

New lung cancer treatment in updated NCCN guidelines

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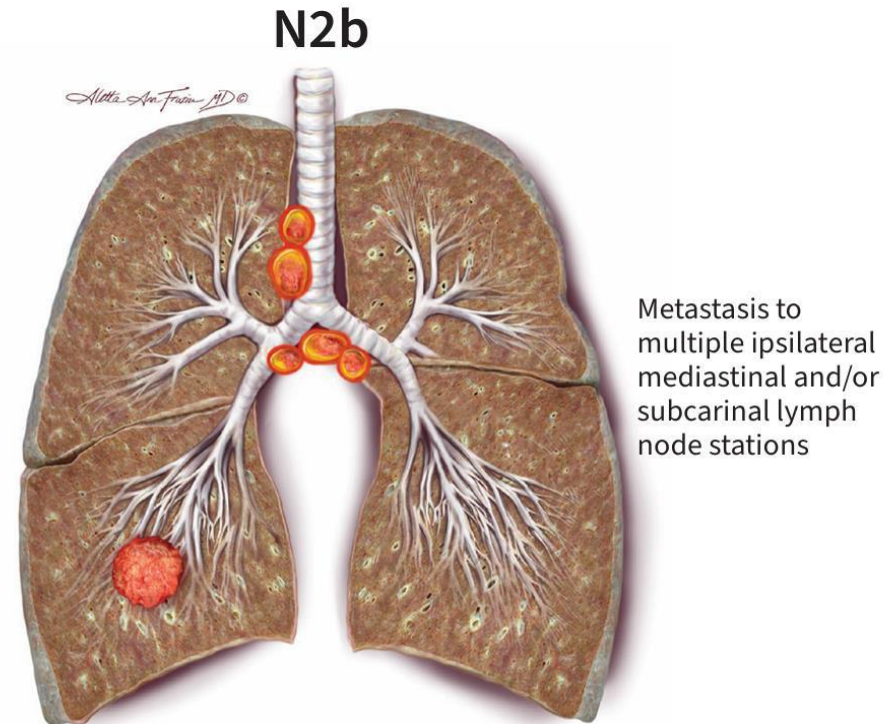
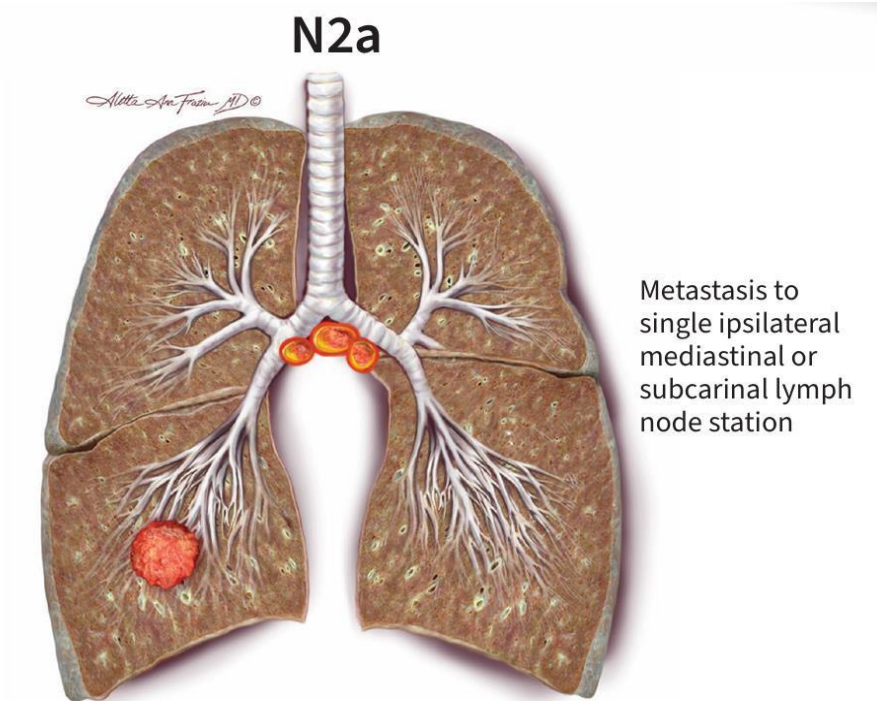
- 01 Update treatment of NSCLC
- 02 Update treatment of SCLC
- 03 Summary

Changes of TNM Classification 9th edition

Subdivision of N2

N2a: single-station N2 involvement

N2b: multiple-station N2 involvement



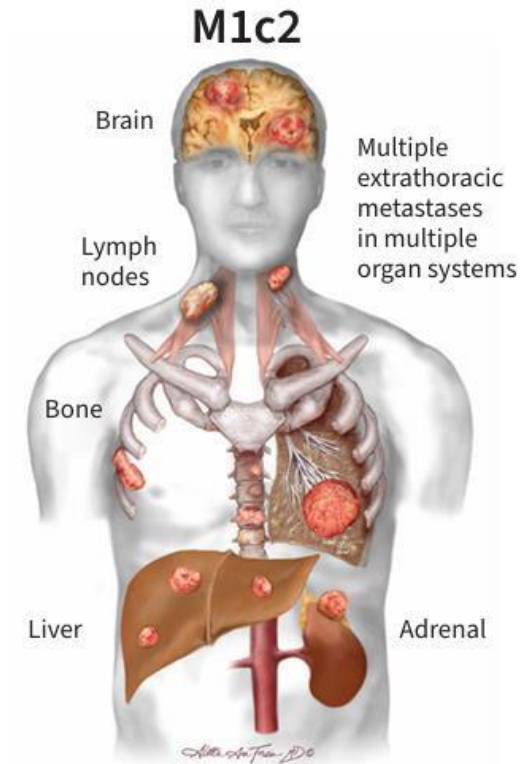
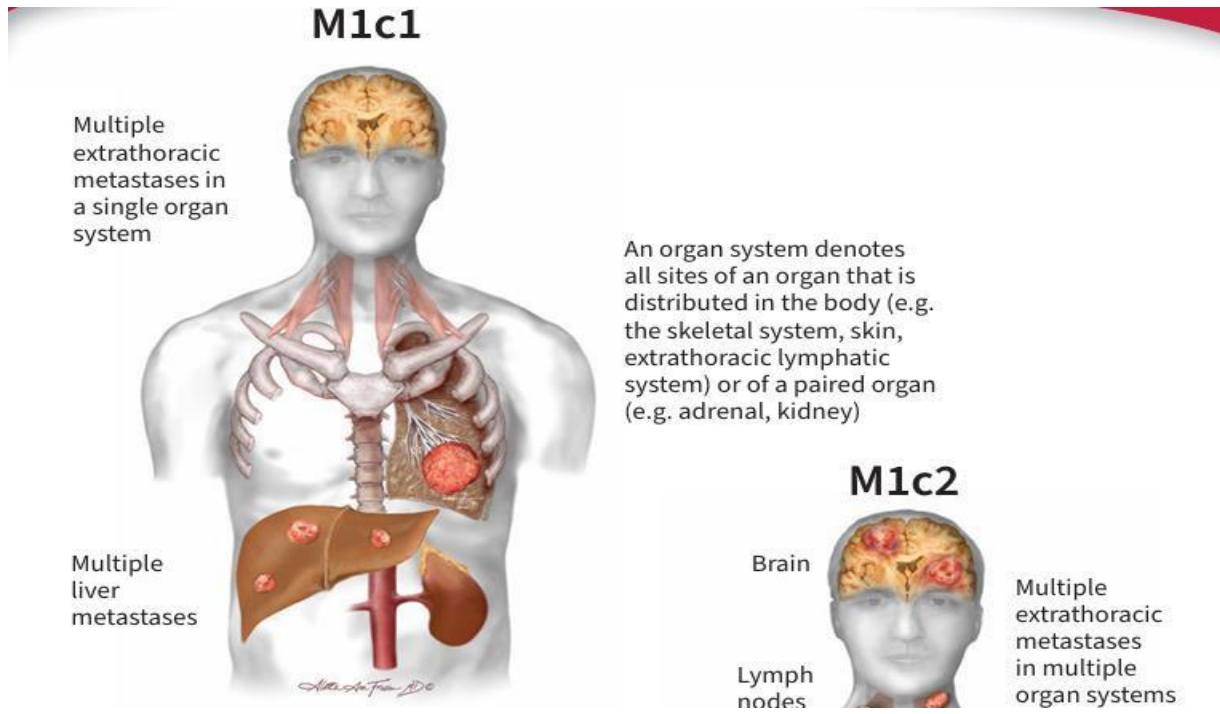
Diagnosis of NSCLC

Changes of TNM Classification 9th edition

Subdivision of M1c

M1c1: multiple extrathoracic metastasis in single organ

M1c2: metastasis in multiple organ systems



Diagnosis of NSCLC

TABLE 1 Stages in lung cancer classification according to the 9th TNM (tumour–node–metastasis) edition versus the 8th TNM edition

T	Label	N0	N1	N2		N3
				N2a	N2b	
T1	T1a ≤1 cm	IA1	IIB	IIB	IIIA	IIIB
	T1b >1 to ≤2 cm	IA2	IIB	IIB	IIIA	IIIB
	T1c >2 to ≤3 cm	IA3	IIB	IIB	IIIA	IIIB
T2	T2a >3 to ≤4 cm	IB	IIB	IIIA	IIIB	IIIB
	T2b >4 to ≤5 cm	IIA	IIB	IIIA	IIIB	IIIB
T3	T3 >5 to ≤7 cm	IIB	IIIA	IIIA	IIIB	IIIC
	T3 invasion	IIB	IIIA	IIIA	IIIB	IIIC
	T3 satellite nodules	IIB	IIIA	IIIA	IIIB	IIIC
T4	T4 >7 cm	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 invasion	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 ipsilateral nodules	IIIA	IIIA	IIIB	IIIB	IIIC

Changes showing comparison to the 8th TNM classification are flagged accordingly. Blue signifies downstaging either from stage IIIA to IIB, or from stage IIIB to IIIA. Red signifies upstaging from stage IIIA to IIIB. For the scope of this review, alterations in stage I and II, as well as stage IV disease (M descriptor), were disregarded.

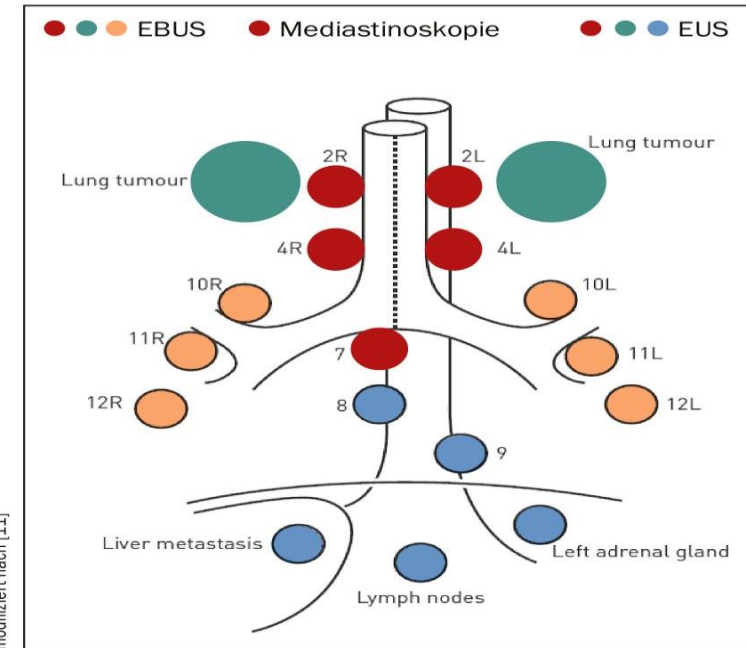
Resectability of stage III NSCLC

Multidisciplinary Expert consensus document

TABLE 2 Consensus Summary of Surgical Resectability for Non-small Cell Lung Cancer

Variable	N0	N1	Nonbulky N2 Single	N2 I
T1/T2	Resectable	Resectable	Resectable	Pot re
T3	Resectable	Resectable	Resectable	Pot re
T3 (Pancoast)	Potentially resectable	Potentially resectable	Unresectable	Uni
T4 size	Potentially resectable	Potentially resectable	Unresectable	Uni
T4 satellite	Potentially resectable	Potentially resectable	Potentially resectable	Uni
T4 invasion	Potentially resectable	Potentially resectable	Unresectable	Uni

^aThis table represents a general recommendation that may be considered after a multidisciplinary discussion.

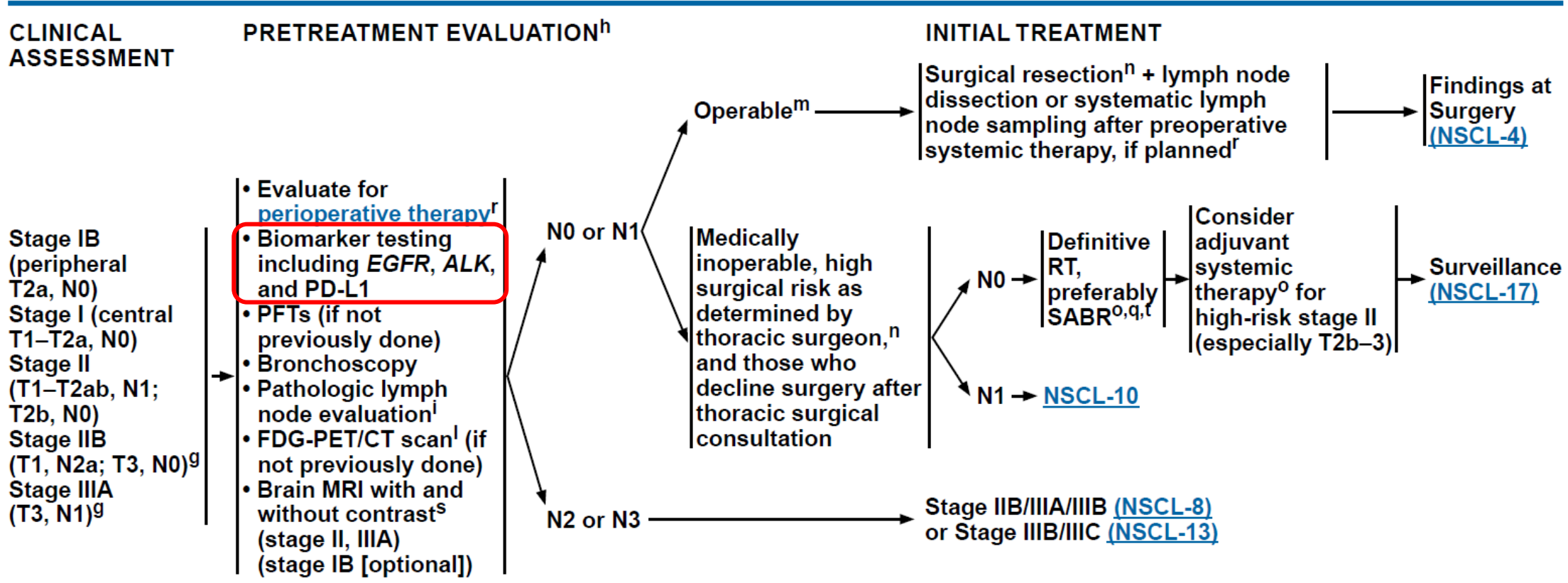


modifiziert nach [11]

Abb. 3: Vereinfachte Darstellung der Lymphknotenkarte nach IASLC 2009. Die Reichweite der verschiedenen Methoden (Mediastinoskopie, EBUS, EUS) ist farblich dargestellt.

LN staging ... Targeted vs. Systematic
Systematic EBUS & EUS and separate needle... according to LN stage

Diagnosis of NSCLC



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PRINCIPLES OF PERIOPERATIVE SYSTEMIC THERAPY

PRINCIPLES OF PERIOPERATIVE SYSTEMIC THERAPY

Neoadjuvant Systemic Therapy in Patients Who Are Candidates for Immune Checkpoint Inhibitors

Patients with ≥ 4 cm or node-positive tumors should be evaluated for the following treatment options:

• Nivolumab and platinum-based doublet chemotherapy^{1,2} with the option of continuing single-agent nivolumab as adjuvant treatment after surgery (for patients with no known *EGFR* mutations or *ALK* gene fusions) (category 1);⁴ [Other Adjuvant Systemic Therapy](#)

▶ Platinum-doublet chemotherapy options include:

- ◇ Carboplatin/Paclitaxel (any histology)
- ◇ Cisplatin/Docetaxel (any histology)
- ◇ Cisplatin/Pemetrexed (nonsquamous)
- ◇ Carboplatin/Pemetrexed (nonsquamous)
- ◇ Cisplatin/Gemcitabine (squamous)
- ◇ Carboplatin/Gemcitabine (squamous)

• Pembrolizumab and cisplatin-based doublet chemotherapy then continued as single-agent pembrolizumab as adjuvant treatment after surgery (category 1);⁴ [Other Adjuvant Systemic Therapy](#)

▶ Platinum-doublet chemotherapy options include:

- ◇ Cisplatin/Pemetrexed (nonsquamous)
- ◇ Cisplatin/Gemcitabine (squamous)

• Durvalumab and platinum-based doublet chemotherapy then continued as single-agent durvalumab as adjuvant treatment after surgery (for patients with no known *EGFR* mutations or *ALK* gene fusions) (category 1);⁴ [Other Adjuvant Systemic Therapy](#)

▶ Platinum-doublet chemotherapy options include:

- ◇ Cisplatin/Pemetrexed (nonsquamous)
- ◇ Carboplatin/Pemetrexed (nonsquamous)
- ◇ Cisplatin/Gemcitabine (squamous)
- ◇ Carboplatin/Gemcitabine (squamous)
- ◇ Carboplatin/Paclitaxel (squamous)

01 Neoadjuvant and Perioperative IO + CTx

TABLE 1. Neoadjuvant and Perioperative Phase III Trial Evaluating Chemoimmunotherapy Versus Chemotherapy

Study	Treatment	No.	Stage III, %	Percent With Surgery, %	pCR Rate (ICI arm), %	EFS, months (ICI arm)	EFS, HR (95% CI)	OS, HR (95% CI)
CheckMate-816	Neoadjuvant nivolumab	358	63	83	24	31.6	HR, 0.63 (97.38% CI, 0.43 to 0.91); <i>P</i> = .005	NA
KEYNOTE-671	Perioperative pembrolizumab	797	70	82	18	47.2	HR, 0.59 (95% CI, 0.48 to 0.72)	HR, 0.72 (95% CI, 0.56 to 0.93); <i>P</i> = .0052
CheckMate-77T	Perioperative nivolumab	461	64	77	25	40.1	HR, 0.59 (95% CI, 0.45 to 0.79)	HR, 0.72 (95% CI, 0.56 to 0.93); <i>P</i> < .01
AEGEAN	Perioperative durvalumab	802	71	81	17	NR	HR, 0.58 (95% CI, 0.53 to 0.88); <i>P</i> = .004	NR
NEOTORCH	Perioperative toripalimab	501	100	82	25	NR	HR, 0.40 (95% CI, 0.28 to 0.57); <i>P</i> < .001	HR, 0.62 (95% CI, 0.38 to 1.00); <i>P</i> = .05
RATIONALE 315	Perioperative tislelizumab	453	58	84	41	NR	HR, 0.56 (95% CI, 0.40 to 0.79); <i>P</i> = .0003	HR, 0.62 (95% CI, 0.39 to 0.98); <i>P</i> = .019

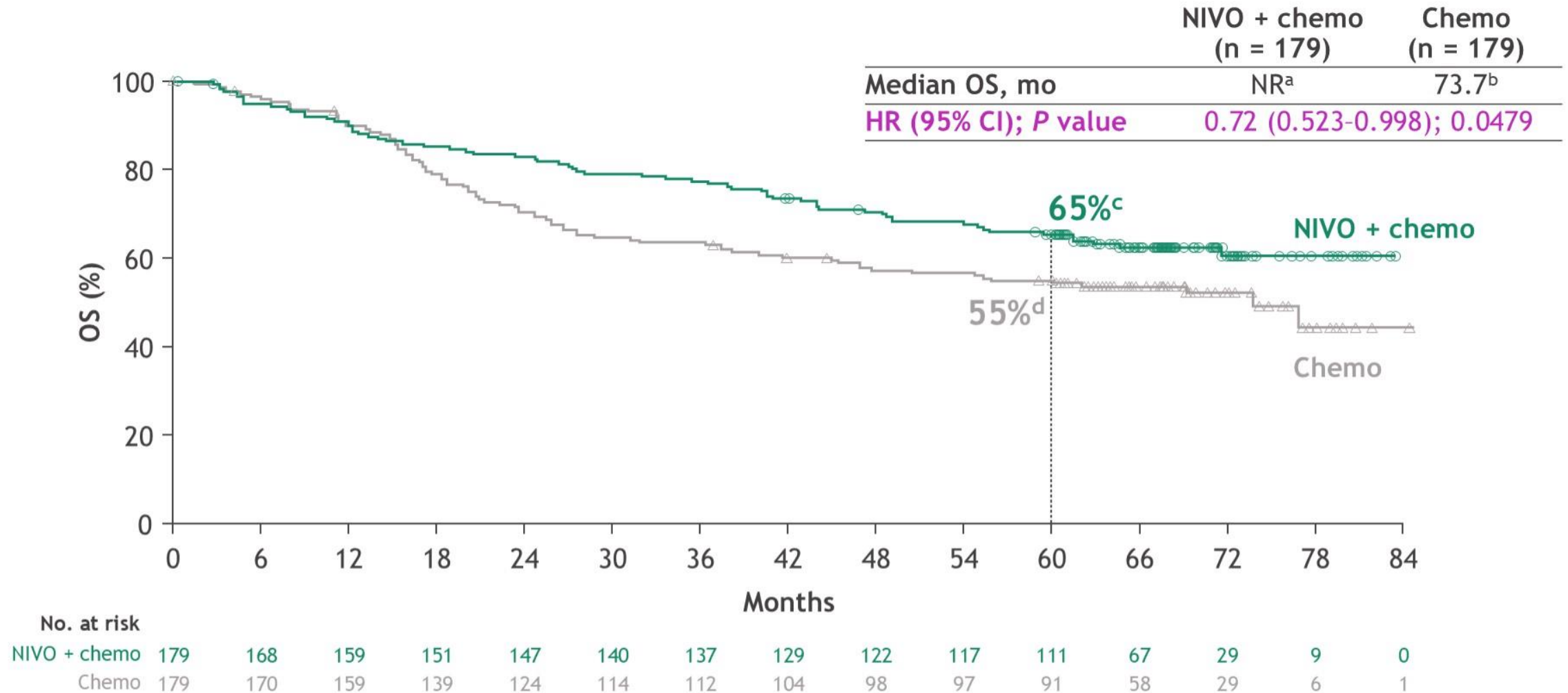
Abbreviations: EFS, event-free survival; HR, hazard ratio; ICI, immune checkpoint inhibitor; NA, non application; NR, not reported; OS, overall survival; pCR, pathologic complete response.

