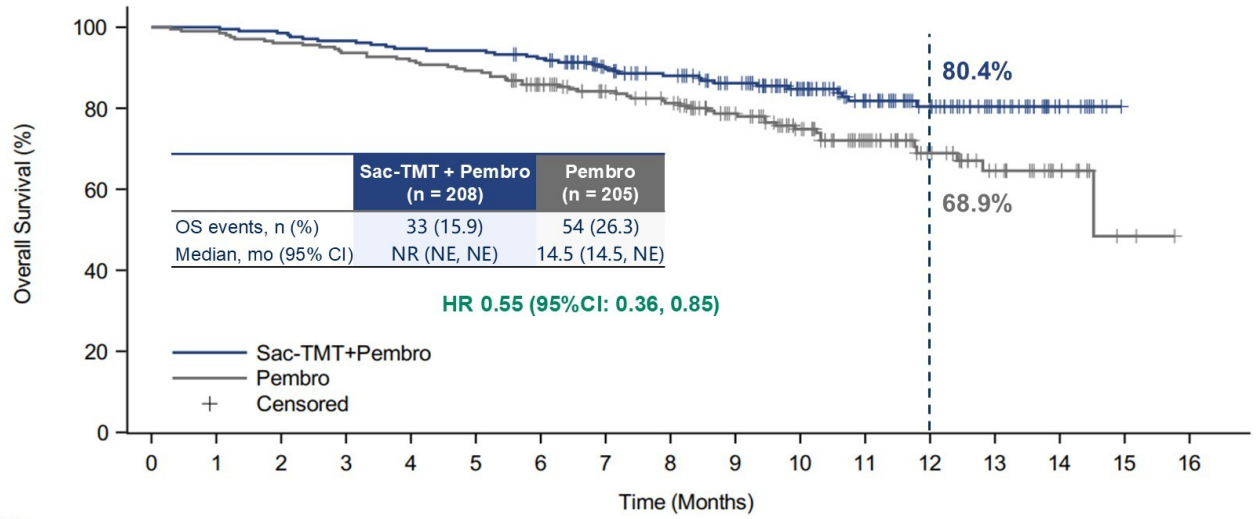


Zhou, ASCO 2026

OptiTROP-Lung05: Efficacy

Descriptive OS at PFS IA

A favorable trend was observed with sac-TMT + pembro



No.at risk

Sac-TMT+Pembro	208	208	205	201	197	196	190	164	151	135	104	78	55	36	11	0
Pembro	205	203	197	192	188	183	164	146	137	111	87	63	41	25	12	2	0

Median follow-up was 10.5 months.

PD-L1 ≥50%	PD-L1 1–49%	PD-L1 <1%
Pembro + carbo/pemetrexed (*KN-189*)	Pembro + carbo/pemetrexed (*KN-189*)	Pembro + carbo/pemetrexed (*KN-189*)
mPFS 11.3 PFS HR 0.35 mOS 27.7 OS HR 0.68	*mPFS 9.4* PFS HR 0.57 mOS 21.8 OS HR 0.65	*mPFS 6.2* PFS HR 0.67 mOS 17.2 OS HR 0.55

Zhou, ASCO 2026

OptiTROP-Lung05: Safety

Event, n (%)	Sac-TMT + Pembro (n = 208)		Pembro (n = 204)	
	Any grade	Grade ≥3	Any grade	Grade ≥3
Treatment-emergent AEs	207 (99.5)	115 (55.3)	178 (87.3)	64 (31.4)
Serious	81 (38.9)	—	59 (28.9)	—
Led to discontinuation of sac-TMT/ pembro	8 (3.8) / 11 (5.3)	—	10 (4.9)	—
Led to death	5 (2.4)	—	13 (6.4)	—
Common TEAEs[a]				
Anemia	182 (87.5)	19 (9.1)	55 (27.0)	2 (1.0)
Alopecia	137 (65.9)	0	6 (2.9)	0
White blood cell count decreased	96 (46.2)	18 (8.7)	5 (2.5)	1 (0.5)
Neutrophil count decreased	93 (44.7)	36 (17.3)	3 (1.5)	1 (0.5)
Stomatitis	84 (40.4)	11 (5.3)	3 (1.5)	0
Decreased appetite	73 (35.1)	2 (1.0)	27 (13.2)	0
Weakness	71 (34.1)	8 (3.8)	23 (11.3)	2 (1.0)
Nausea	70 (33.7)	0	11 (5.4)	0
Hypoalbuminemia	61 (29.3)	0	35 (17.2)	0
Weight decreased	56 (26.9)	1 (0.5)	19 (9.3)	1 (0.5)
ALT increased	55 (26.4)	1 (0.5)	33 (16.2)	0
Rash	50 (24.0)	6 (2.9)	33 (16.2)	1 (0.5)

[a] Summary of any grade TEAEs with incidence ≥ 20% in either treatment group.
ALT increased, alanine aminotransferase increased; TEAE, treatment-emergent adverse events.

- Median duration of exposure
  - Sac-TMT + Pembro: Sac-TMT 8.9 months/ Pembro 8.3 months
  - Pembro alone: 5.1 months
- Higher incidence of grade ≥3 TEAEs with sac-TMT+ pembro vs. pembro, primarily driven by expected hematologic AEs of sac-TMT
- Treatment-emergent AEs leading to discontinuation of pembro were similar in both groups. No treatment-related deaths were attributed to sac-TMT

Zhou, ASCO 2026

Key Takeaway Points

Dual checkpoint inhibition is promising, however there is a need for therapeutic window optimization

PD-(L)1 and VEGF bispecific antibodies are likely to be approved in the US

ADC and IO combinations are promising in the first line, also with the need to optimize the therapeutic window

Thank you!


EMORY
WINSHIP
CANCER
INSTITUTE
National Cancer Institute-Designated
Comprehensive Cancer Center