Overall survival with neoadjuvant nivolumab + chemotherapy in patients with resectable NSCLC in CheckMate 816

[Patrick M. Forde](#),¹ Jonathan D. Spicer,² Mariano Provencio,³ Tetsuya Mitsudomi,⁴ Mark M. Awad,⁵ Changli Wang,⁶ Shun Lu,⁷ Enriqueta Felip,⁸ Stephen Broderick,⁹ Scott J. Swanson,¹⁰ Julie Brahmer,⁹ Keith Kerr,¹¹ Tudor-Eliade Ciuleanu,¹² Fumihiko Tanaka,¹³ Gene B. Saylor,¹⁴ Ke-Neng Chen,¹⁵ Lily Wang,¹⁶ Quyen Duong,¹⁶ Nicolas Girard¹⁷

¹Trinity St. James's Cancer Institute, Trinity College Dublin, Dublin, Ireland; ²McGill University Health Centre, Montreal, Quebec, Canada; ³Hospital Universitario Puerta de Hierro, Madrid, Spain; ⁴Kindai University Faculty of Medicine, Ohno-Higashi, Osaka-Sayama, Japan; ⁵Memorial Sloan Kettering Cancer Center, New York, NY, USA; ⁶Tianjin Lung Cancer Center, Tianjin Medical University Cancer Institute & Hospital, Tianjin, China; ⁷Shanghai Lung Cancer Center, Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China; ⁸Vall d'Hebron University Hospital, Vall d'Hebron Institute of Oncology, Universitat Autònoma de Barcelona, Barcelona, Spain; ⁹The Bloomberg-Kimmel Institute for Cancer Immunotherapy, The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins Medicine, Baltimore, MD, USA; ¹⁰Brigham and Women's Hospital, Boston, MA, USA; ¹¹Aberdeen Royal Infirmary, Aberdeen, United Kingdom; ¹²Institutul Oncologic Prof Dr Ion Chiricuță and University of Medicine and Pharmacy Iuliu Hațieganu, Cluj-Napoca, Romania; ¹³The University of Occupational and Environmental Health, Kitakyushu, Japan; ¹⁴Charleston Oncology, Charleston, SC, USA; ¹⁵State Key Laboratory of Molecular Oncology, Peking University Cancer Hospital & Institute, Beijing, China; ¹⁶Bristol Myers Squibb, Princeton, NJ, USA; ¹⁷Institut du Thorax Curie-Montsouris, Institut Curie, Paris, France

Final analysis: OS with neoadjuvant NIVO + chemo vs chemo

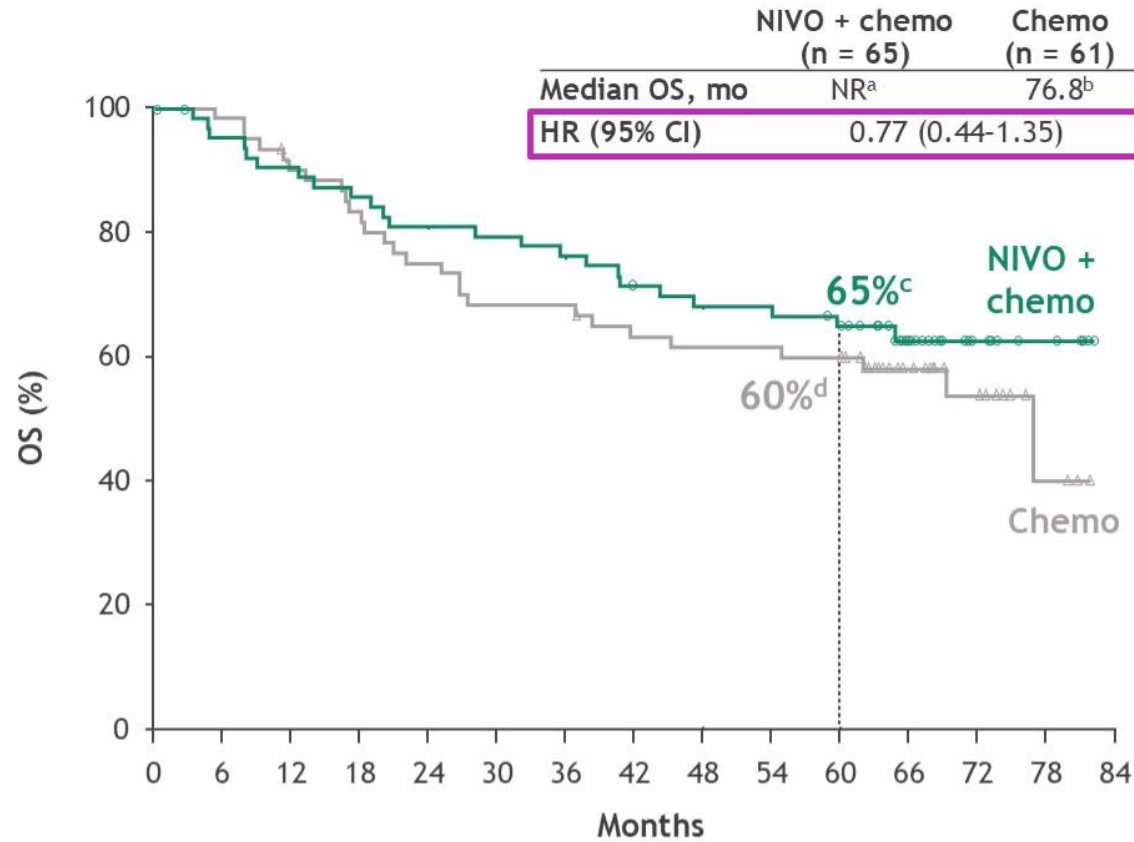


Minimum/median follow-up: 59.9/68.4 months.

^{a-d}95% CI: ^aNR; ^b47.3-NR; ^c58-72; ^d47-62.

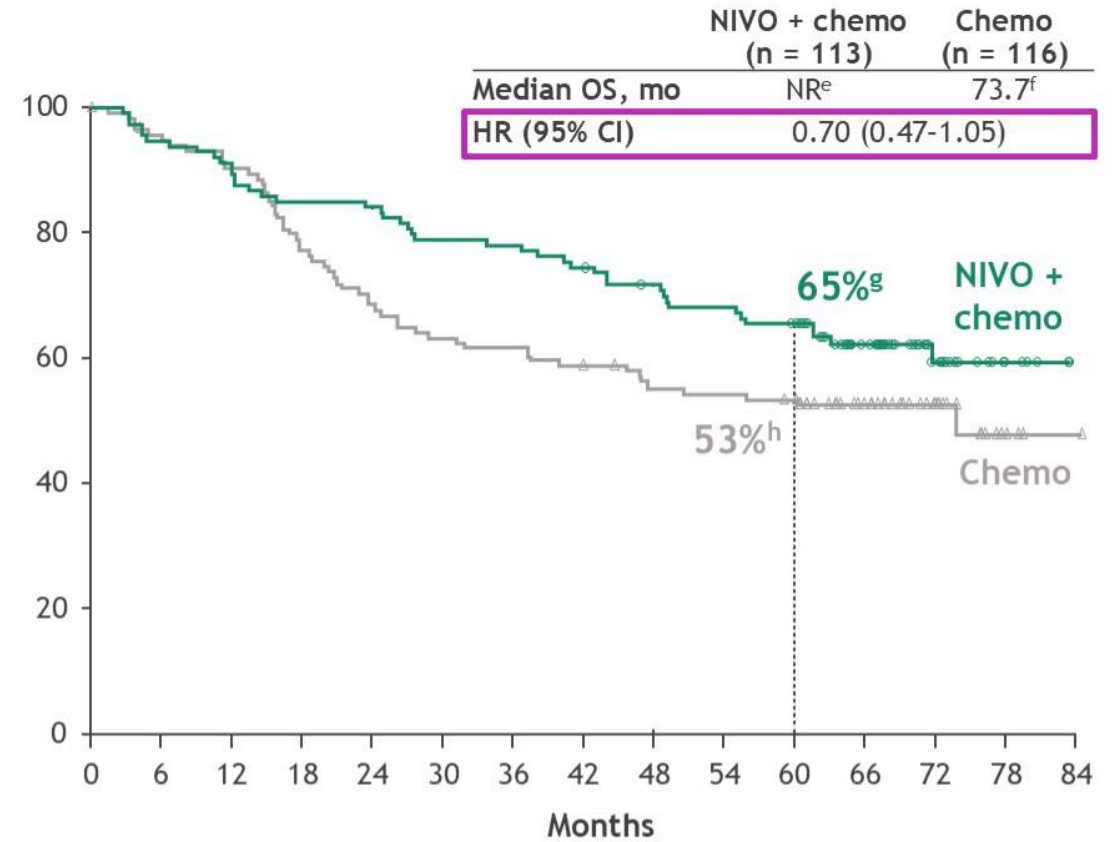
OS by baseline stage of disease

Stage IB-II



No. at risk	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84
NIVO + chemo	65	60	57	54	51	50	48	44	42	41	39	21	11	4	0
Chemo	61	60	54	50	45	41	41	37	36	36	34	20	12	3	0

Stage IIIA



No. at risk	0	6	12	18	24	30	36	42	48	54	60	66	72	78	84
NIVO + chemo	113	107	101	96	95	89	88	84	79	75	71	46	18	5	0
Chemo	116	108	103	88	78	72	70	66	61	60	57	38	17	3	1

Minimum/median follow-up: 59.9/68.4 months.

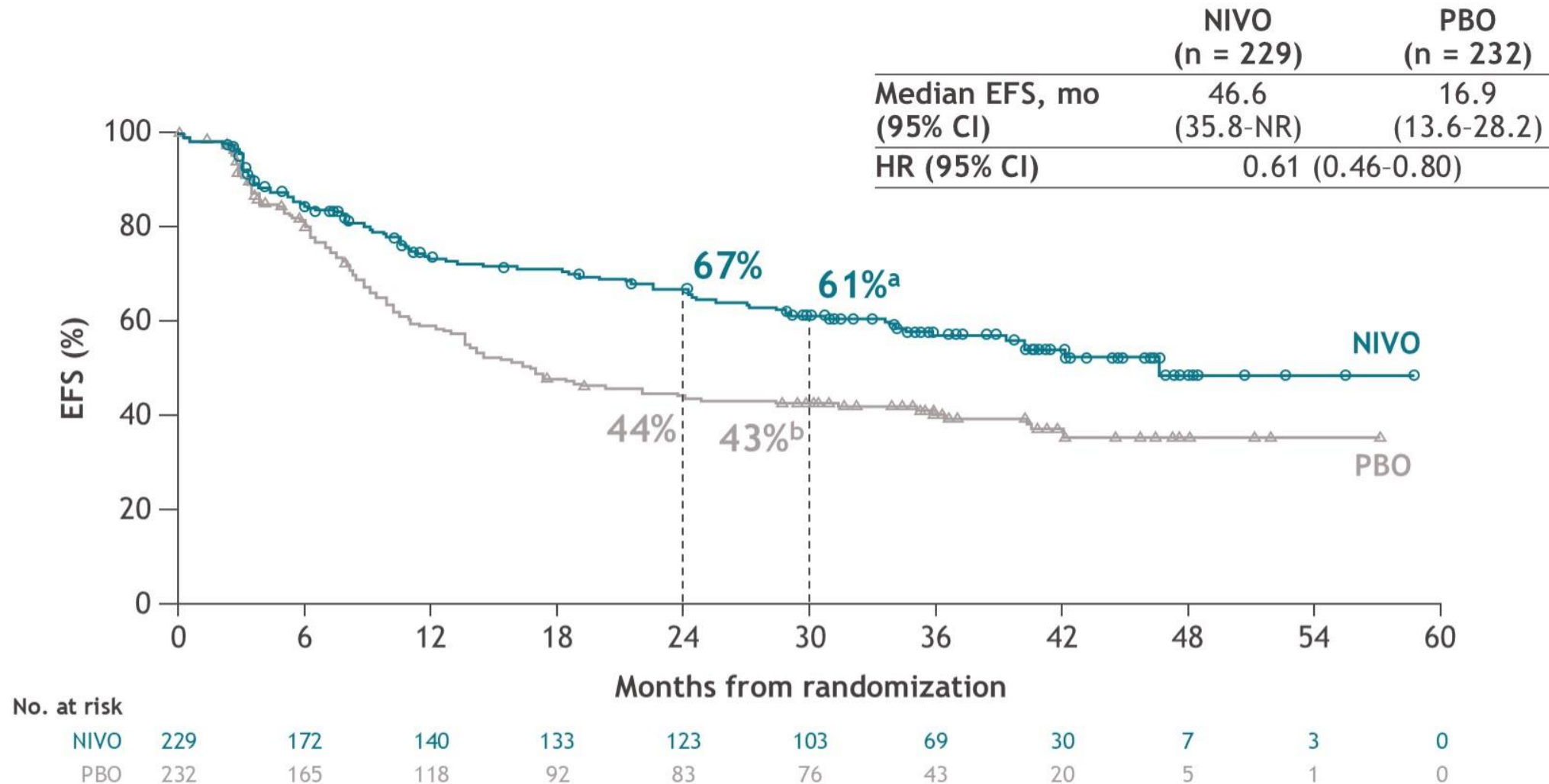
^{a-h}95% CI: ^a64.7-NR; ^b41.6-NR; ^c52-75; ^d46-71; ^e71.6-NR; ^f39.8-NR; ^g56-73; ^h44-62.

Perioperative nivolumab vs placebo in patients with resectable NSCLC: updated survival and biomarker analyses from CheckMate 77T

Tina Cascone,¹ Mark M. Awad,² Jonathan D. Spicer,³ Jie He,⁴ Shun Lu,⁵ Fumihiro Tanaka,⁶ Robin Cornelissen,⁷ Lubos B. Petruzela,⁸ Hiroyuki Ito,⁹ Ludmila de Oliveira Muniz Koch,¹⁰ Lin Wu,¹¹ Sabine Bohnet,¹² Cinthya Coronado Erdmann,¹³ Stephanie Meadows-Shropshire,¹⁴ Jaclyn Neely,¹⁴ Yu-Han Hung,¹⁴ Padma Sathyanarayana,¹⁴ Sumeena Bhatia,¹⁴ Mariano Provencio¹⁵

¹The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ²Memorial Sloan Kettering Cancer Center, New York, NY, USA; ³McGill University Health Centre, Montreal, Quebec, Canada; ⁴National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China; ⁵Shanghai Lung Cancer Center, Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China; ⁶University of Occupational and Environmental Health, Kitakyushu, Japan; ⁷Erasmus MC Cancer Institute, Rotterdam, Netherlands; ⁸Charles University, Prague, Czech Republic; ⁹Kanagawa Cancer Center, Yokohama, Japan; ¹⁰Hospital Israelita Albert Einstein, Sao Paulo, Brazil; ¹¹Hunan Cancer Hospital, Changsha, China; ¹²University Medical Center Schleswig-Holstein, Lubeck, Germany; ¹³Bristol Myers Squibb, Boudry, Switzerland; ¹⁴Bristol Myers Squibb, Princeton, NJ, USA; ¹⁵Hospital Universitario Puerta de Hierro, Madrid, Spain

EFS per BICR



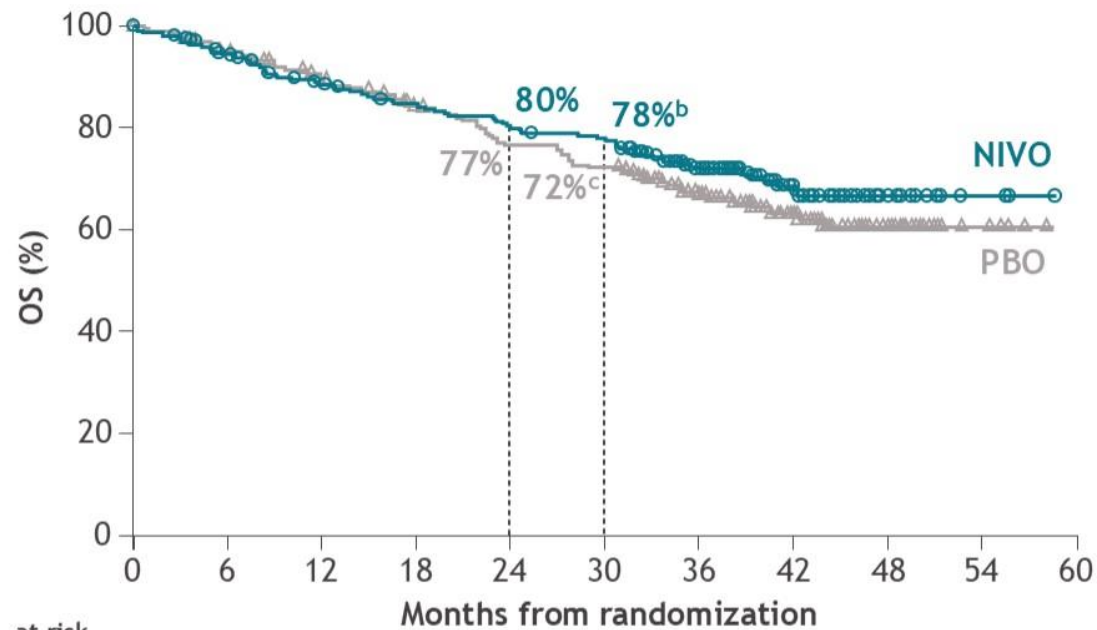
Database lock date: December 16, 2024; median follow-up (range): 41.0 months (31.3-59.8).

^a,^b95% CI: ^a54-68; ^b36-50.

OS and lung cancer-specific survival

OS

	NIVO (n = 229)	PBO (n = 232)
Median OS, mo (95% CI)	NR (NR-NR)	NR (NR-NR)
HR (97.63% CI) ^a	0.85 (0.58-1.25)	



No. at risk

	0	6	12	18	24	30	36	42	48	54	60
NIVO	229	206	187	176	166	161	114	66	23	6	0
PBO	232	216	197	178	161	152	103	52	20	7	0

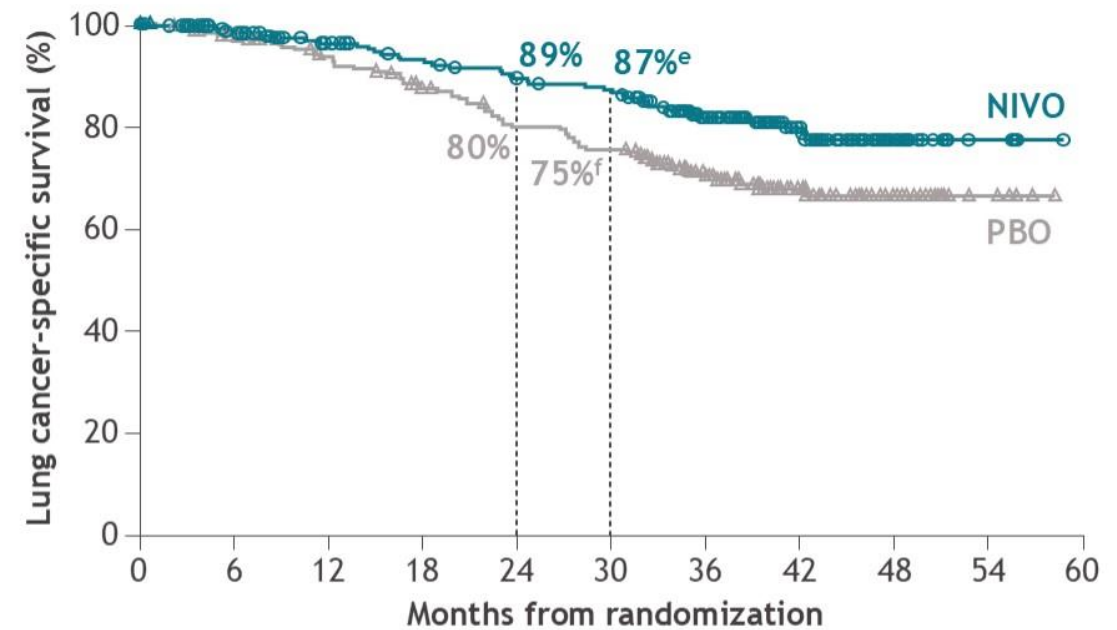
Median follow-up (range): 41.0 months (31.3-59.8).

67 (29%) patients in the NIVO arm and 101 (44%) patients in the PBO arm received subsequent therapy of any type; 50 (22%) and 87 (38%) patients, respectively, received subsequent systemic therapy.

^aHR (95% CI), 0.85 (0.61-1.18). Significance boundary for OS was not met at this interim analysis. ^b95% CI: ^b72-83; ^c66-78. ^dExploratory analysis; events were deaths with noted reason of "disease" per investigator assessment. ^e95% CI: ^e82-91; ^f69-81.

Lung cancer-specific survival^d

	NIVO (n = 229)	PBO (n = 232)
Median lung cancer-specific survival, mo (95% CI)	NR (NR-NR)	NR (NR-NR)
HR (95% CI)	0.60 (0.40-0.89)	



	0	6	12	18	24	30	36	42	48	54	60
NIVO	229	206	187	176	166	161	114	66	23	6	0
PBO	232	216	197	178	161	152	103	52	20	7	0

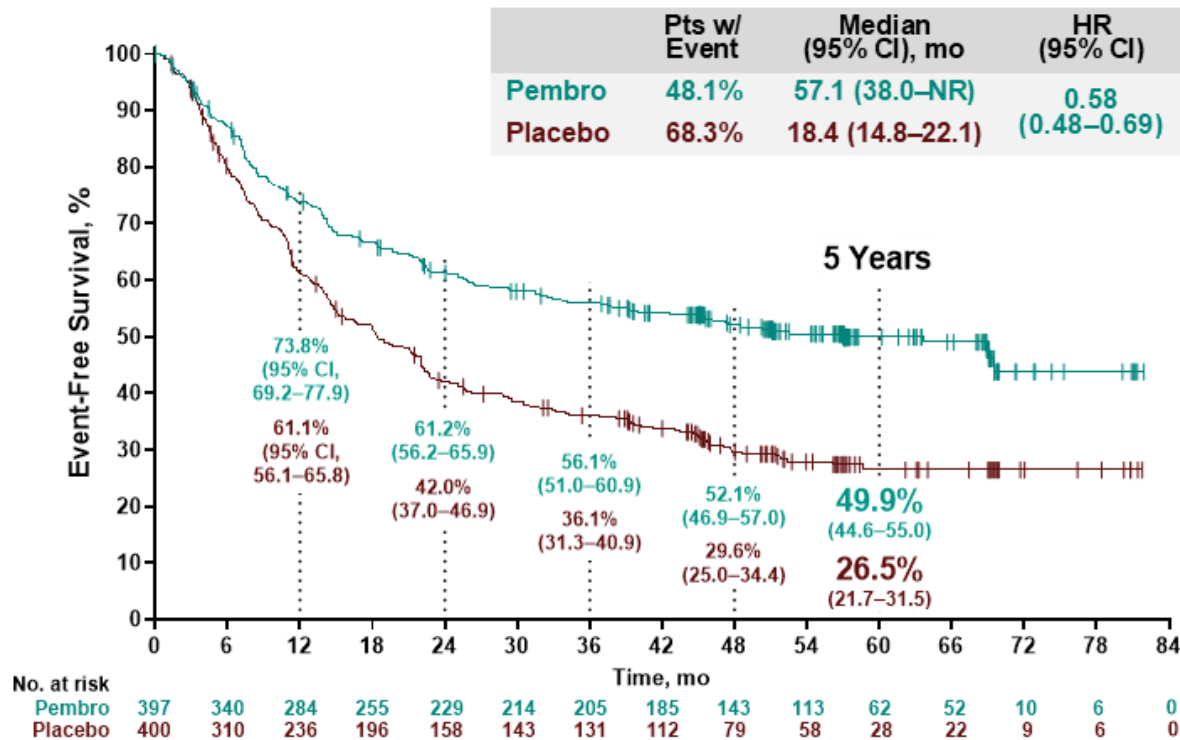
Perioperative Pembrolizumab in Early-Stage Non-Small-Cell Lung Cancer (NSCLC): 5-Year Follow-Up From KEYNOTE-671

H. Wakelee,¹ J.D. Spicer,² S. Gao,³ M. Liberman,⁴ M. Tsuboi,⁵ T. Kato,⁶ K.-N. Chen,⁷ C. Doms,⁸ M. Majem,⁹ G.L. Martinengo,¹⁰ O. Bylicki,¹¹ D. Rodríguez-Abreu,¹² B. Halmos,¹³ D.R. Jones,¹⁴ J.E. Chaft,¹⁴ M. Reck,¹⁵ E. Jensen,¹⁶ S.M. Keller,¹⁶ A. Samkari,¹⁶ M.C. Garassino¹⁷

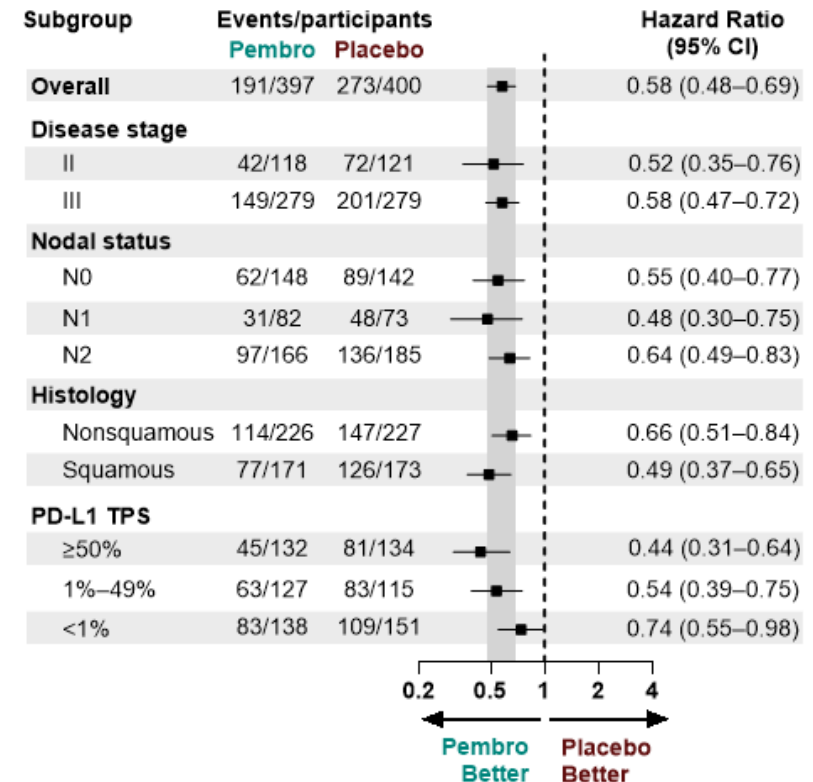
¹Stanford University School of Medicine/Stanford Cancer Institute, Stanford, CA, USA; ²McGill University Health Centre, Montreal, QC, Canada; ³National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China; ⁴Centre Hospitalier de l'Université de Montréal (CHUM), University of Montreal, Montreal, QC, Canada; ⁵National Cancer Center Hospital East, Kashiwa, Japan; ⁶Kanagawa Cancer Center, Yokohama, Japan; ⁷State Key Laboratory of Molecular Oncology, Peking University Cancer Hospital and Institute, Beijing, China; ⁸University Hospitals Leuven, Leuven, Belgium; ⁹Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ¹⁰Sanatorio Parque, Rosario, Argentina; ¹¹HIA Sainte-Anne, Toulon, France; ¹²Hospital Universitario Insular de Gran Canaria, Universidad de Las Palmas de Gran Canaria, Las Palmas de Gran Canaria, Spain; ¹³Montefiore Medical Center–Albert Einstein College of Medicine, Bronx, New York, NY, USA; ¹⁴Memorial Sloan Kettering Cancer Center, Weill Cornell Medical College, New York, NY, USA; ¹⁵LungenClinic Grosshansdorf, Airway Research Center North, German Center for Lung Research, Grosshansdorf, Germany; ¹⁶Merck & Co., Inc., Rahway, NJ, USA; ¹⁷University of Chicago Medicine and Biological Sciences, Chicago, IL, USA

5-Year Update of Event-Free Survival^a

Overall Population



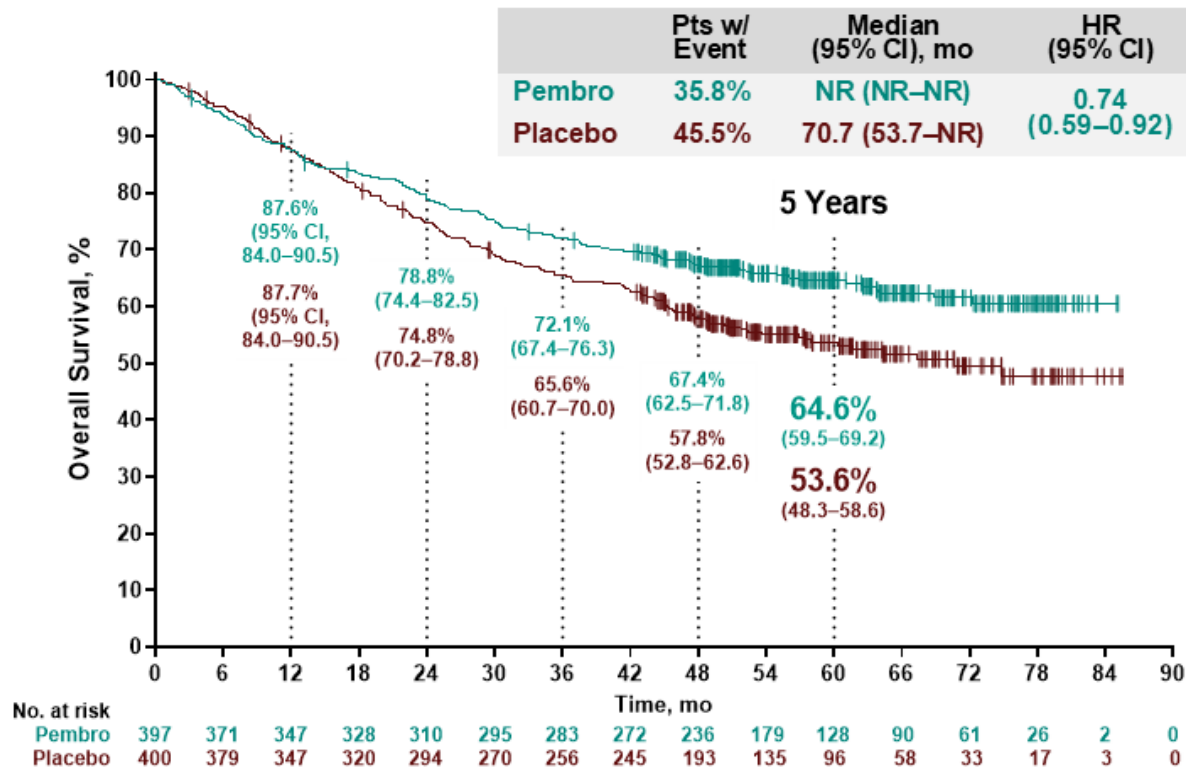
Key Subgroups



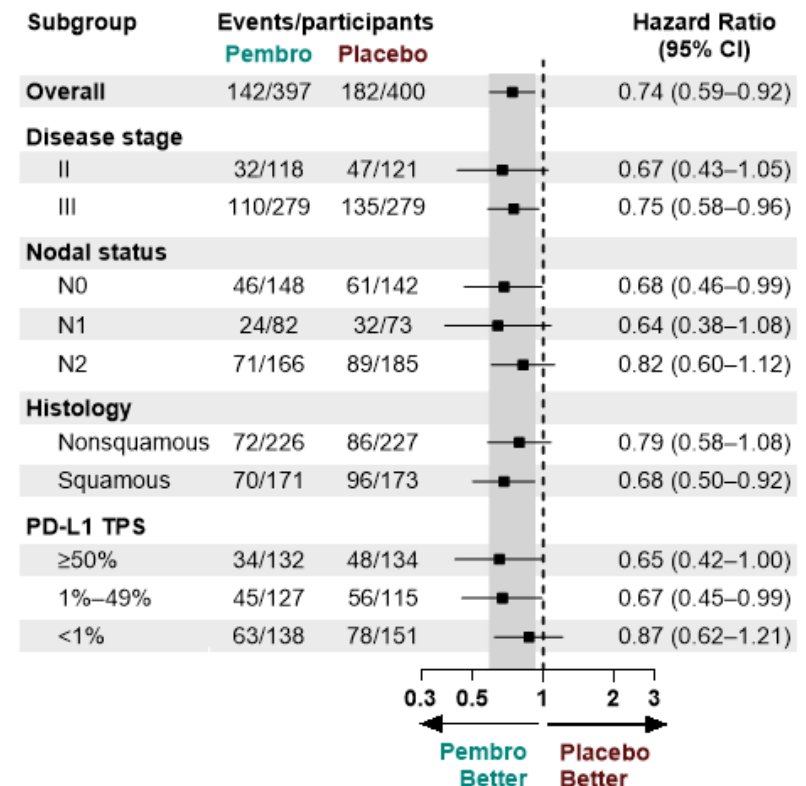
^aAssessed per RECIST version 1.1 by investigator assessment.
 Median time from randomization to data cutoff was 60.4 (range, 42.6–85.8) months.
 Data cutoff date: July 3, 2025.

5-Year Update of Overall Survival

Overall Population



Key Subgroups



Median time from randomization to data cutoff was 60.4 (range, 42.6-85.8) months.
 Data cutoff date: July 3, 2025.

Surgical outcomes following neoadjuvant treatment

JEONBUK NATIONAL UNIVERSITY HOSPITAL

Intervention group	N	Undergo Op. % (N)	Cancelled Op. % (N)	Reasons % (N)			
				Progression	A/E	Physician decision (Unfit)	Others
CheckMate816	179	83.2 (149)	15.6 (28)	6.7 (12)	1.1 (2)	2.2 (4)	5.6 (10)
KEYNOTE671	397	86.4 (342)	17.9 (71)	4.1 (16)	6.3 (25)	4 (16)	3.5 (14)
CheckMate77T	229	77.7 (178)	20.1 (46)	5.7 (13)	3.1 (7)	3.5 (8)	7.9 (18)
AEGEAN	400	81.0 (324)	19 (76)	6.8 (27)	1.8 (7)	4.3 (17)	3.4 (14)
NEOTORCH	202	82.2 (166)	17.8 (36)	2.5 (5)	3.0 (6)	3.5 (7)	8.9 (18)
RATIONALE315	226	84.0 (190)	15.9 (36)	2.6 (6)	2.6 (6)	1.3 (3)	9.3 (21)

PRINCIPLES OF PERIOPERATIVE SYSTEMIC THERAPY^b

Other Adjuvant Systemic Therapy

Targeted Therapy Options for Patients with Resected NSCLC

- Alectinib¹⁵ (for patients with ≥ 4 cm or node-positive NSCLC stages IB–IIIA, IIIB [T2–T3, N2b; T4, N2], and positive for *ALK* gene fusions) (category 1).
- Osimertinib (for patients with NSCLC positive for *EGFR* exon 19 deletion or L858R mutation).
 - ▶ For patients with stage IB–IIIA, IIIB (T2–T3, N2b; T4, N2) NSCLC who received previous adjuvant chemotherapy or are ineligible to receive platinum-based chemotherapy (category 1)¹⁶
 - ▶ For patients who received previous neoadjuvant Osimertinib \pm chemotherapy⁹

Immune Checkpoint Inhibitor Options for Patients with Resected NSCLC Tumors

- Atezolizumab¹⁷ (for patients with ≥ 4 cm or node-positive NSCLC stages IB–IIIA, IIIB [T2–T3, N2b; T4, N2] who received previous adjuvant chemotherapy with NSCLC PD-L1 $\geq 1\%$ and no known *EGFR* mutations or *ALK* gene fusions) (category 1).
- Pembrolizumab
 - ▶ For up to a year for patients with ≥ 4 cm or node-positive NSCLC stages IB–IIIA, IIIB (T2–T3, N2b; T4, N2) who received previous adjuvant chemotherapy and no known *EGFR* mutations or *ALK* gene fusions (category 1).¹⁸ The benefit for patients with PD-L1 $< 1\%$ is unclear.
 - ▶ For up to 39 weeks for patients who received previous neoadjuvant chemotherapy + Pembrolizumab (category 1).³
- Durvalumab⁴ (for patients who received previous neoadjuvant chemotherapy + Durvalumab and no known *EGFR* mutations or *ALK* gene fusions) (category 1).
- Nivolumab² (for patients who received previous neoadjuvant chemotherapy + Nivolumab and no known *EGFR* mutations or *ALK* gene fusions) (category 1).

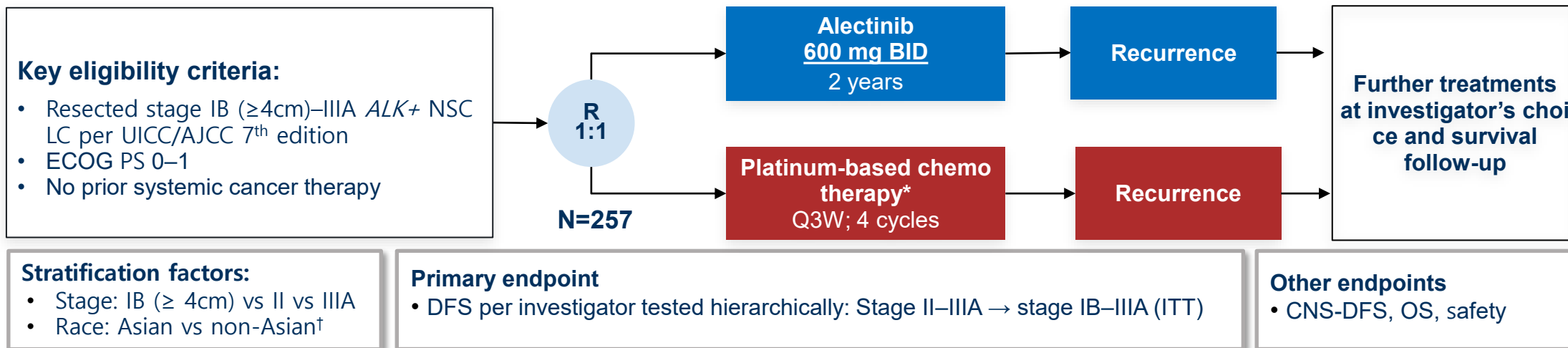
Updated results from the phase III ALINA study of adjuvant alectinib vs chemotherapy in patients with early-stage *ALK+* non-small cell lung cancer (NSCLC)

R. Dziadziuszko¹, B.J. Solomon², Y. Wu³, J.S. Ahn⁴, M. Nishio⁵, D.H. Lee⁶,
J. Lee⁷, W. Zhong³, H. Horinouchi⁸, W. Mao⁹, M.J. Hochmair¹⁰, F. de Marinis¹¹,
M.R. Migliorino¹², I. Bondarenko¹³, T. Xu¹⁴, A. Cardona¹⁵, A. Scalori¹⁶, V. McNally¹⁶,
A.A. Higginson¹⁷, F. Barlesi¹⁸

¹Department of Oncology & Radiotherapy and Early Phase Clinical Trials Centre, Medical University of Gdańsk, Gdańsk, Poland ²Department of Medical Oncology, Peter MacCallum Cancer Centre, Melbourne, Australia; ³Guangdong Lung Cancer Institute, Guangdong Provincial People's Hospital (Guangdong Academy of Medical Sciences), Southern Medical University, Guangzhou, China; ⁴Department of Haematology & Oncology, Samsung Medical Centre, Seoul, Korea; ⁵Department of Thoracic Medical Oncology, Cancer Institute Hospital, Japanese Foundation for Cancer Research, Tokyo, Japan; ⁶Department of Oncology, Asan Medical Centre, Seoul, Korea; ⁷Division of Haematology and Medical Oncology, Seoul National University Bundang Hospital, Seongnam, Korea; ⁸Department of Thoracic Oncology, National Cancer Centre Hospital, Tokyo, Japan; ⁹Department of Thoracic surgery, Institute of Basic Medicine and Cancer, Chinese Academy of Sciences, Zhejiang, China; ¹⁰Department of Respiratory & Critical Care Medicine, Klinik Floridsdorf, Karl-Landsteiner-Institute for Lung Research and Pulmonary Oncology, Vienna, Austria; ¹¹Department of Thoracic Oncology, European Institute of Oncology (IRCSS), Milan, Italy; ¹²Department of Oncology, San Camillo Forlanini Hospital, Rome, Italy; ¹³Oncology And Medical Radiology Department, Dnipropetrovsk Medical Academy, Dnipro, Ukraine; ¹⁴Department of Clinical Science, Roche (China) Holding Ltd, Shanghai, China; ¹⁵Data and Statistical Sciences, F. Hoffmann-La Roche Ltd, Basel, Switzerland; ¹⁶PD Oncology, Roche Products Ltd, Welwyn Garden City, United Kingdom; ¹⁷PD Safety, F. Hoffmann-La Roche Ltd, Basel, Switzerland; ¹⁸Department of Medical Oncology, International Centre for Thoracic Cancers (CICT), Villejuif, France



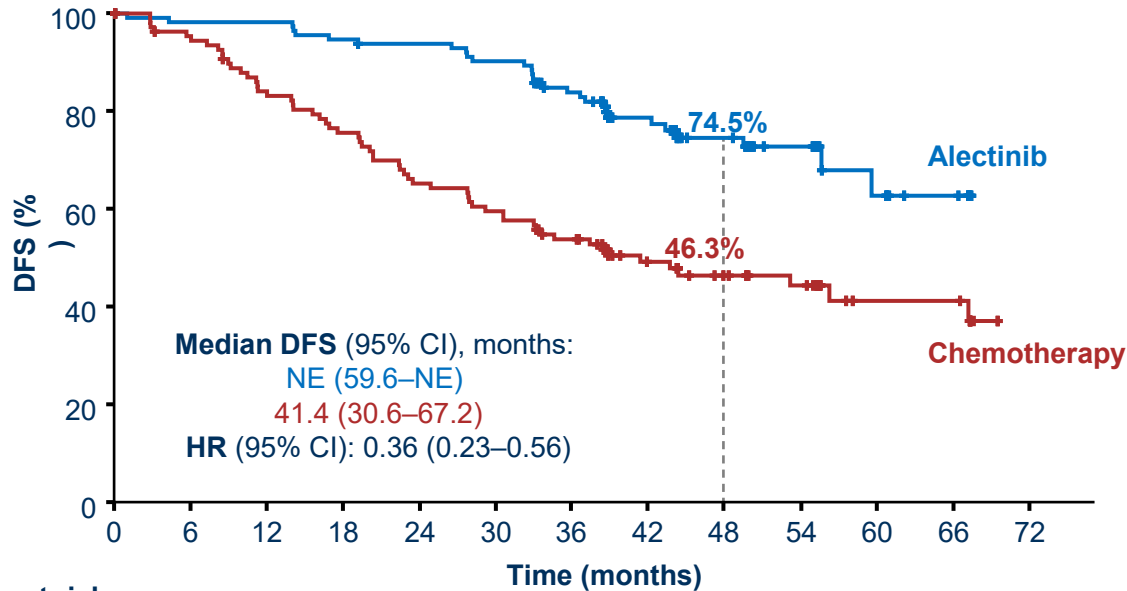
- **Alectinib**, an ALK inhibitor, is an approved **standard-of-care** for patients with **resected or advanced ALK+ NSCLC**¹⁻³
 - Alectinib has **demonstrated efficacy and delayed disease progression in the CNS**¹⁻³
 - Long-term data show alectinib is tolerable and has a manageable safety profile¹⁻³
- **ALINA** is the only **positive phase III trial** of an ALK inhibitor in **resectable, stage IB–IIIA** (UICC/AJCC 7th edition), **ALK+ NSCLC**²⁻⁴
 - The primary analysis showed a **significant DFS benefit** with alectinib vs chemotherapy (**HR: 0.24**; 95% CI 0.13–0.43; p<0.0001)^{2,3}



Here, we present updated data from the ALINA study with a median follow-up of 4 years
All patients in the alectinib arm had completed 2 years of treatment with ≥1 year of follow-up

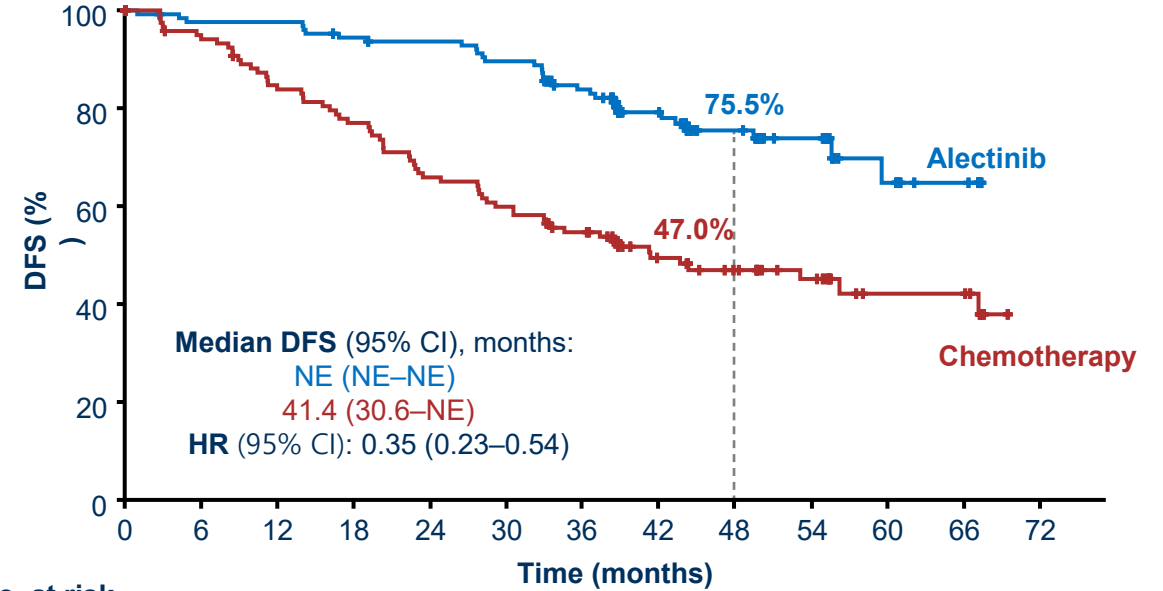
NCT03456076. Crossover was not permitted prior to disease recurrence. *Cisplatin + pemetrexed, cisplatin + vinorelbine or cisplatin + gemcitabine; cisplatin could be switched to carboplatin in case of intolerability. [†]Stratification by patient race recorded in the interactive voice/web response system. 1. Alecensa Prescribing Information Genentech Inc. 2024; 2. Solomon et al. ESMO 2023 (LBA2); 3. Wu et al. N Engl J Med 2024; 4. Ahn et al. ESMO Asia 2023 (LBA1). ALK, anaplastic lymphoma kinase; AJCC, American Joint Committee on Cancer; BID, twice daily; CI, confidence interval; CNS, central nervous system; DFS, disease-free survival; ECOG PS, Eastern Cooperative Oncology Group performance status; HR, hazard ratio; ITT, intention to treat

DFS in stage II–III A*



No. at risk	0	6	12	18	24	30	36	42	48	54	60	66	72
Alectinib	116	111	105	87	43	12	NE						
Chemo	115	88	69	54	28	11	NE						

DFS in stage IB–III A (ITT)*

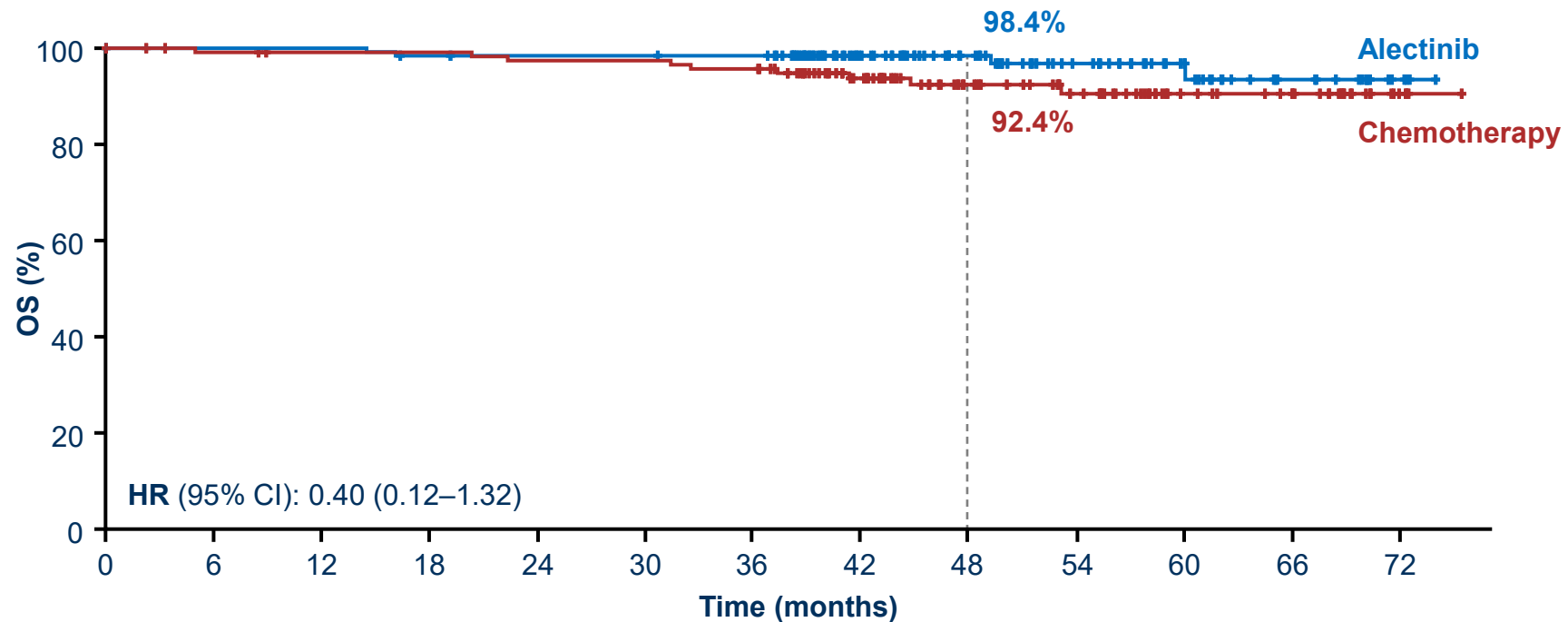


No. at risk	0	6	12	18	24	30	36	42	48	54	60	66	72
Alectinib	130	123	116	97	48	13	NE						
Chemo	127	98	77	61	33	12	NE						

Median follow-up (ITT): alectinib, 48.0 months; chemotherapy, 47.4 months

DFS benefit was sustained with alectinib versus chemotherapy in the stage II–III A and stage IB–III A (ITT) populations

Data cut-off: 8 December 2024. DFS defined as the time from randomisation to the first documented recurrence of disease or new primary NSCLC as determined by the investigator, or death from any cause, whichever occurred first
 *Per UICC/AJCC 7th edition. Chemo, chemotherapy; NE, not estimable



No. at risk

Alectinib	130	128	124	123	65	31	4
Chemo	127	115	113	111	60	28	4

Median follow-up (ITT): alectinib, 48.0 months; chemotherapy, 47.4 months

In the IB–IIIA* (ITT) population, there was a positive trend in OS with 4 years of median follow-up

01 CCRTx for Un-resectable stage III NSCLC

CONCURRENT CHEMORADIATION REGIMENS

Concurrent Chemoradiation Regimens^a

Preferred (nonsquamous)

- Carboplatin AUC 5 on Day 1, Pemetrexed 500 mg/m² on Day 1 every 21 days for 4 cycles; concurrent thoracic RT^{1,b,c,d,e}
- Cisplatin 75 mg/m² on Day 1, Pemetrexed 500 mg/m² on Day 1 every 21 days for 3 cycles; concurrent thoracic RT^{2,3,b,c,d,e,f}
- Carboplatin AUC 2; Paclitaxel 45–50 mg/m² weekly, concurrent thoracic RT^{4,b,c,d,e,g}
- Cisplatin 50 mg/m² on Days 1, 8, 29, and 36; Etoposide 50 mg/m² Days 1–5 and 29–33; concurrent thoracic RT^{5,6,b,c,d,e}

Preferred (squamous)

- Carboplatin AUC 2; Paclitaxel 45–50 mg/m² weekly, concurrent thoracic RT^{6,b,c,d,e,g}
- Cisplatin 50 mg/m² on Days 1, 8, 29, and 36; Etoposide 50 mg/m² Days 1–5 and 29–33; concurrent thoracic RT^{5,6,b,c,d,e}

Consolidation Therapy for Patients with Unresectable Stage II/III NSCLC, PS 0–1, and No Disease Progression After Definitive Concurrent Chemoradiation

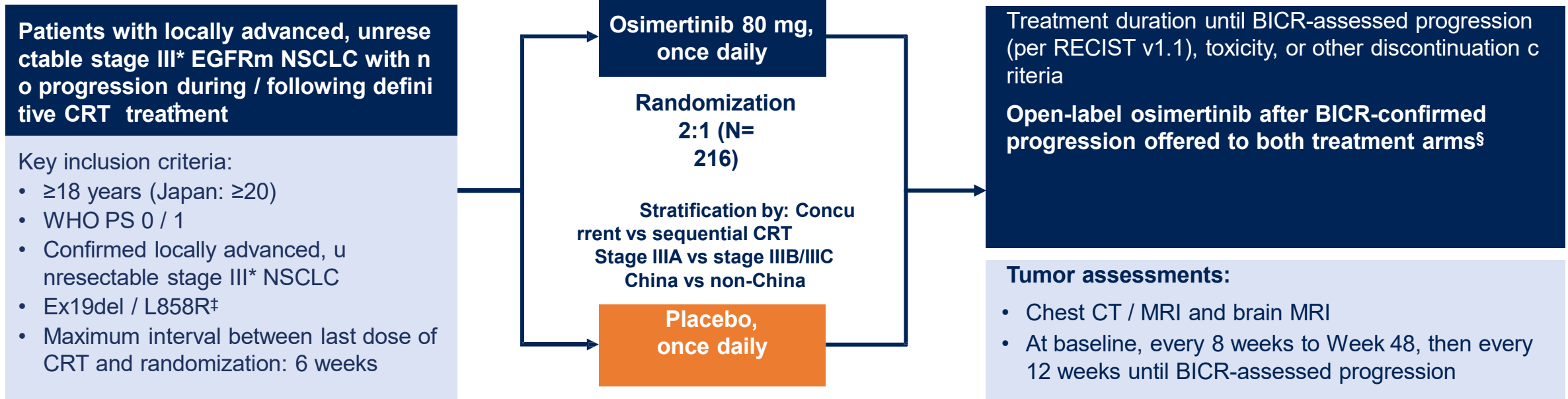
- Durvalumab 10 mg/kg IV every 2 weeks or 1500 mg every 4 weeks for up to 12 months (patients with a body weight of ≥30 kg)^{7,8,h,i} (category 1 for stage III; category 2A for stage II) (except tumors that are positive for *EGFR* exon 19 deletion or L858R mutation)
- Osimertinib 80 mg once daily until disease progression (category 1 for stage III; category 2A for stage II) if *EGFR* exon 19 deletion or L858R mutation^{9,i}

Osimertinib after definitive chemoradiotherapy in patients with unresectable stage III epidermal growth factor receptor-mutated (EGFRm) NSCLC: primary results of the Phase 3 LAURA study

Suresh S. Ramalingam,¹ Terufumi Kato, Xiaorong Dong, Myung-Ju Ahn, Le-Van Quang, Nopadol Soparattanapaisarn, Takako Inoue, Chih-Liang Wang, Meijuan Huang, James Chih-Hsin Yang, Manuel Cobo, Mustafa Özgüroğlu, Ignacio Casarini, Dang-Van Khiem, Virote Sriuranpong, Eduardo Cronemberger, Xiangning Huang, Toon van der Gronde, Dana Ghiorghiu, Shun Lu

¹Emory University School of Medicine, Winship Cancer Institute, Atlanta, GA, USA

LAURA Phase 3 double-blind study design



Endpoints

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

*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).

LAURA statistical assumptions

- Planned sample size: ~200 patients randomized 2:1, osimertinib:placebo

Sequential multiple testing procedure

Primary analysis: PFS

Study designed with 90% power to detect a PFS HR of 0.53 at a 5% (2-sided) significance level (alpha); translating to improvement in median PFS from 8.0 to 15.0 months; primary analysis when approximately 120 BICR-confirmed progression events had occurred



If significant, recycle alpha

OS (interim and final analyses)*

Interim OS analysis at time of primary PFS analysis; final OS analysis at 60% maturity (approximately 120 deaths)
Non-statistically significant OS at interim analysis will not preclude further testing of OS



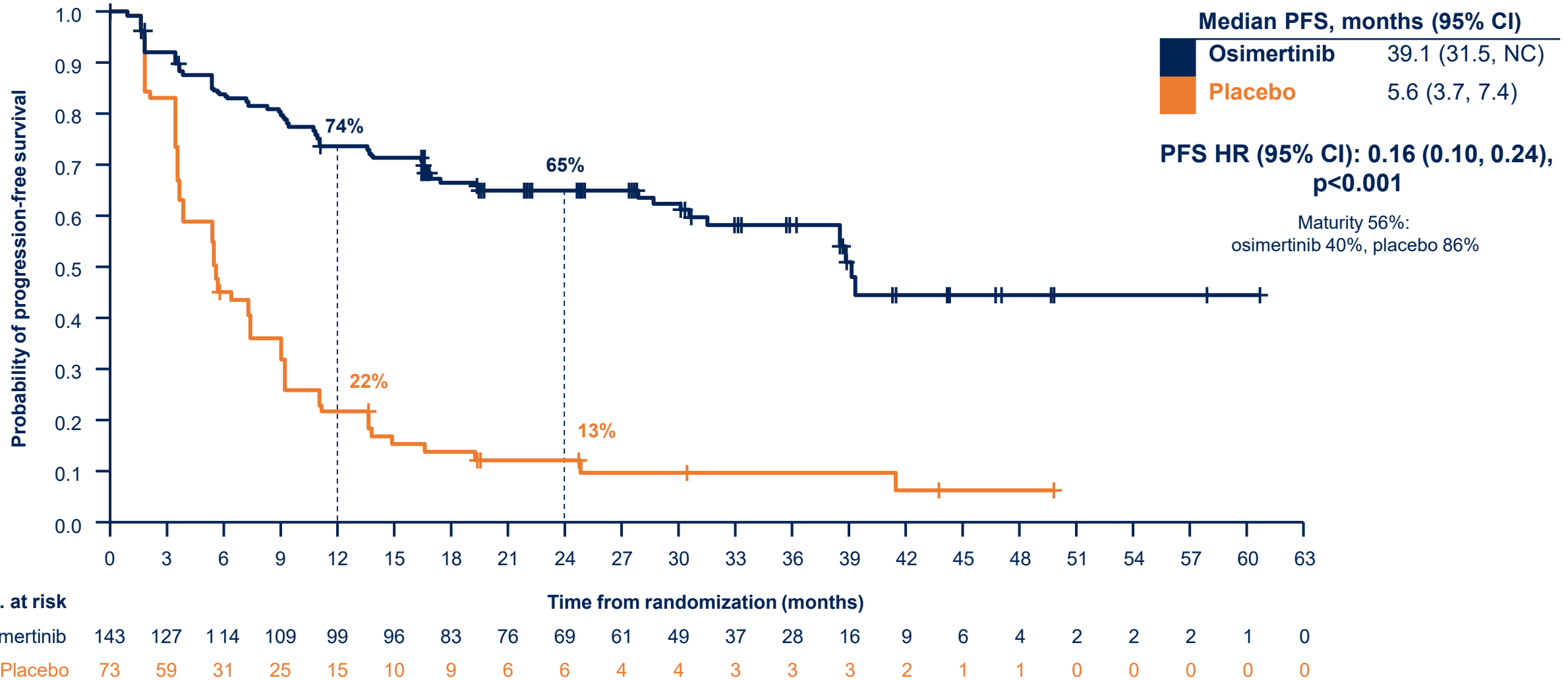
If significant, recycle alpha

CNS PFS

Will be tested for significance if OS is statistically significant, either at interim or final analysis of OS

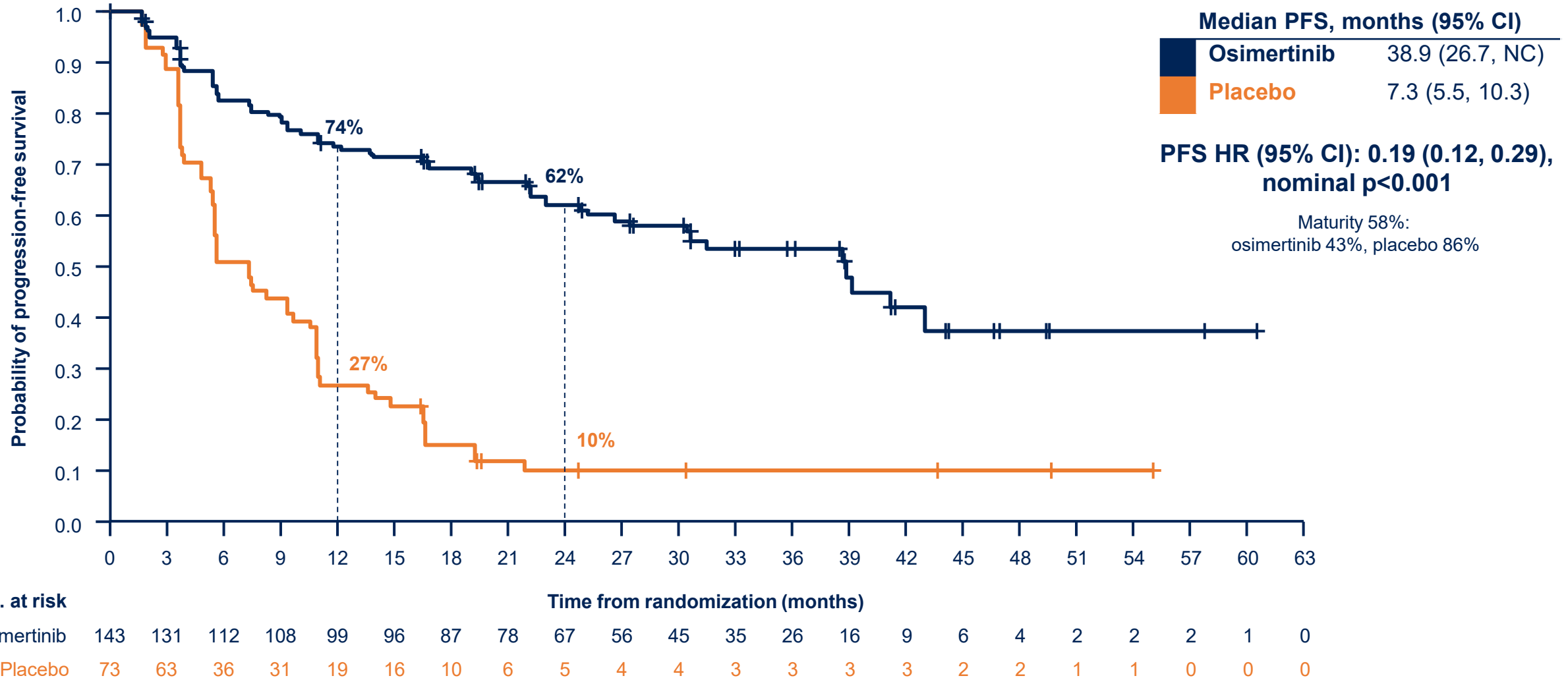
*Lan DeMets approach (that approximates the O'Brien and Fleming spending function) used to control the alpha level allocated to OS, where the alpha level applied at the interim depends upon the proportion of information available.

Progression-free survival by BICR



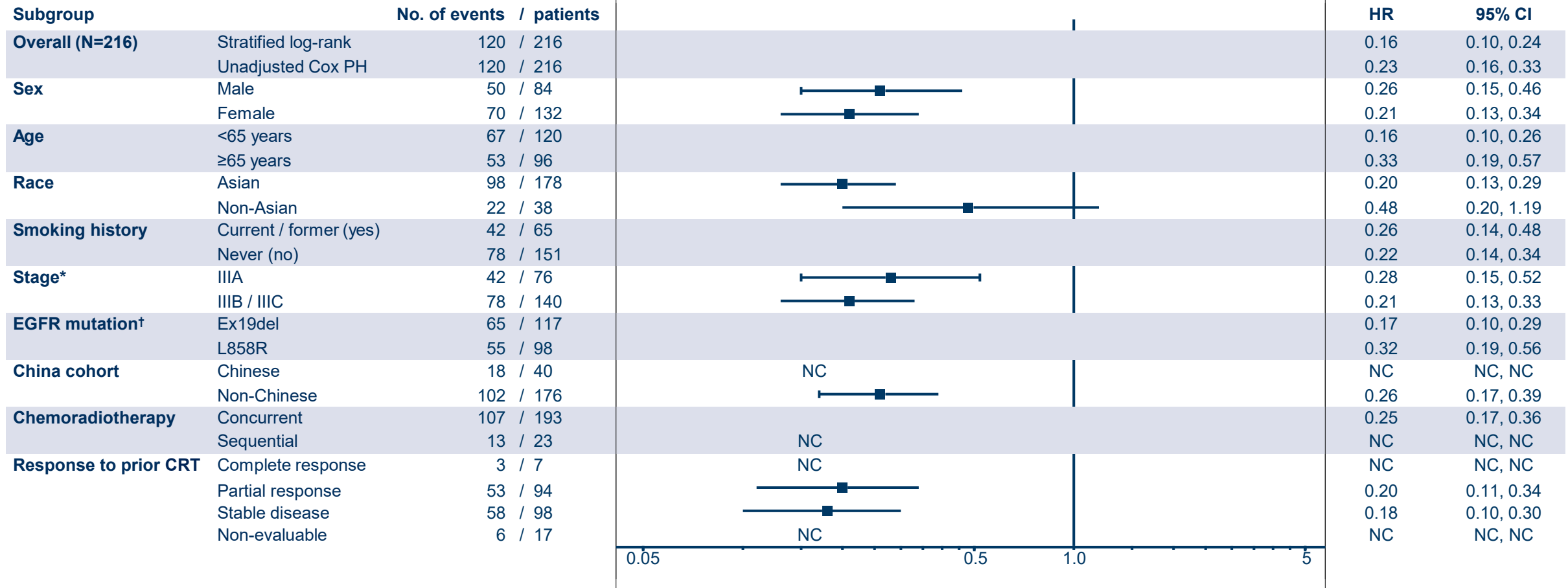
Tick marks indicate censored data. Median follow-up for PFS (all patients): osimertinib 22.0 months, placebo 5.6 months. Median follow-up for PFS (censored patients): osimertinib 27.7 months, placebo 19.5 months. Data cut-off: January 5, 2024.

Progression-free survival by investigator assessment



Data cut-off: January 5, 2024.
Tick marks indicate censored data. Median follow-up for PFS (all patients): osimertinib 22.2 months, placebo 5.7 months. Median follow-up for PFS (censored patients): osimertinib 27.6 months, placebo 22.1 months.

Progression-free survival by BICR across subgroups



HR for progression-free survival (95% CI)

← Favours osimertinib Favours placebo →

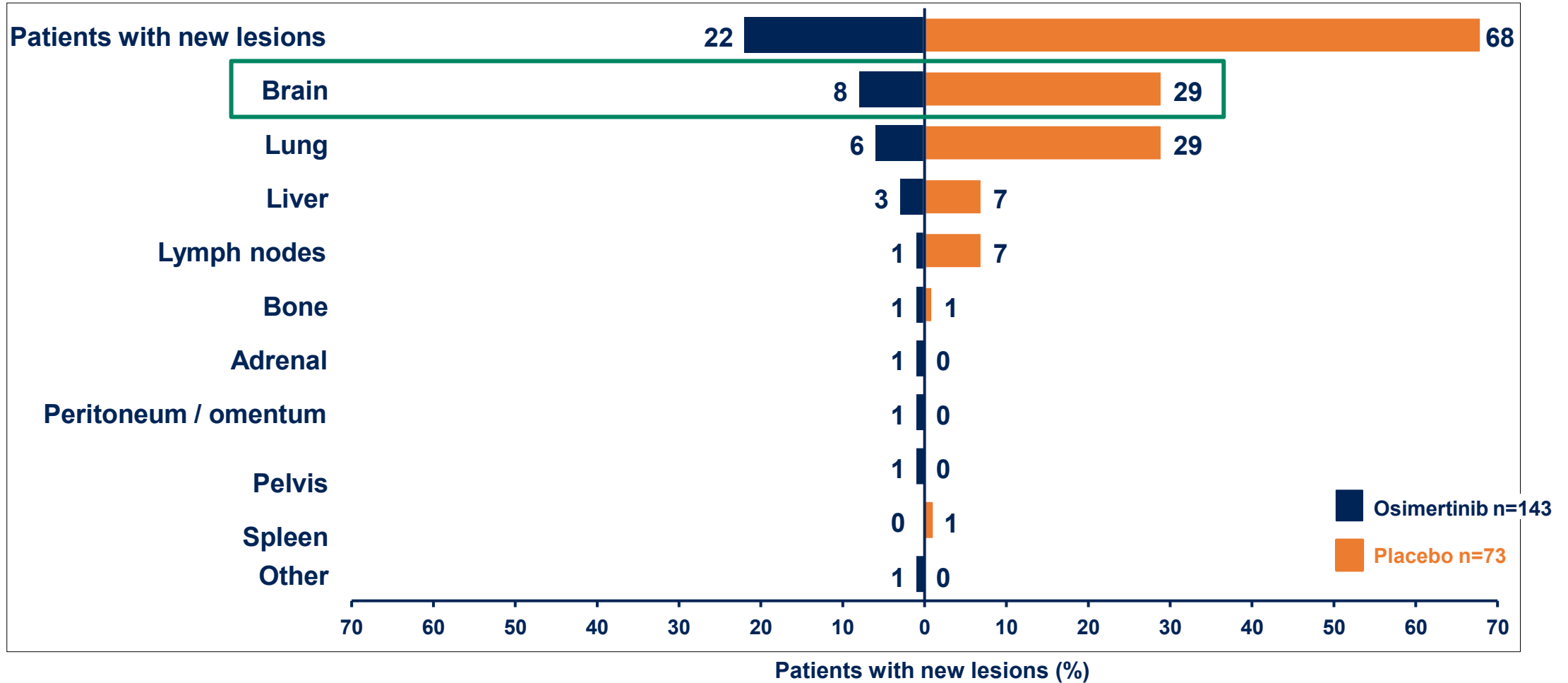
Note: HRs were calculated only for subgroups with >20 events across both arms to allow for meaningful analysis. Subgroup (not prespecified) of WHOPS: PS=0 HR 0.17 (95% CI 0.10, 0.28); PS=1 HR 0.34 (95% CI 0.20, 0.56); *Stage prior to CRT by AJCC / UICC staging (8th edition);

†Central test of tumor tissue at screening, or local pre-existing test result; one patient in the osimertinib arm had missing EGFR mutation information.

AJCC, American Joint Committee on Cancer; BICR, blinded independent central review; CI, confidence interval; CRT, chemoradiotherapy; EGFR, epidermal growth factor receptor; Ex19del, exon 19 deletion; HR, hazard ratio; NC, not calculable; PFS, progression-free survival; PH, proportional-hazards model; UICC, Union for International Cancer Control; WHOPS, World Health Organization performance status

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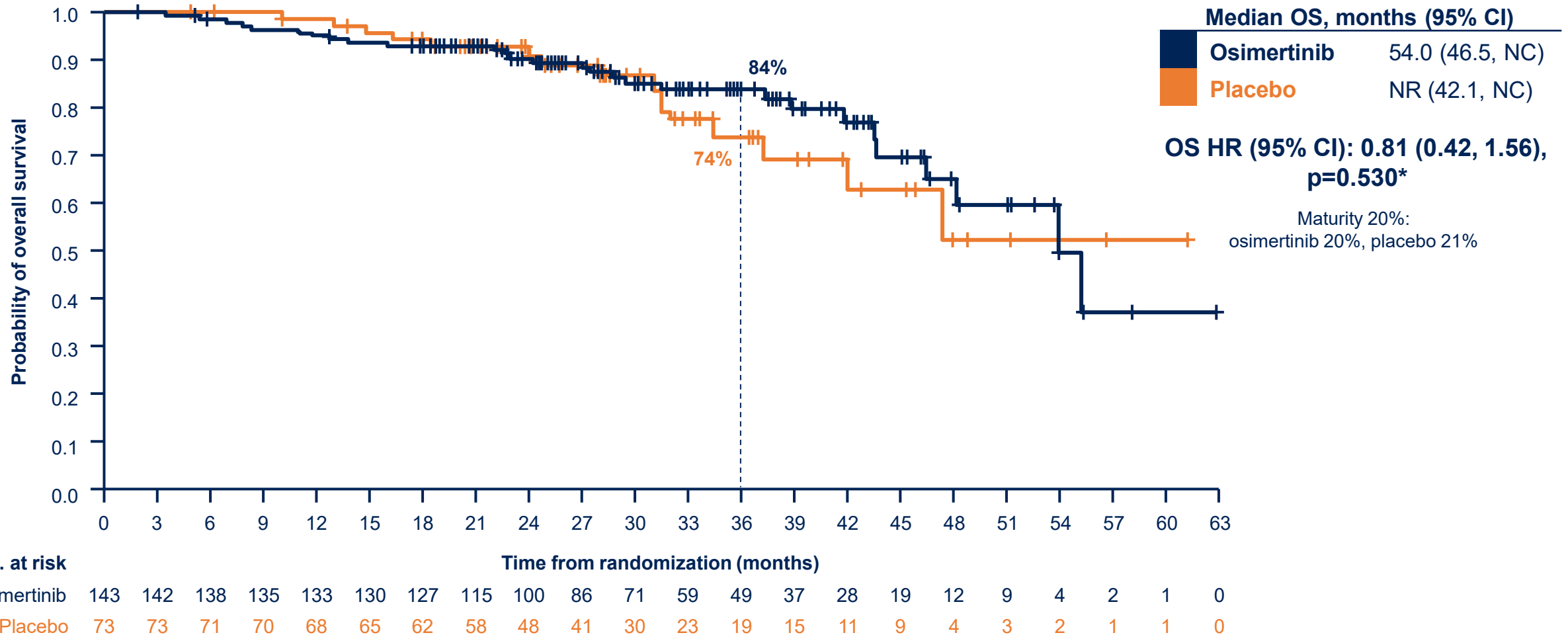
Sites of new lesions by BICR



Percentages based on number of patients in each treatment arm. Patients can have more than one new lesion site. Based on BICR assessments according to RECIST v1.1 and includes all new lesions at any time (including those whose RECIST progression event had been censored). Data cut-off: January 5, 2024.

Interim analysis of overall survival

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



Data cut-off: January 5, 2024.
 Tick marks indicate censored data. *For statistical significance at this interim analysis, a p-value of <0.00036 was required.
 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.

Conclusions

- In LAURA, osimertinib demonstrated a statistically significant and clinically meaningful improvement in PFS vs placebo by BICR in unresectable stage III EGFRm NSCLC following definitive chemoradiotherapy
 - **Median PFS was 39.1 months** (95% CI 31.5, NC) with osimertinib, **5.6 months** (95% CI 3.7, 7.4) with placebo; **HR 0.16** (95% CI 0.10, 0.24), $p < 0.001$
 - PFS benefit was consistent across subgroups
- Interim OS data showed a positive trend in favor of osimertinib, despite a high proportion of patients crossing over to osimertinib in the placebo arm (81%)
- Safety profile of osimertinib post-chemoradiotherapy was as expected and manageable
- EGFR mutation testing is critical in stage III disease to ensure optimal outcomes for patients with EGFRm NSCLC

Osimertinib will become the new standard of care for patients with unresectable stage III EGFRm NSCLC who have not progressed after definitive chemoradiotherapy

Osimertinib after definitive chemoradiotherapy in patients with unresectable stage III EGFRm NSCLC: Updated overall survival analysis from the LAURA study

Suresh S. Ramalingam,¹ Mustafa Özgüroğlu,² Myung-Ju Ahn,³ Xiaorong Dong,⁴ James Chih-Hsin Yang,⁵
Satoshi Oizumi,⁶ Koichi Goto,⁷ Manuel Cobo,⁸ Sang-We Kim,⁹ Te-Chun Hsia,¹⁰ Jarin Chindapasirt,¹¹
Fernanda Fujiki,¹² Natalia Valdiviezo,¹³ Ignacio Casarini,¹⁴ Terufumi Kato,¹⁵ Xiangning Huang,¹⁶
Azura Evans,¹⁷ Ana Bolanos,¹⁸ Shun Lu¹⁹

¹Emory University School of Medicine, Winship Cancer Institute, Atlanta, GA, USA; ²Clinical Trial Unit, Istanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, Istanbul, Türkiye; ³Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; ⁴Cancer Center, Union Hospital and Huazhong University of Science and Technology, Wuhan, China; ⁵National Taiwan University Hospital and National Taiwan University Cancer Center, Taipei, Taiwan; ⁶NHO Hokkaido Cancer Center, Sapporo, Japan; ⁷National Cancer Center Hospital East, Kashiwa, Japan; ⁸Hospitales Universitarios Regional y Virgen de la Victoria, IBIMA, Málaga, Spain; ⁹Asan Medical Center, Seoul, Republic of Korea; ¹⁰China Medical University Hospital, Taichung, Taiwan; ¹¹Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand; ¹²ICESP – Instituto do Câncer do Estado de São Paulo, São Paulo, Brazil; ¹³Instituto Nacional de Enfermedades Neoplásicas, Surquillo, Peru; ¹⁴Hospital Bernardo Houssay, Mar del Plata, Buenos Aires, Argentina; ¹⁵Kanagawa Cancer Center, Yokohama, Japan; ¹⁶Late-stage Development, Oncology R&D, AstraZeneca, Cambridge, UK; ¹⁷Late-stage Development, Oncology R&D, AstraZeneca, Macclesfield, UK; ¹⁸Late-stage Development, Oncology R&D, AstraZeneca, Mississauga, ON, Canada; ¹⁹Shanghai Chest Hospital and Shanghai Jiao Tong University, Shanghai, China

Final Publication Number: LBA4

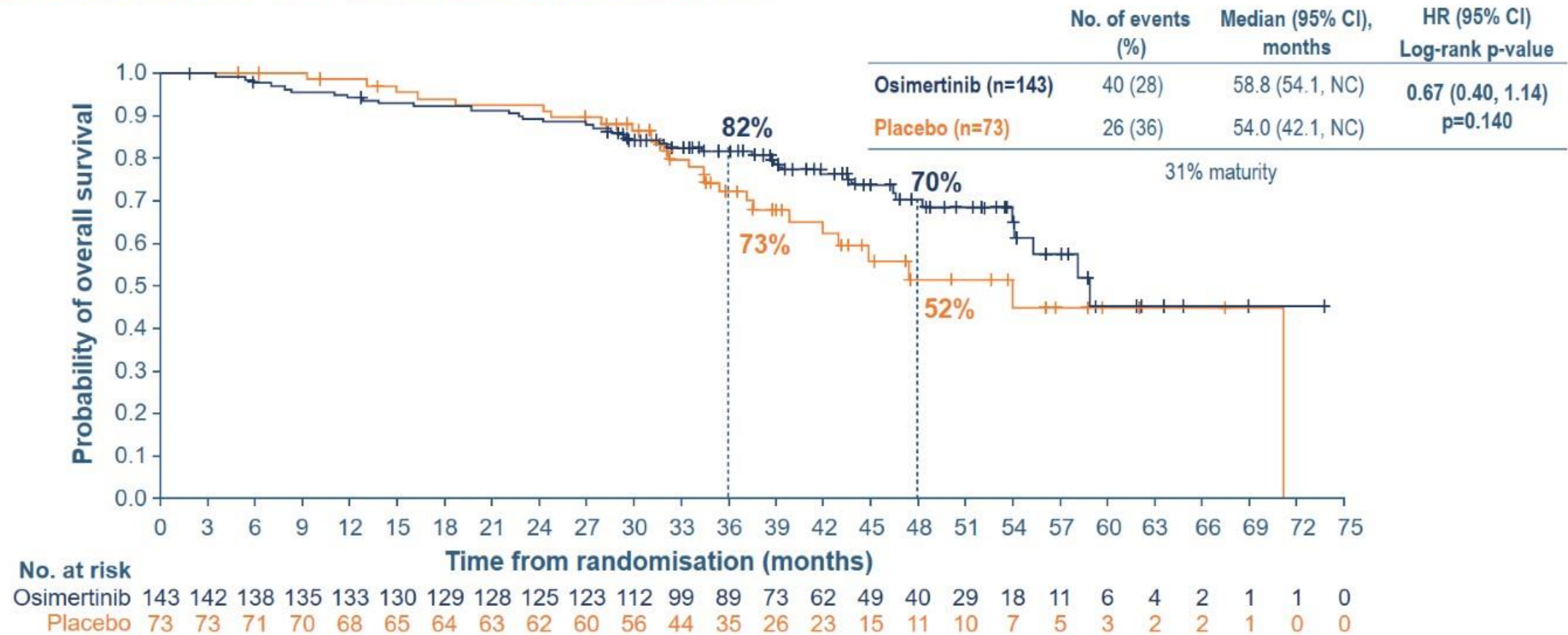
Organisers



Partners



IMPROVED TREND TOWARDS OS BENEFIT SEEN WITH OSIMERTINIB AT UPDATED ANALYSIS



- 55/69 (80%) patients who discontinued study treatment in the placebo group received subsequent treatment with a 3rd-gen EGFR-TKI*

CONCLUSIONS

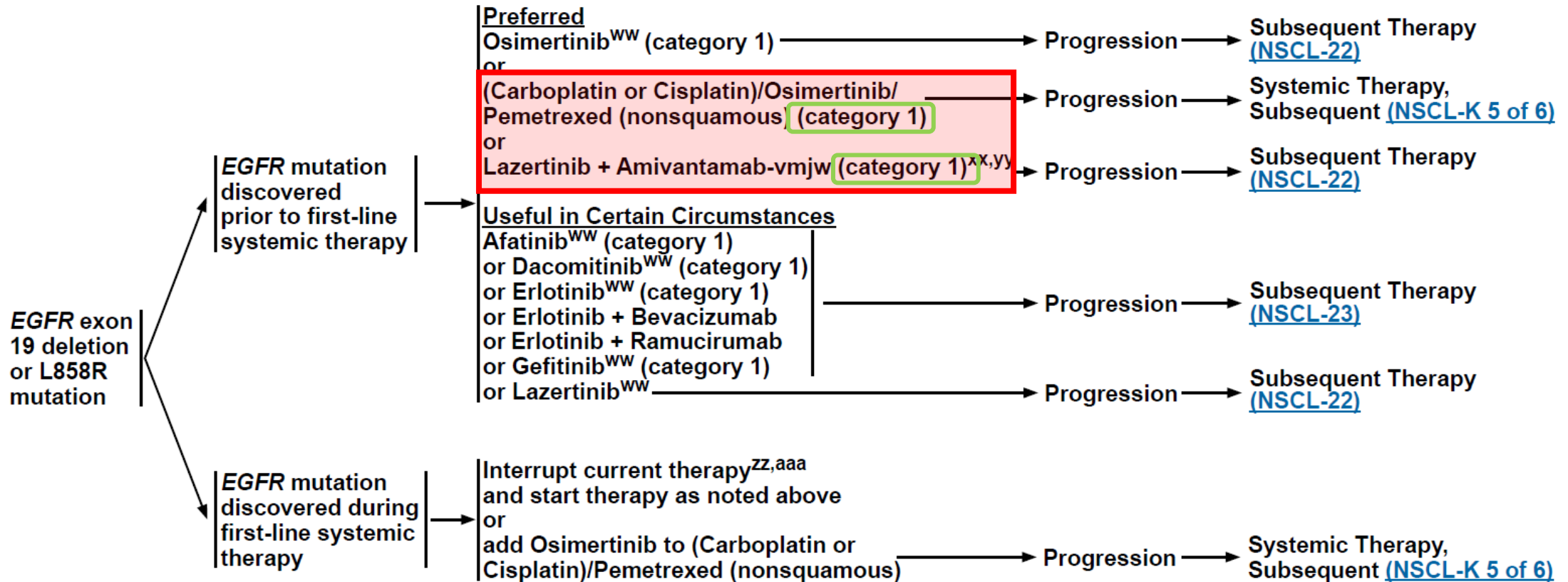
- The updated OS analysis from LAURA demonstrates an improved favourable trend for OS benefit with osimertinib over placebo
 - This was seen despite the high proportion of patients in the placebo group receiving subsequent treatment with a 3rd-generation EGFR-TKI post-treatment discontinuation (80%)
- Clinically meaningful improvements were observed with osimertinib over placebo in the post-progression outcomes TFST, PFS2 and TSST

Osimertinib after definitive chemoradiotherapy is the new standard of care for patients with unresectable stage III EGFRm NSCLC

Treatments of advanced NSCLC

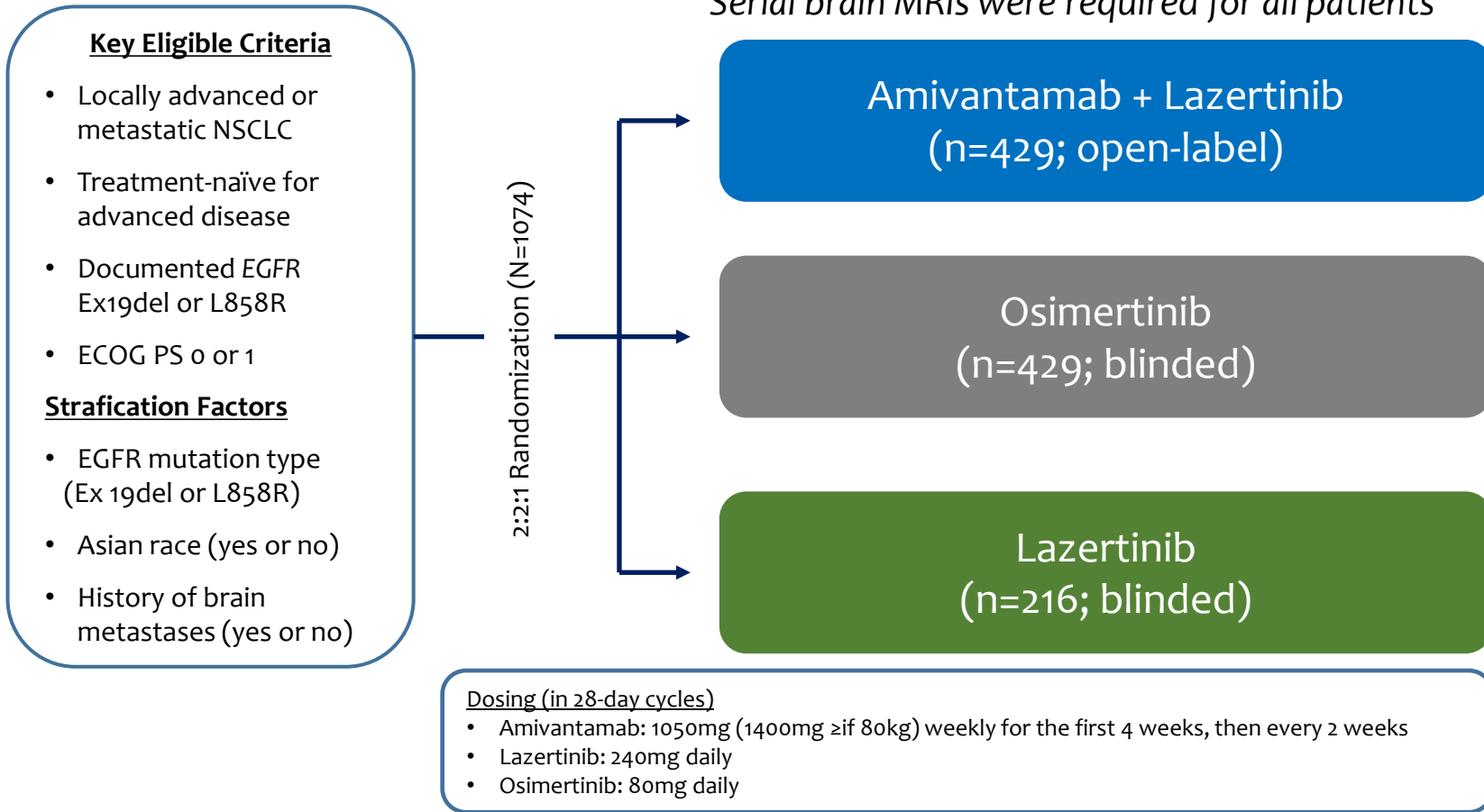
EGFR EXON 19 DELETION OR L858R MUTATION^{rr}

FIRST-LINE THERAPY^{vv}



MARIPOSA : Amivantamab + Lazertinib vs Osimertinib

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Primary endpoint of progression-free survival (PFS) by BICR per RECIST v1.1:

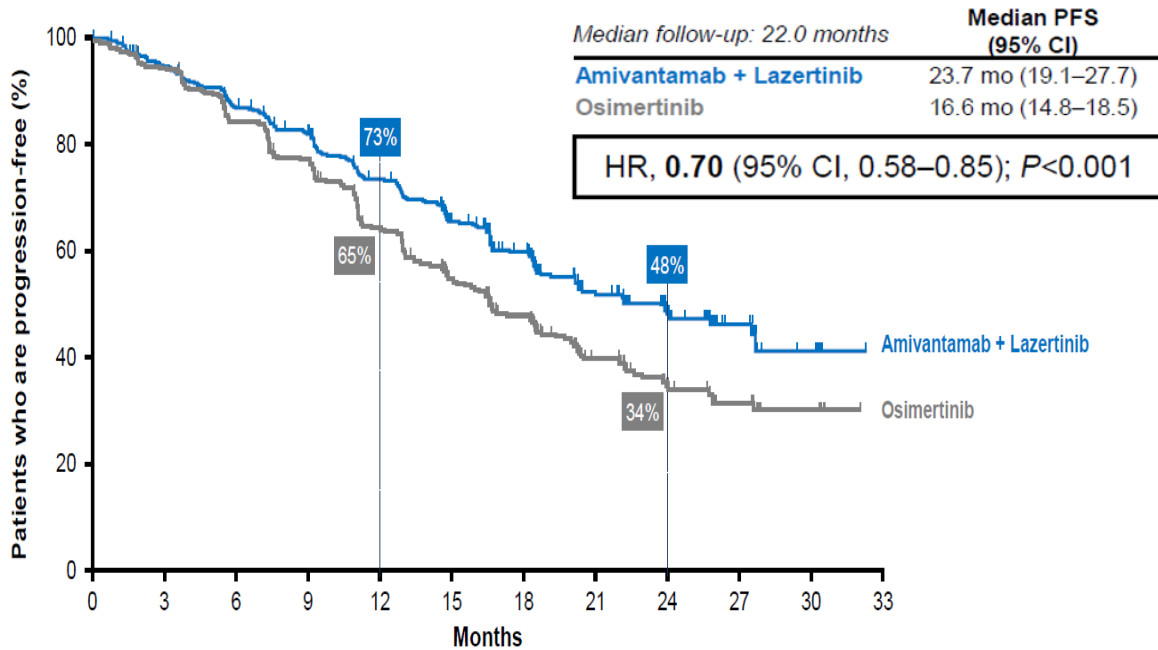
Amivantamab+lazertinib vs osimertinib

Secondary endpoints of Amivantamab+lazertinib vs osimertinib

- Overall survival (OS)
- Objective response rate (ORR)
- Duration of response (DoR)
- PFS after first subsequent therapy (PFS2)
- Symptomatic PFS
- Intracranial PFS
- Safety

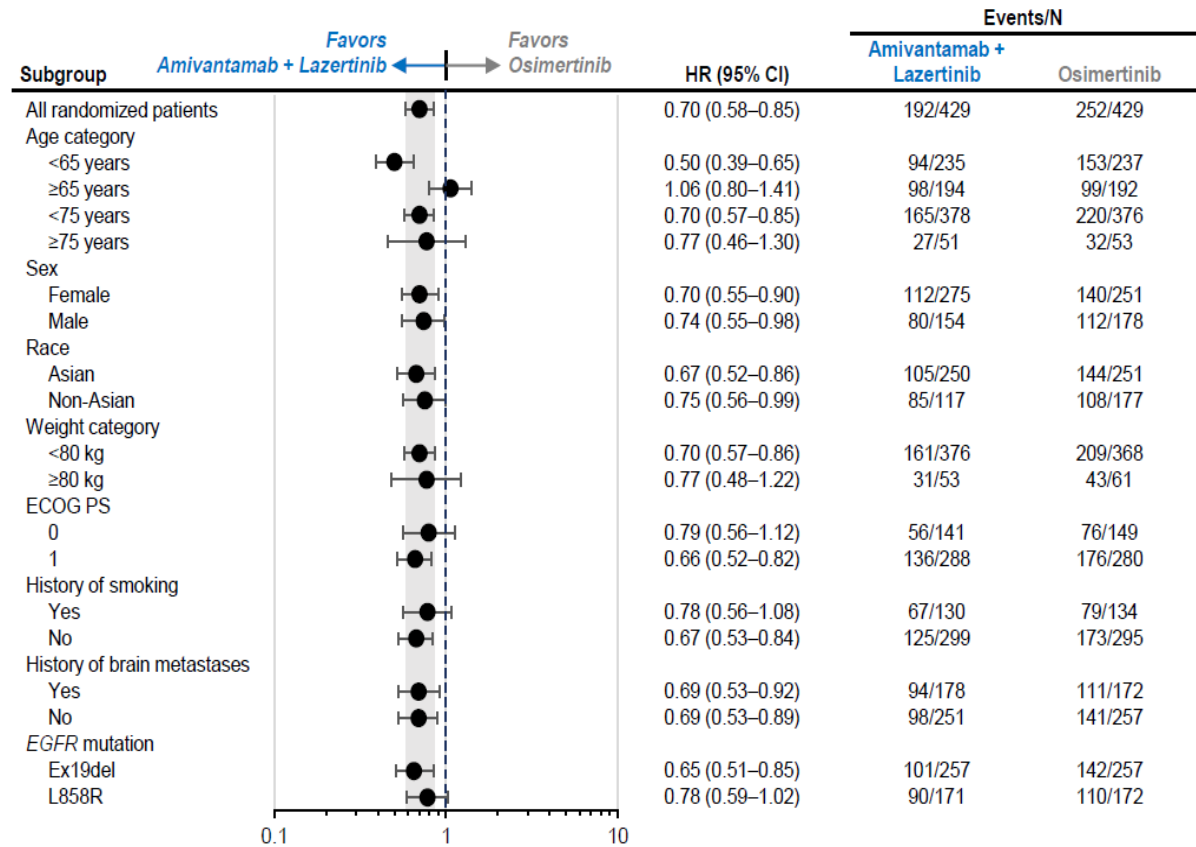
MARIPOSA : PFS (by BICR)

Progression-free survival



No. at risk	0	3	6	9	12	15	18	21	24	27	30	33
Amivantamab + Lazertinib	429	391	357	332	291	244	194	106	60	33	8	0
Osimertinib	429	404	358	325	266	205	160	90	48	28	10	0

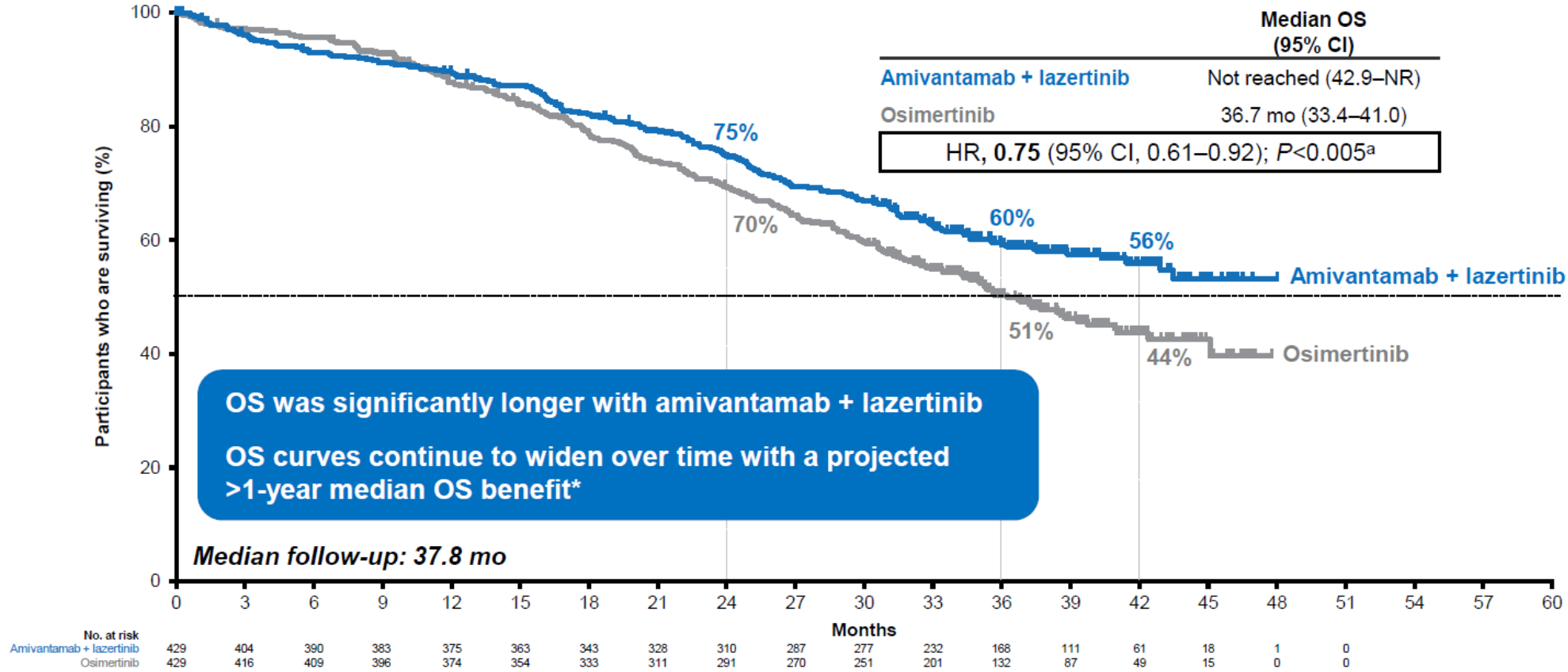
PFS Benefit across Predefined Subgroups



BICR, blinded independent central review; CI, confidence interval; HR, hazard ratio; mo, months; PFS, progression-free survival.

Cho BC, et al. *N Engl J Med* 2024;391(16):1486-1498

MARIPOSA : Overall Survival

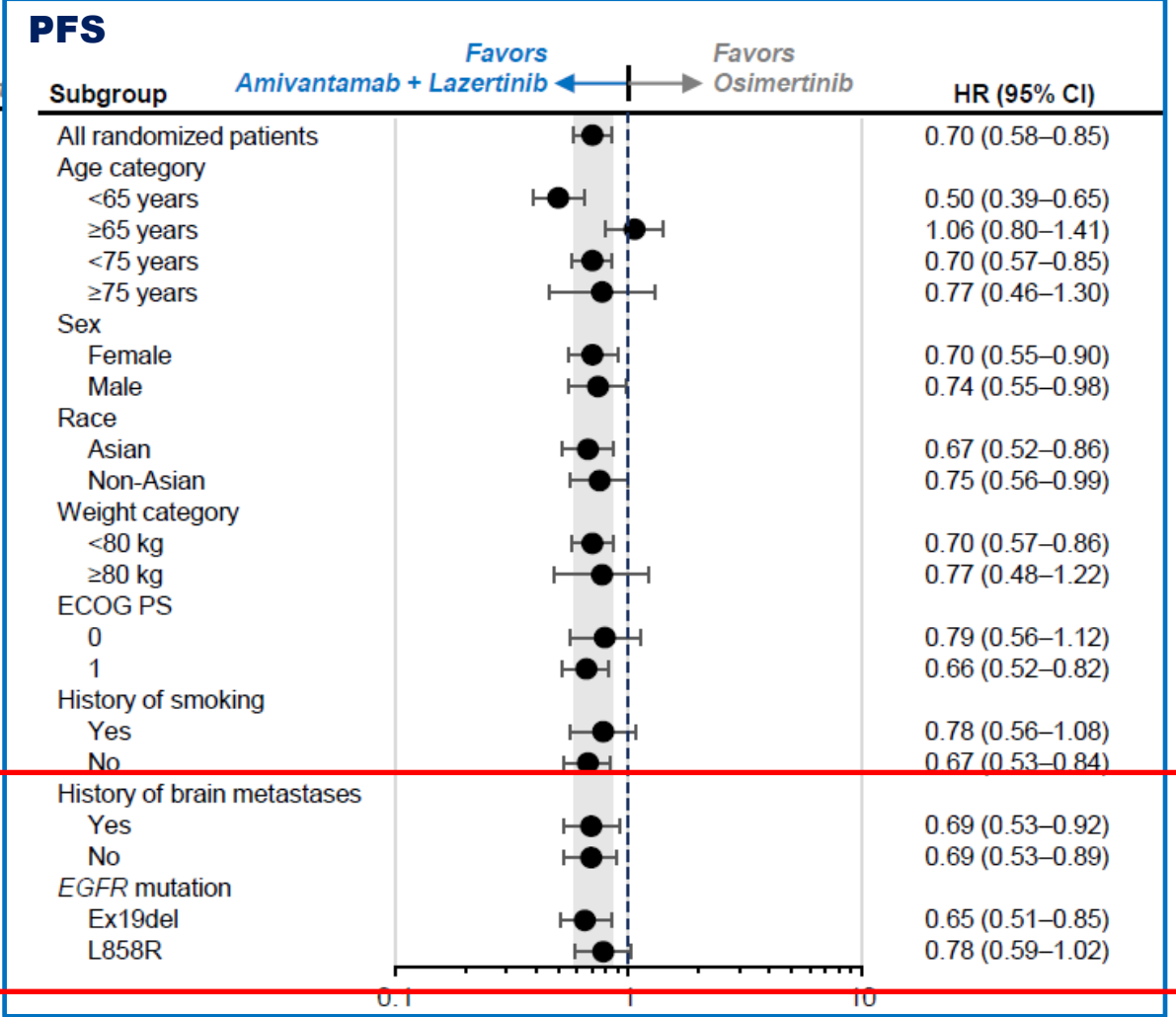
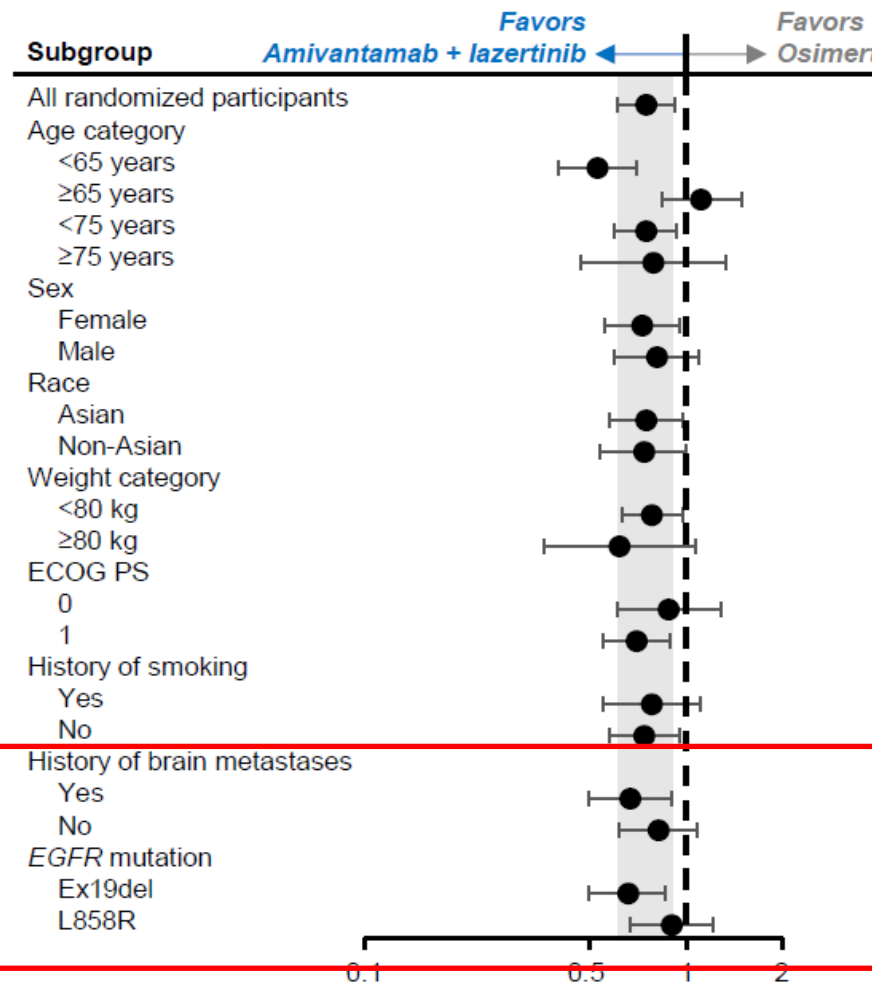


*Based on an exponential distribution assumption of OS in both arms, the improvement in median OS is projected to exceed 1 year.

Note: Last participant was enrolled in May 2022. Clinical cutoff date was December 4, 2024. In total, 390 deaths had occurred in the amivantamab + lazertinib (173 deaths) and osimertinib (217 deaths) arms.

aP-value was calculated from a log-rank test stratified by mutation type (Ex19del or L858R), race (Asian or Non-Asian), and history of brain metastasis (present or absent). Hazard ratio was calculated from a stratified Cox regression model.

MARIPOSA : Overall Survival in Predefined Subgroups

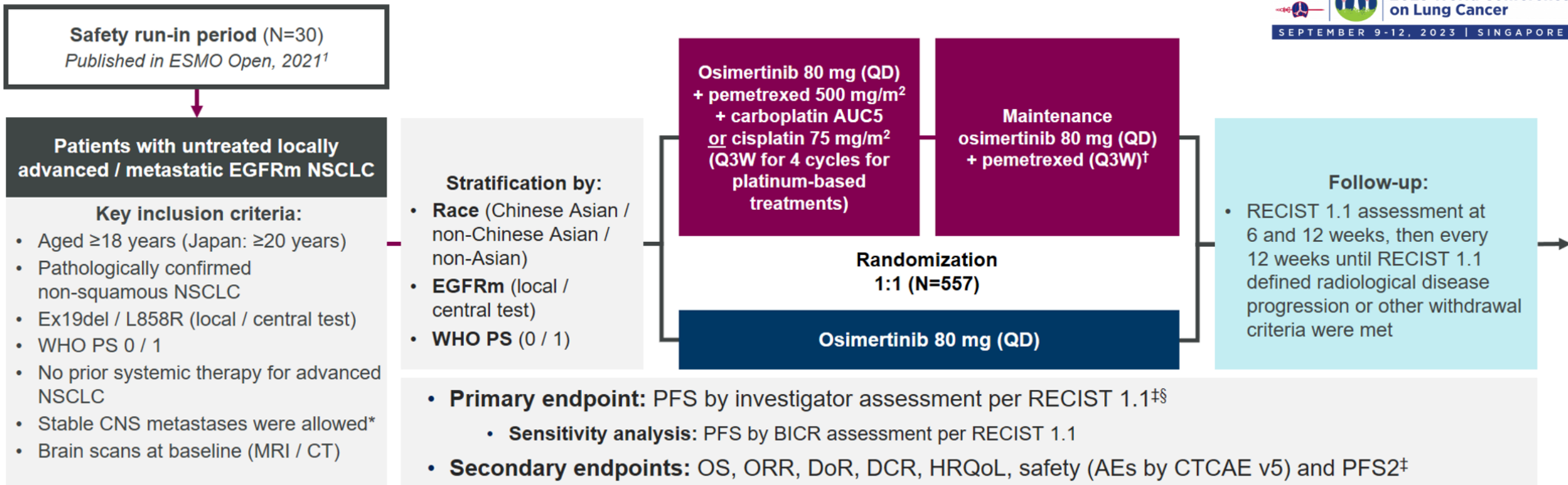


Yang JC, et al. ELCC 2025
 Yang JC, et al. *N Engl J Med.* Sep 6, 2025;

FLAURA2 : Osimertinib + Chemotherapy vs Osimertinib

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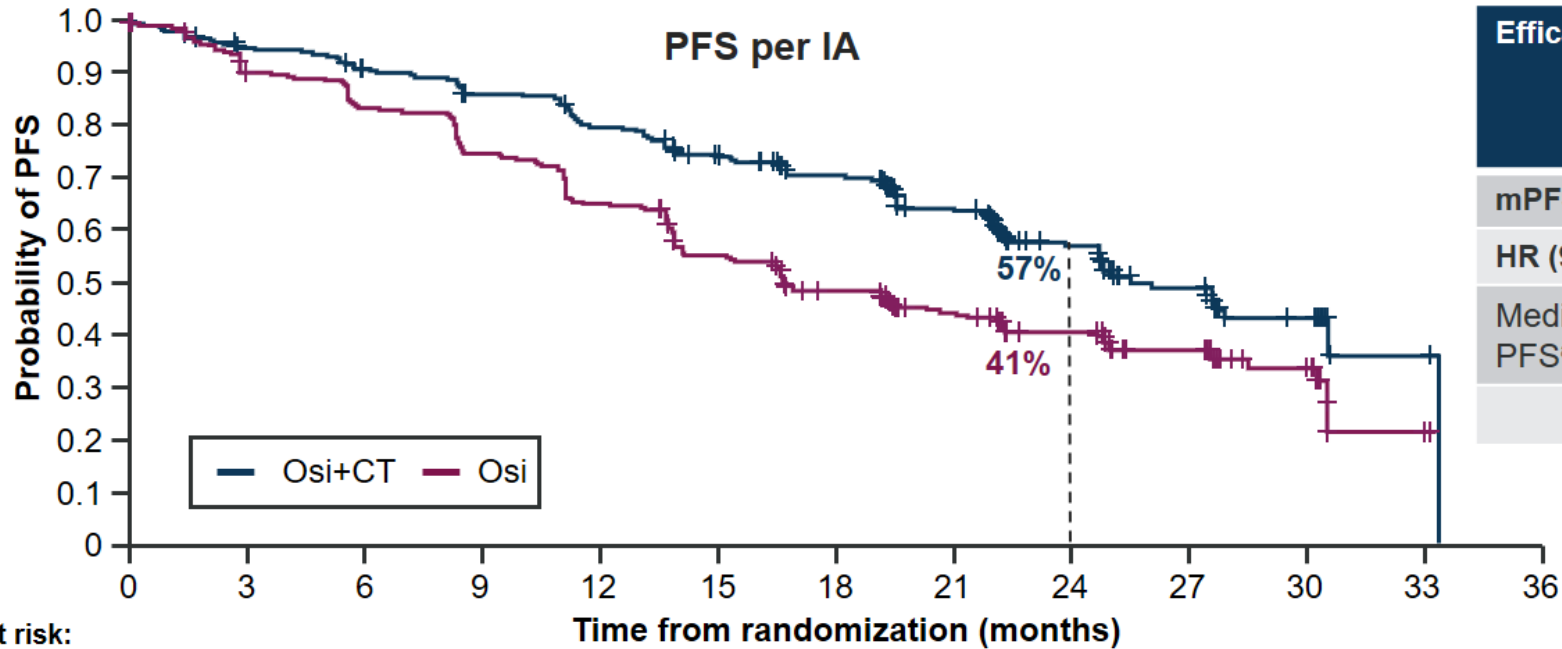


*Not requiring steroids for at least two weeks; [†]Pemetrexed maintenance continued until a discontinuation criterion was met; [‡]Efficacy analyses in the full analysis set, defined as all patients randomized to study treatment regardless of the treatment actually received, and safety analyses in the safety analysis set, defined as all randomized patients who received ≥1 dose of study treatment – one patient who was randomized to osimertinib plus platinum-pemetrexed received only osimertinib and was therefore included in the osimertinib monotherapy safety analysis set; [§]The study provided 90% power to demonstrate a statistically significant difference in PFS assuming HR=0.68 at 5% two-sided significance level

AE, adverse event; AUC, area under curve; BICR, blinded independent central review; CNS, central nervous system; CT, computed tomography; CTCAE, Common Terminology Criteria for Adverse Events; DCR, disease control rate; DoR, duration of response; EGFRm, epidermal growth factor receptor-mutated; EGFR-TKI, EGFR-tyrosine kinase inhibitor; Ex19del, exon 19 deletion; HR, hazard ratio; HRQoL, health-related quality of life; MRI, magnetic resonance imaging; NSCLC, non-small cell lung cancer; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; PFS2, second progression-free survival; QD, once-daily; Q3W, every 3 weeks; RECIST, Response Evaluation Criteria in Solid Tumors; WHO PS, World Health Organization performance status

의료에 신뢰를 더하다. JBUH⁺

FLAURA2 : Investigator-Assessed PFS

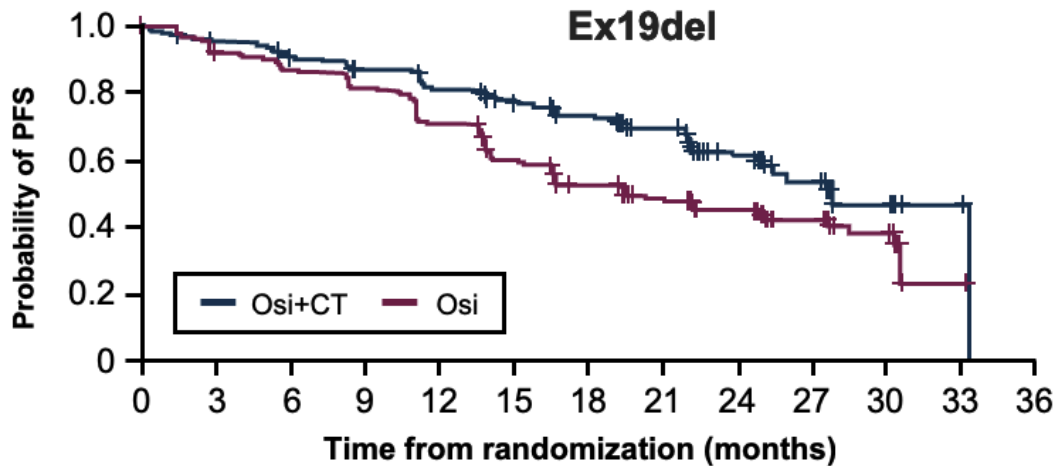


Efficacy	Osimertinib + platinum-pemetrexed ^a (n=279)	Osimertinib (n=278)
mPFS months (95% CI)	25.5 (24.7-NC)	16.7 (14.1-21.3)
HR (95% CI) ^b	0.62 (0.49-0.79); p<0.0001	
Median follow up for PFS ^a , months (range)	19.5 (0-33.3)	16.5 (0-33.1)
Overall maturity: 51%		

DCO: April 03, 2023. **Note:** CT therapy includes cisplatin or carboplatin with pemetrexed. ^aIn all patients.

CI = confidence interval; CT = chemotherapy; DCO = data cut-off; EGFRm = epidermal growth factor receptor mutation-positive; HR = hazard ratio; mPFS = median progression-free survival; NC = not calculable.; NSCLC = non-small cell lung cancer; PFS = progression-free survival. NSQ=non squamous

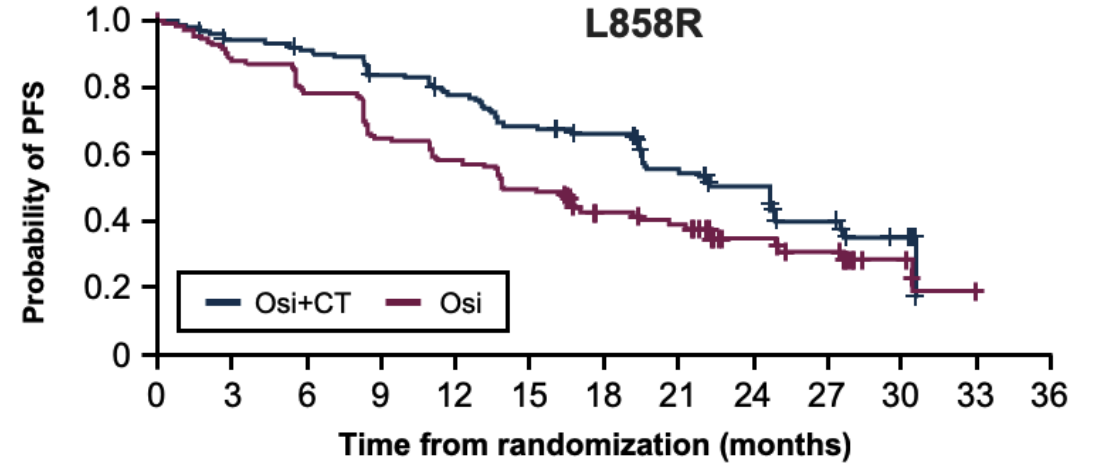
FLAURA2 : PFS^a Benefit according to EGFRm Type



No. at risk:

Osi+CT	172	159	150	142	131	120	103	86	53	23	9	3	0
Osi	169	152	144	135	117	96	79	63	48	33	16	1	0

Efficacy in Ex19del	Osimertinib + platinum-pemetrexed (n=172)	Osimertinib (n=169)
mPFS, months (95% CI)	27.9 (25.1-NC)	19.4 (16.5-27.6)
HR (95% CI)	0.60 (0.44-0.83)	



No. at risk:

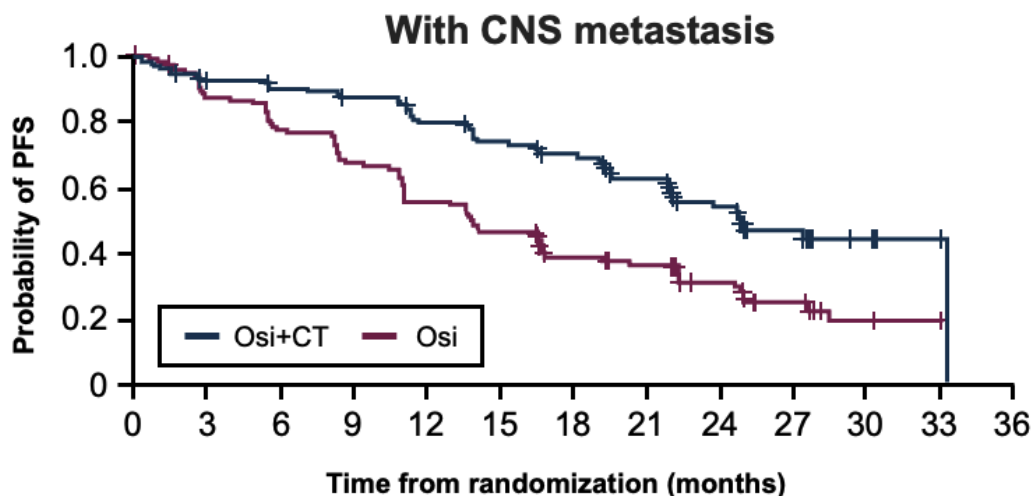
Osi+CT	106	95	91	83	76	67	62	47	31	19	12	0	0
Osi	107	92	82	68	61	52	40	31	19	15	5	0	0

Efficacy in L858R	Osimertinib + platinum-pemetrexed (n=106)	Osimertinib (n=107)
mPFS, months (95% CI)	24.7 (19.5-27.4)	13.9 (11.1-19.4)
HR (95% CI)	0.63 (0.44-0.90)	

DCO: April 03, 2023. **Note:** CT includes cisplatin or carboplatin with pemetrexed. ^aInvestigator assessed.

CI = confidence interval; CT = chemotherapy; DCO = data cut-off; EGFRm = epidermal growth factor receptor mutation-positive; Ex19del = exon 19 deletion; HR = hazard ratio; mPFS = median progression-free survival; NC = non calculable; PFS = progression-free survival.

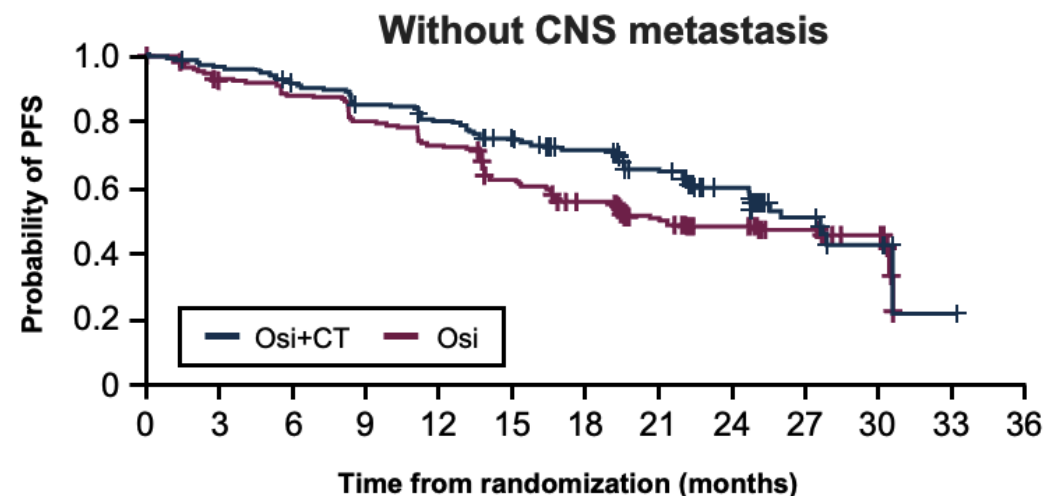
FLAURA2 : PFS^a Benefit according to CNS mets



No. at risk:

	0	3	6	9	12	15	18	21	24	27	30	33	36
Osi+CT	116	101	98	93	84	77	70	58	34	19	8	2	0
Osi	110	95	74	73	60	50	37	32	21	13	5	1	0

Efficacy with CNS metastases	Osimertinib + platinum-pemetrexed (n=116)	Osimertinib (n=110)
mPFS, months (95% CI)	24.9 (22.0-NC)	13.8 (11.0-16.7)
HR (95% CI)	0.47 (0.33-0.66)	



No. at risk:

	0	3	6	9	12	15	18	21	24	27	30	33	36
Osi+CT	163	153	143	132	123	110	95	75	50	23	13	1	0
Osi	168	151	143	130	118	98	82	62	46	35	16	0	0

Efficacy without CNS metastases	Osimertinib + platinum-pemetrexed (n=163)	Osimertinib (n=168)
mPFS, months (95% CI)	27.6 (24.7-NC)	21.0 (16.7-30.5)
HR (95% CI)	0.75 (0.55-1.03)	

DCO: April 03, 2023. **Note:** CT include cisplatin or carboplatin with pemetrexed. ^aInvestigator assessed.

CI = confidence interval; CNS = central nervous system; CT = chemotherapy; DCO = data cut-off; HR = hazard ratio; NC = non calculable; PFS = progression-free survival



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First-line Osimertinib + Chemotherapy Versus Osimertinib Monotherapy in EGFRm Advanced NSCLC: FLAURA2 Final Overall Survival

David Planchard,¹ Pasi A. Jänne, Kunihiko Kobayashi, James Chih-Hsin Yang, Ying Liu, Natalia Valdiviezo, Tae Min Kim, Liyan Jiang, Hiroshi Kagamu, Noriko Yanagitani, Jialei Wang, Bivas Biswas, Artem Poltoratskiy, Yeni Neron, Carlos Rojas, Leona Koubkova, Carles Escriu, Doreen Ezeife, Karen Barrett, Muna Albayaty, Haiyi Jiang, Chee K. Lee

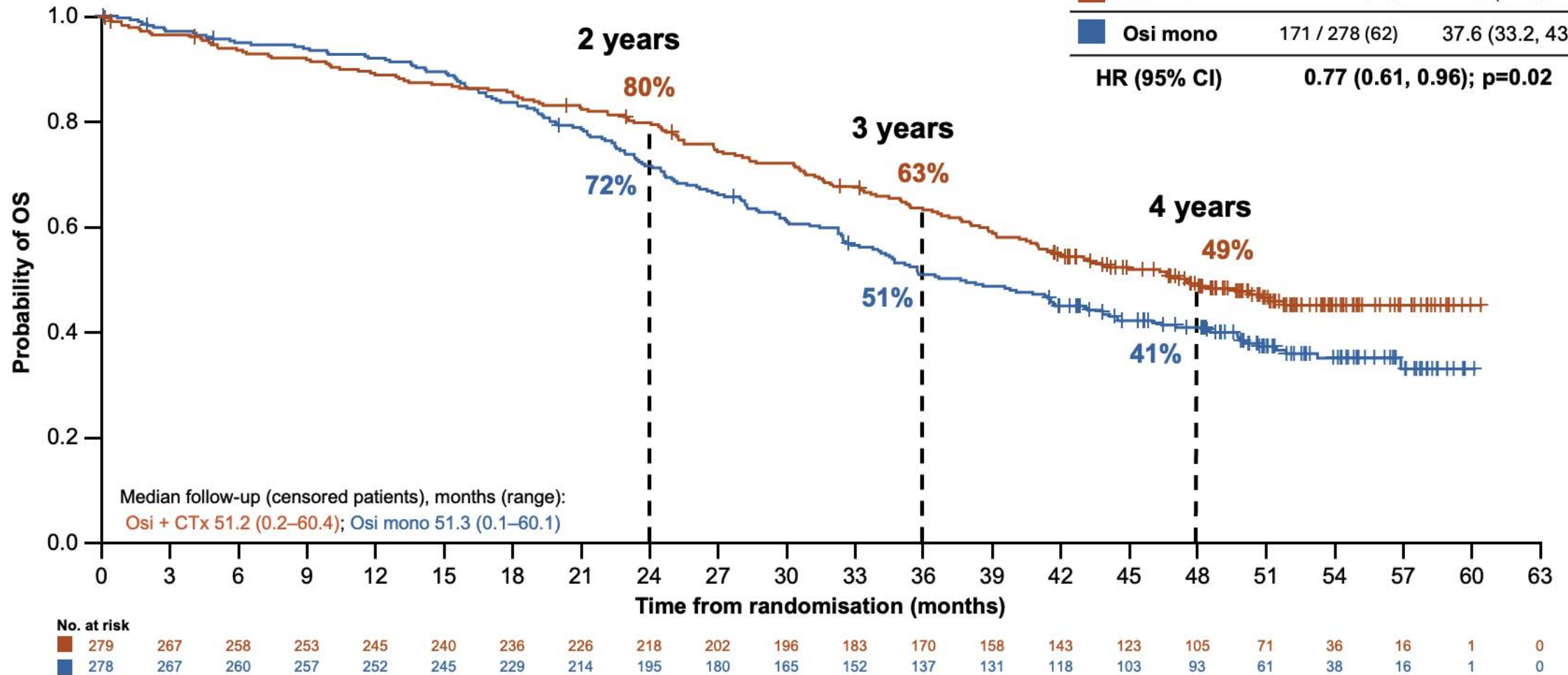
¹Department of Medical Oncology, Institut Gustave Roussy, Thoracic Unit, Villejuif, France and Faculty of Medicine, Université Paris-Saclay, Paris, France

FLAURA2: Overall survival

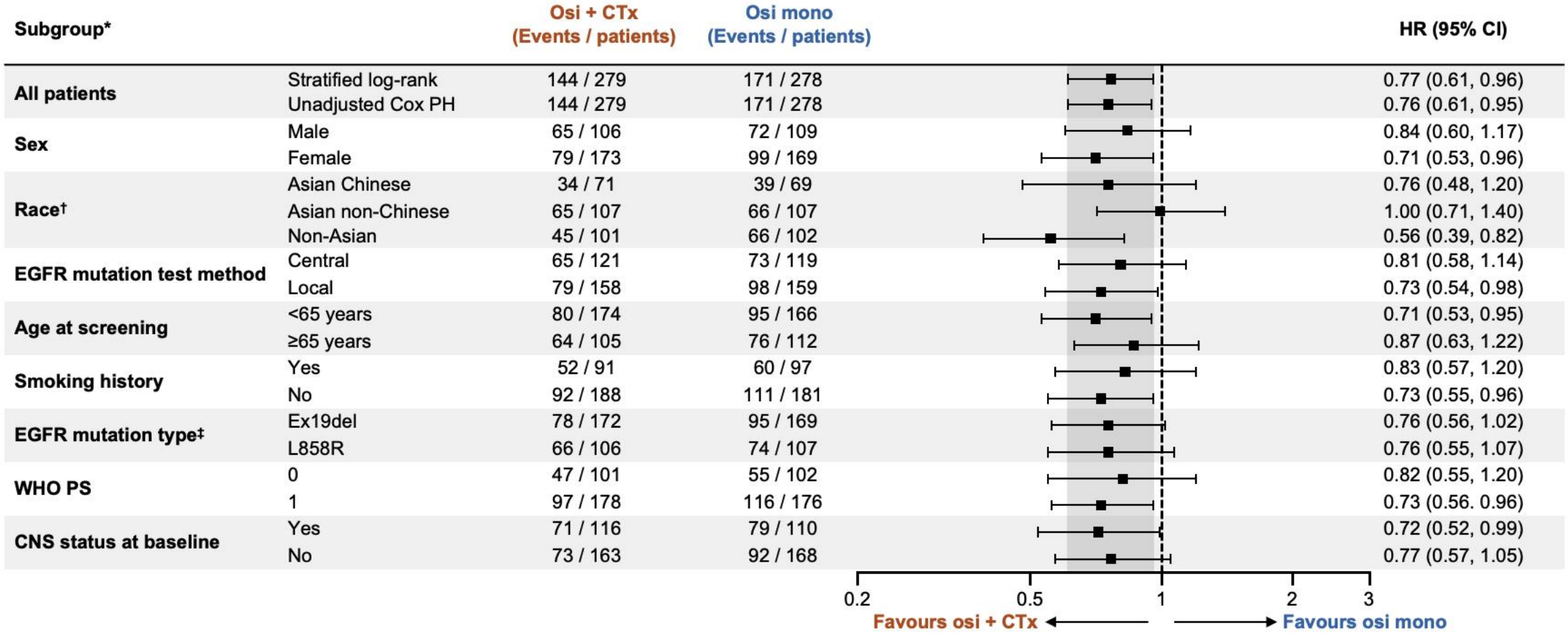
Median OS with osi + CTx was 47.5 months



	No. events / no. patients (%)	Median OS, months (95% CI)
Osi + CTx	144 / 279 (52)	47.5 (41.0, NC)
Osi mono	171 / 278 (62)	37.6 (33.2, 43.2)
HR (95% CI)	0.77 (0.61, 0.96); p=0.02	



Overall survival across subgroups



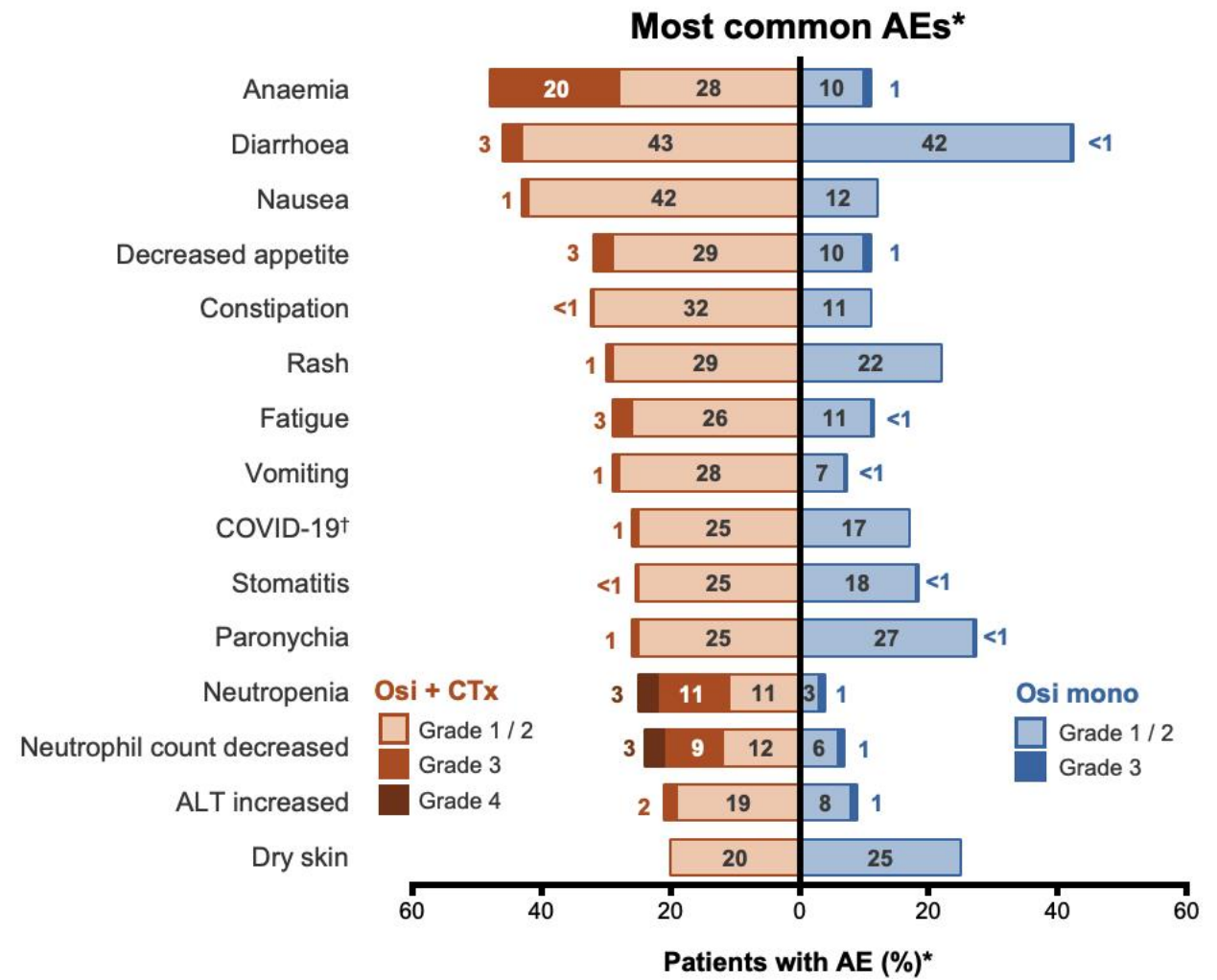
OS benefit was consistent across predefined subgroups

Safety

Since the primary analysis¹ (>2 years additional follow-up):

- No new safety signals observed
- AEs leading to discontinuation of osi remained low
- No new treatment-related deaths observed with osi + CTx (vs 1 with osi mono)

AE summary	Osi + CTx (n=276)	Osi mono (n=275)
AE any cause, n (%)		
Any grade	276 (100)	269 (98)
Grade ≥3	193 (70)	94 (34)
Serious	126 (46)	75 (27)
Outcome of death	22 (8)	10 (4)
Considered possibly related to treatment	5 (2)	2 (1)
Leading to discontinuation of osi	34 (12)	20 (7)
Leading to discontinuation of pemetrexed	137 (50)	NA
Leading to discontinuation of platinum	46 (17)	NA



Conclusions

- **First-line osi + CTx demonstrated a statistically significant and clinically meaningful improvement in OS versus osi mono**
 - **OS HR: 0.77; 95% CI (0.61, 0.96); p=0.02**
 - **Median OS with osi + CTx was 47.5 months** – longest reported in a global phase III study showing OS benefit in this population¹
 - Observed OS benefit was **consistent** across pre-defined subgroups
- Osi + CTx arm had a long CTx-free period – median treatment duration was 30.5 months for osi and 8.3 months for pemetrexed
- In both arms, **CTx was the most common first subsequent treatment**
 - CTx rechallenge, primarily with platinum doublet, was the most common treatment after osi + CTx
 - OS benefit with osi + CTx was seen despite SoC CTx being the most common treatment after osi mono
- With 2 years additional follow up since the primary analysis, the **safety profiles remained as expected and manageable**

These compelling OS results from FLAURA2 confirm osimertinib-plus-chemotherapy as a first-line standard-of-care treatment in EGFRm advanced NSCLC

What is the tradeoff with upfront combination therapy ?

	Osimertinib	Osimertinib-Pemetrexed-Platinum	Amivantamab-Lazertinib
Study	FLAURA	FLAURA2	MARIPOSA
Efficacy	PFS 18.9 m OS 38.6 m vs 31.8 m	PFS 25.5 m OS 47.5 m vs 37.6 m (HR 0.77)	PFS 23.7 m OS NR vs 36.7 m (HR 0.75)
Side effects (all grades)	Diarrhea 42% Rash 22% Paronychia 27% Neutropenia 4% Anemia 11%	Diarrhea 46% Rash 30% Paronychia 26% Neutropenia 25% Anemia 48% Creatinine increase 14%	Diarrhea 32% Rash 64% Paronychia 69% Infusion related reaction 65% Peripheral edema 38% Venous thromboembolism 40% Anemia 27%
Schedule	Daily oral tablet Visit every 2-3 months	Daily oral tablet, Iv infusion once every 3 weeks	Daily oral tablet, Iv infusion once per week for first 4weeks; once every 2 weeks thereafter
Finance	\$	\$\$	\$\$\$\$

*Data are not from head-to-head trials and should not be directly compared.
Daniel Tan WCLC 2025

Target therapy for advanced or metastatic dz

PRINCIPLES OF BIOMARKER-DIRECTED THERAPY FOR ADVANCED OR METASTATIC DISEASE

Order does not imply preference. This is a listing for references.

EGFR Exon 19 Deletion or L858R Mutation

- First-line therapy
 - Afatinib¹
 - Erlotinib²
 - Dacomitinib³
 - Gefitinib^{4,5}
 - Osimertinib⁶
 - (Carboplatin or Cisplatin)/ Osimertinib/Pemetrexed (nonsquamous)⁷
 - Erlotinib + Ramucirumab⁸
 - Erlotinib + Bevacizumab (nonsquamous)⁹
 - Lazertinib + Amivantamab-vmjw¹⁰
 - Lazertinib¹⁰
- Subsequent therapy
 - Osimertinib¹¹
 - Carboplatin/Pemetrexed + Amivantamab-vmjw (nonsquamous)¹²
 - Datopotamab deruxtecan-dlnk (nonsquamous)¹³
 - Lazertinib + Amivantamab-vmjw^{14,15}

EGFR S768I, L861Q, and/or G719X Mutations

- First-line therapy
 - Afatinib^{1,16}
 - Erlotinib²
 - Dacomitinib³
 - Gefitinib^{4,5}
 - Osimertinib^{6,17}

EGFR S768I, L861Q, and/or G719X Mutations (continued)

- Subsequent therapy
 - Osimertinib¹¹
 - Datopotamab deruxtecan-dlnk (nonsquamous)¹³

ALK Gene Fusion (continued)

- Subsequent therapy
 - Alectinib^{30,31}
 - Brigatinib³²
 - Ceritinib³³
 - Ensartinib³⁴



- Ceritinib²⁶
- Crizotinib^{23,27}
- Ensartinib²⁸
- Lorlatinib²⁹

- Dabrafenib/Trametinib^{43,44}
- Binimetinib/Encorafenib⁴²

NTRK1/2/3 Gene Fusion

- First-line/Subsequent therapy
 - Larotrectinib⁴⁵
 - Entrectinib⁴⁶
 - Repotrectinib⁴⁷

MET Exon 14 Skipping Mutation^a

- First-line therapy/Subsequent therapy
 - Capmatinib⁴⁸
 - Crizotinib⁴⁹
 - Tepotinib⁵⁰

RET Gene Fusion

- First-line therapy
 - Selpercatinib⁵¹
 - Pralsetinib⁵²
- Subsequent therapy
 - Cabozantinib^{53,54}

ERBB2 (HER2) Mutation^a

- Subsequent therapy
 - Fam-trastuzumab deruxtecan-nxki⁵⁵
 - Ado-trastuzumab emtansine⁵⁶
 - Zongertinib⁵⁷
 - Sevabertinib⁵⁸

NRG1 Gene Fusion

- Subsequent therapy
 - Zenocutuzumab-zbco⁵⁹

HER2-positive IHC 3+

- Subsequent therapy
 - Fam-trastuzumab deruxtecan-nxki⁶⁰

HGFR (MET) (≥50% IHC 3+ and EGFR wild-type)

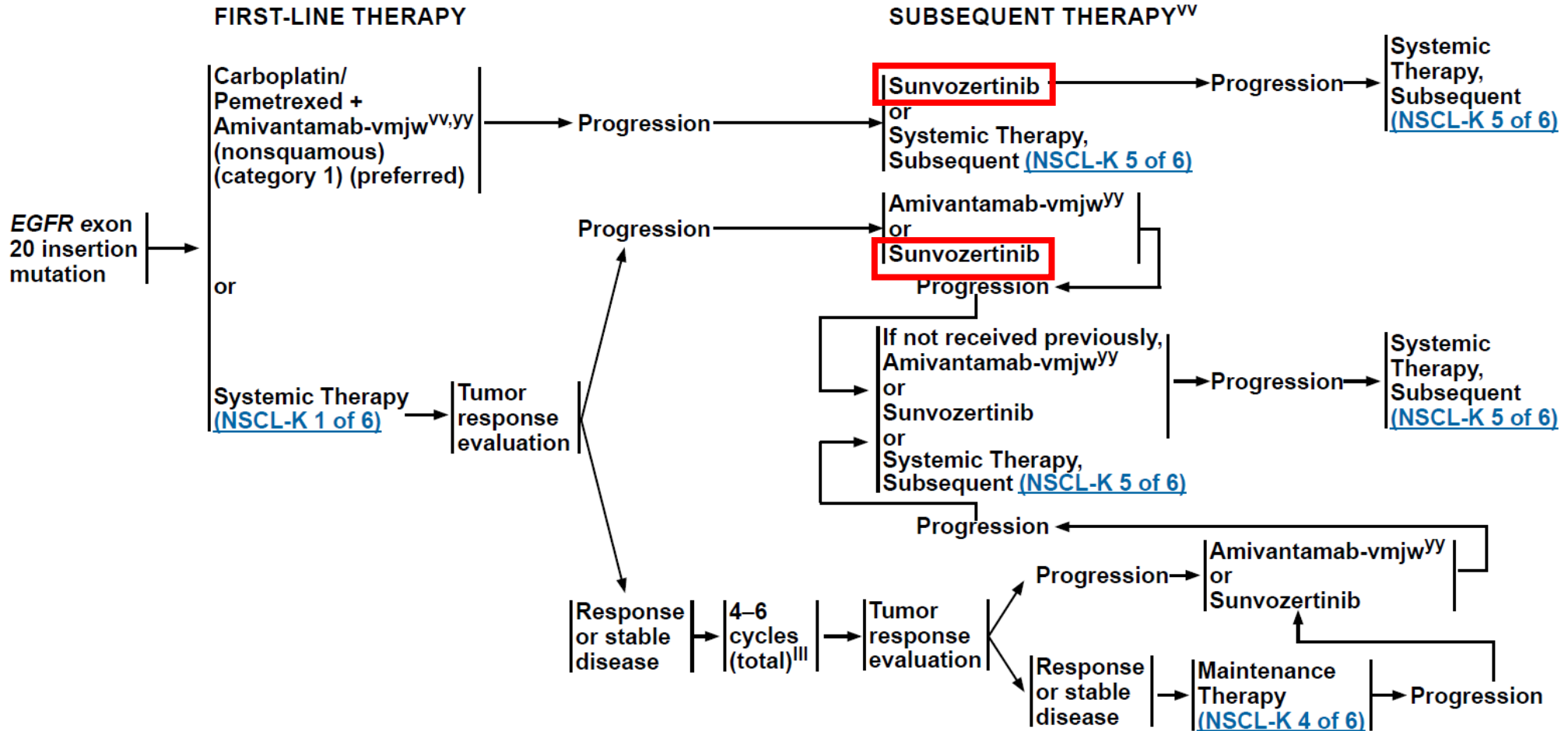
- Subsequent therapy
 - Telisotuzumab vedotin-tllv (nonsquamous)⁶¹

^a For agents with a similar mechanism of action, it is not recommended to switch between these drugs at the time of progression.

[References](#)

NCCN Guidelines (NSCLC) ver3. 2026

EGFR EXON 20 INSERTION MUTATION^{IT}





IASLC 2025 World Conference on Lung Cancer

SEPTEMBER 6-9, 2025 | BARCELONA, SPAIN

wclc.iaslc.org       #WCLC25

A Multinational Phase 2 Randomized Pivotal Study of Sunvozertinib in Pretreated NSCLC with EGFR Exon 20 Insertion Mutations

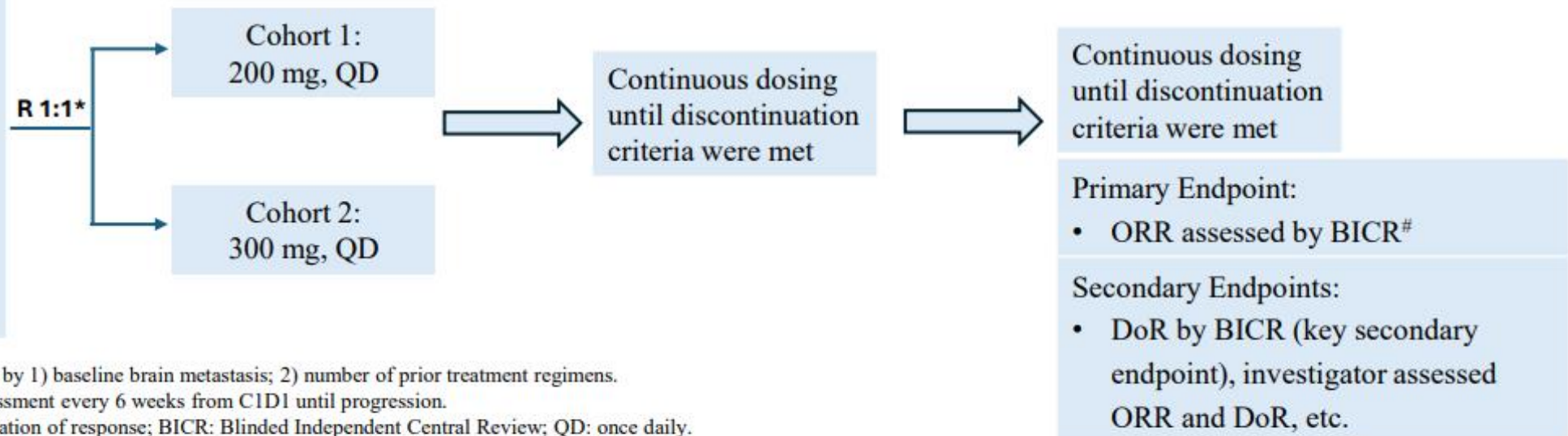
Pasi A. Jänne¹, Mengzhao Wang², Ludovic Doucet³, Yun Fan⁴, Dongqing Lv⁵, Meili Sun⁶, Dingzhi Huang⁷, Laurent Greillier⁸, David Planchard⁹, Qunying Hong¹⁰, Julien Mazieres¹¹, Enriqueta Felip¹², Xingya Li¹³, Ying Hu¹⁴, Jian Fang¹⁵, Lyudmila Bazhenova¹⁶, François Ghiringhelli¹⁷, Manuel Angel Cobo Dols¹⁸, Luis Paz-Ares Rodriguez¹⁹, Alessandra Bearz²⁰, Bruna Pellini Ferreira²¹, Yu Jung Kim²², Joaquim Bosch-Barrera²³, Byoung-Yong Shim²⁴, Yung-Hung Luo²⁵, Marcello Tiseo²⁶, Tsung-Ying Yang²⁷, Enric Carcereny²⁸, Regan Memmott²⁹, Gerard Zalcman³⁰, Javier de Castro Carpeno³¹, Vincenzo Di Noia³², Hector Soto Parra³³, Guillermo Streich³⁴, Dae Ho Lee³⁵, Elaine Shum³⁶, Ji-Youn Han³⁷, Jesus Corral Jaime³⁸, Daniel Brungs³⁹, Thomas John⁴⁰, Manolo D'Arcangelo⁴¹, Andres Barba Joaquin⁴², Geoffrey Liu, MSc, MD⁴³, Lorenzo Antonuzzo⁴⁴, Gonzalo Fernández Hinojal⁴⁵, Xiuning Le⁴⁶, Li Zheng⁴⁷, James Chih-Hsin Yang⁴⁸

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Introduction and Study Design

- Sunvozertinib (DZD9008) is a rationally designed, potent, selective and irreversible EGFR inhibitor targeting EGFR exon 20 insertion mutations (exon20ins).
- WU-KONG1 Part B (WU-KONG1B, NCT03974022) is a multinational phase 2 dose randomized pivotal study of sunvozertinib in platinum pretreated NSCLC with EGFR exon20ins. Sunvozertinib was approved by US FDA under accelerated approval, supported by WU-KONG1B study.
- Here we report the latest results of WU-KONG1B study in dose randomization cohorts.

- Locally advanced or metastatic NSCLC
- Confirmed EGFR exon20ins in tumor tissues by local or sponsor designated laboratory testing
- ECOG PS of 0 or 1
- Prior treated with platinum-based chemotherapy



*Randomization ratio 1:1, and stratified by 1) baseline brain metastasis; 2) number of prior treatment regimens.

#According to RECIST 1.1. Tumor assessment every 6 weeks from C1D1 until progression.

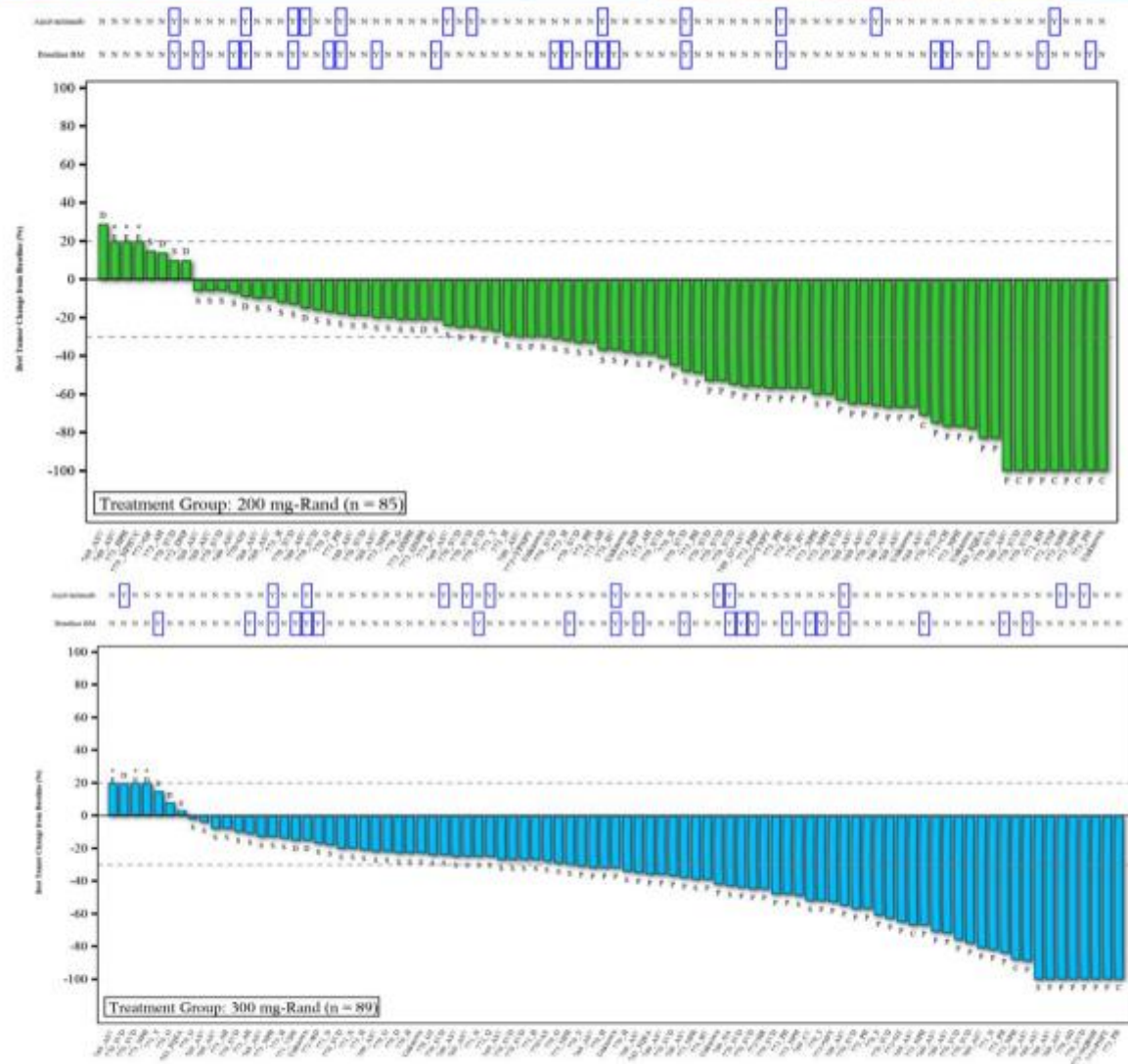
ORR: objective response rate; DoR: duration of response; BICR: Blinded Independent Central Review; QD: once daily.



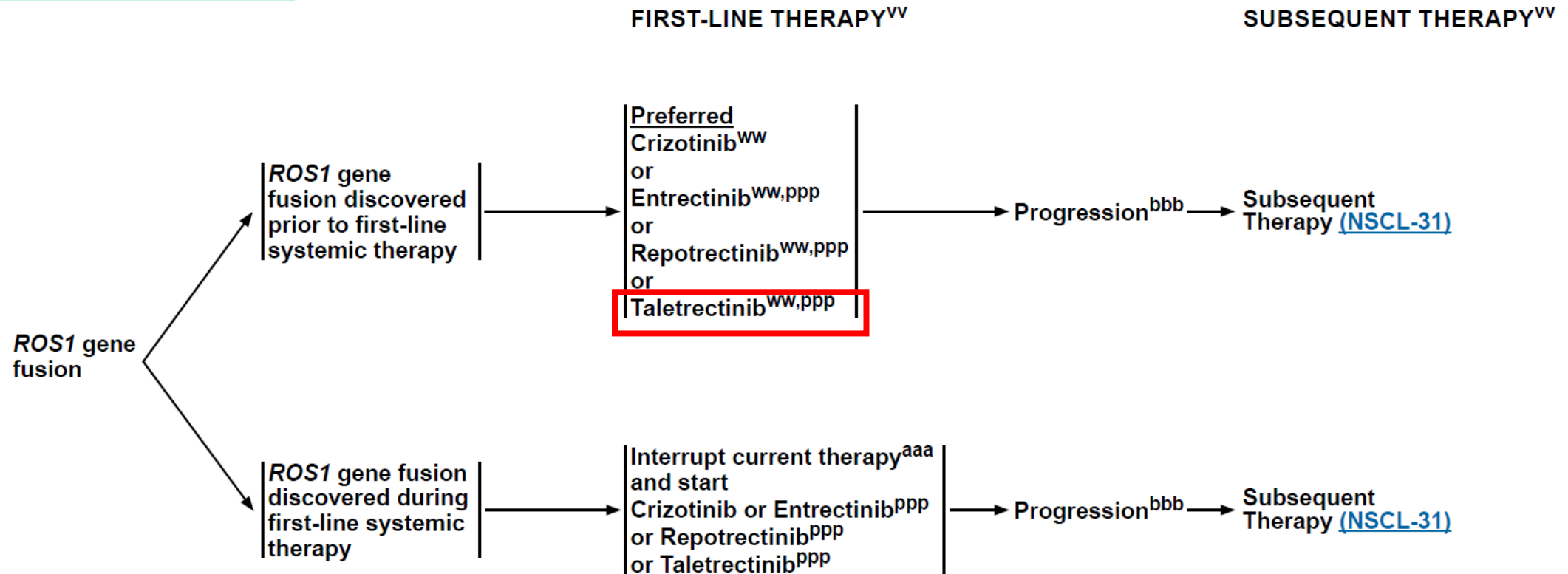
Anti-tumor Efficacy

Tumor Response Per BICR		200 mg (N = 85)	300 mg (N = 89)
Confirmed ORR (%; 97.5% CI)		45.9 (33.6, 58.5)	47.2 (35.1, 59.5)
Disease Control Rate (%; 97.5% CI)		89.4 (79.6, 95.6)	92.1 (83.3, 97.2)
Best Overall Response (n, %)			
Complete Response		5 (5.9)	3 (3.4)
Partial Response		34 (40.0)	39 (43.8)
Stable Disease		37 (43.5)	40 (44.9)
Progressive Disease		6 (7.1)	5 (5.6)
Not Evaluable		3 (3.5)	2 (2.2)
Median DoR (months; 95% CI)		11.1 (8.2, NE)	13.8 (8.3, NE)
Median PFS (months; 95% CI)		8.4 (6.8, 13.9)	7.7 (6.0, 9.8)
Subgroup Analysis of Confirmed ORR (%)			
Prior Amivantamab Treatment	With	25.0	41.7
	Without	49.3	48.1
Baseline Brain Metastasis	With	28.6	52.4
	Without	51.6	45.6

Data cut-off date: December 2, 2024.
BICR: Blinded Independent Central Review; ORR: Objective Response Rate; DoR: duration of response; PFS: Progression Free Survival, CI: Confidence Interval; NE: Not Estimable.



C: Complete Response; P: Partial Response; S: Stable Disease; D: Progressive Disease; E: Not Evaluable; BM: Brain Metastasis. For the patient with tumor size missing, the best change from baseline was reported as 20% increase if the patient had objective progression, discontinued treatment due to PD or died. Such patient was flagged *.

ROS1 GENE FUSION^{rr}

Updated Efficacy and Safety of Taletrectinib in Patients With ROS1+ Non-Small Cell Lung Cancer: The Global TRUST-II Study

Geoffrey Liu,¹ Chang-Min Choi,² Shunichi Sugawara,³ Noriko Yanagitani,⁴ Filippo De Braud,⁵
Jorge Nieva,⁶ Misako Nagasaka,⁷ Caicun Zhou,⁸ Enriqueta Felip,⁹ Xianyu Zhang,¹⁰ Wei Wang,¹⁰
Nathan A. Pennell,¹¹ Maurice Pérol,¹² Lyudmila Bazhenova¹³

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TRUST-II^a: Phase 2 Trial of Taletrectinib in ROS1+ NSCLC

Key Eligibility Criteria

- Locally advanced or metastatic NSCLC with ROS1 fusion
- Age ≥18 years^b
- ECOG PS 0-1

Cohort 1
TKI-naïve^c

Cohort 2
TKI-pretreated^c

Taletrectinib
600 mg QD

Endpoints

Primary:

- IRC-assessed cORR per RECIST v1.1

Secondary:

- DOR
- IC-ORR^d
- TTR
- PFS
- OS
- Safety^e

Additional
5 month follow-up
To > 20 months

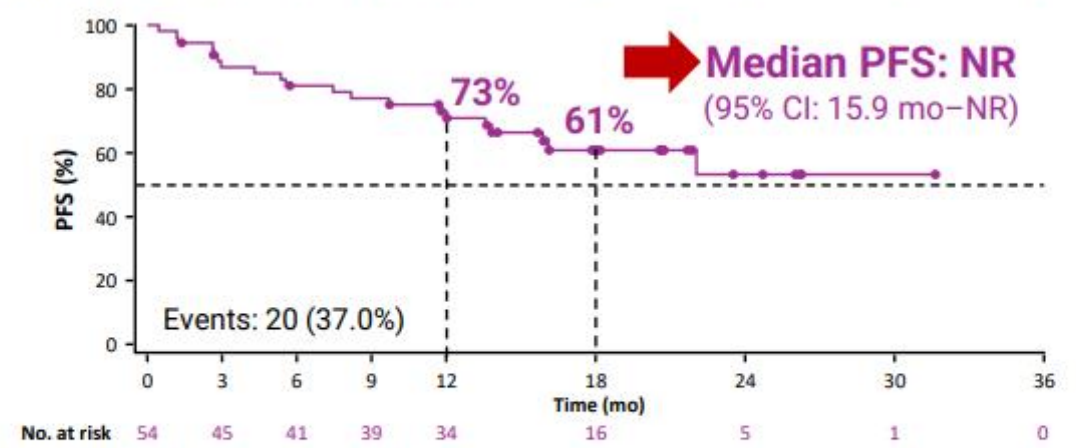
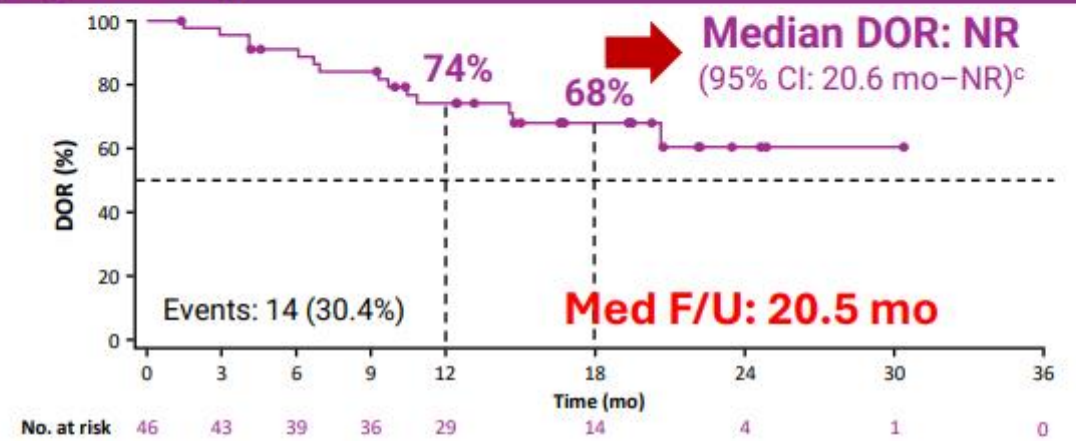
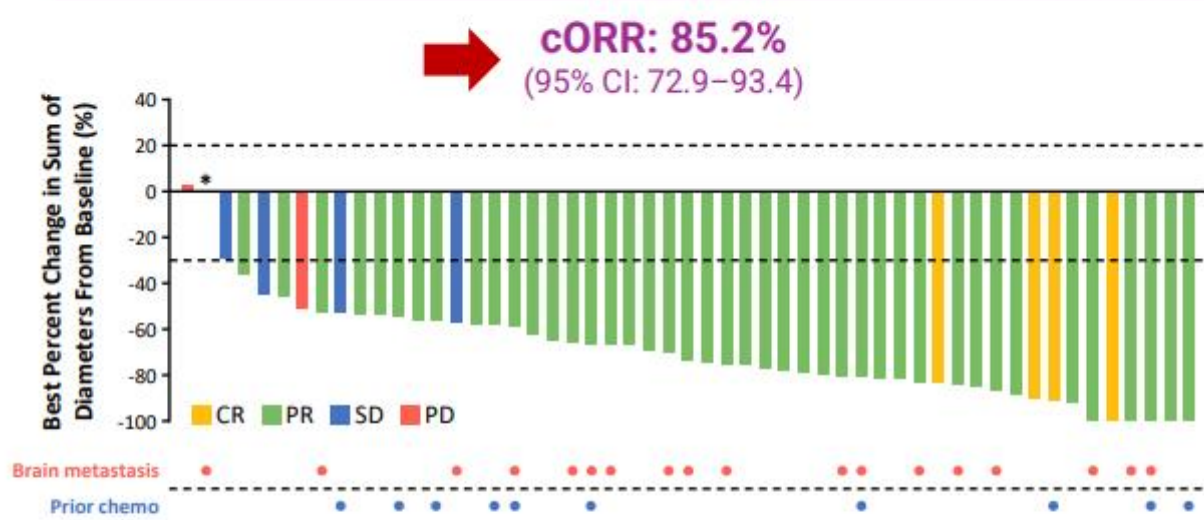
Baseline Characteristics	TKI-naïve (n=55) ^c	TKI-pretreated (n=50) ^c	Safety Population (N=171) ^e
Median age, years (range)	57.0 (27-83)	55.5 (27-79)	57.0 (27-83)
Female, n (%)	31 (56.4)	27 (54.0)	96 (56.1)
Never smoker, n (%)	28 (50.9)	30 (60.0)	95 (55.6)
Region: Asia / non-Asia, n (%)	34 (61.8) / 21 (38.2)	22 (44.0) / 28 (56.0)	74 (43.3) / 97 (56.7)
ECOG PS: 0 / 1, n (%)	22 (40.0) / 33 (60.0)	24 (48.0) / 26 (52.0)	70 (40.9) / 101 (59.1)
Stage IV disease, n (%)	49 (89.1)	49 (98.0)	162 (94.7)
Prior chemotherapy, n (%)	11 (20.0)	19 (38.0)	67 (39.2)
Brain metastases at baseline, ^d n (%)	19 (34.5)	28 (56.0)	78 (45.6)
Prior crizotinib / entrectinib, n (%)	-	40 (80.0) / 10 (20.0)	86 (50.3) / 29 (17.0)

Data cutoff: October 28, 2024. c, confirmed; DOR, duration of response; ECOG PS, Eastern Cooperative Oncology Group performance status; IC, intracranial; IRC, independent review committee; (m)RECIST v1.1, (modified) Response Evaluation Criteria In Solid Tumors version 1.1; NSCLC, non-small cell lung cancer; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; QD, once daily; TKI, tyrosine kinase inhibitor; TTR, time to response.

^aNCT04919811. ^bOr ≥20 years, as required by local regulations. ^cRegistrational cohorts are shown. ^dAssessed by IRC per mRECIST v1.1. ^eSafety population includes all patients who received ≥1 dose of taletrectinib 600 mg.

Taletrectinib: Efficacy Outcomes in TKI-naïve ROS1+ NSCLC

TKI-naïve (n=54)^{a,b}
Median follow-up: 20.5 mo (range: 8.3–34.5)

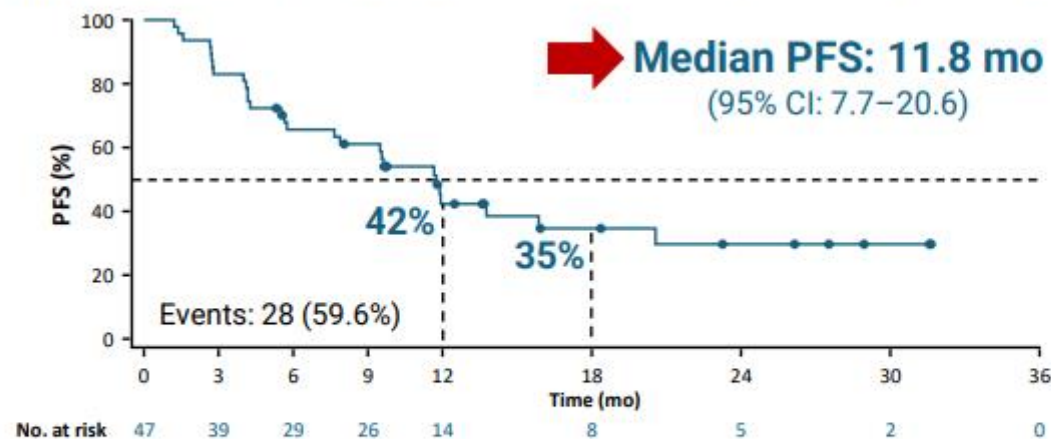
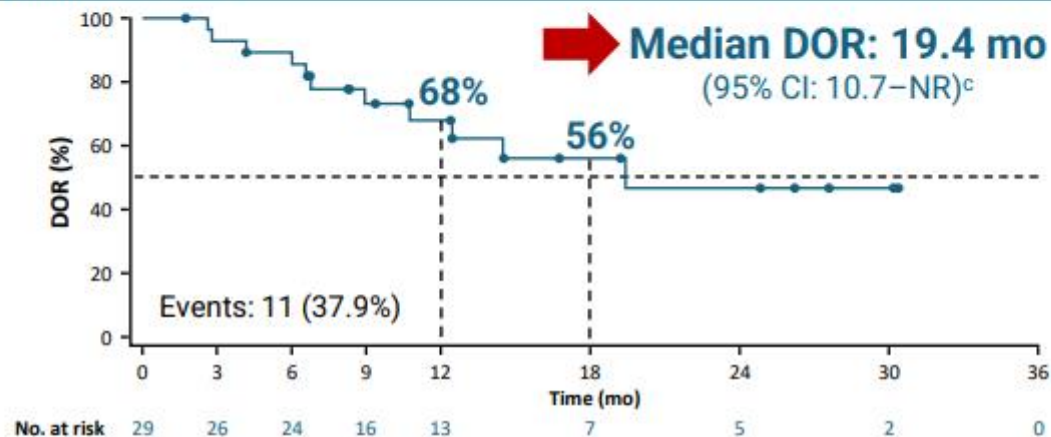
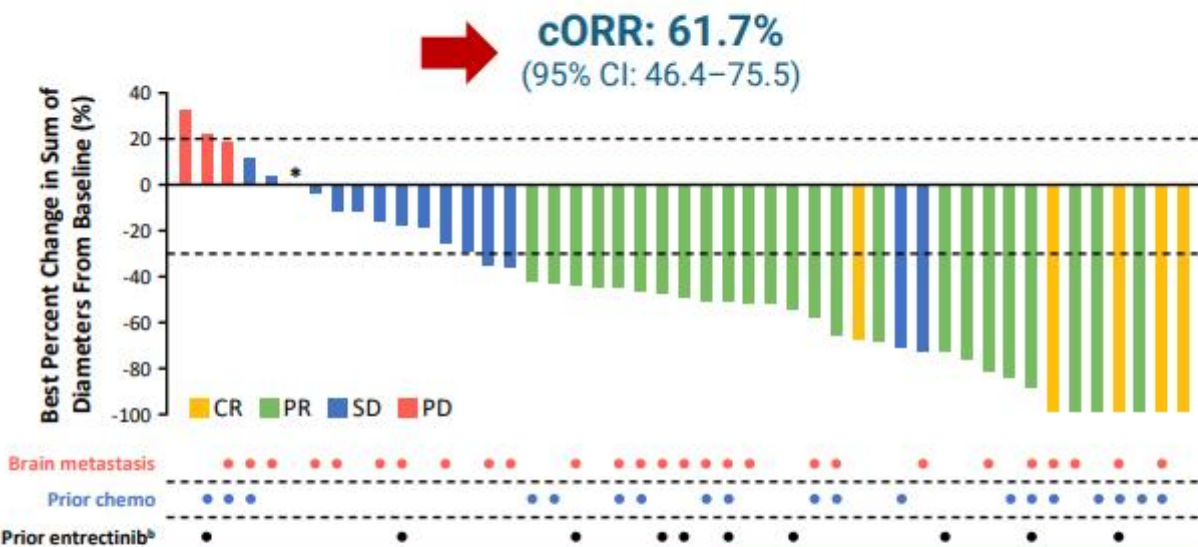


Efficacy	TKI-naïve (n=54)
cORR: prior chemo, yes / no, n/N (%)	9/10 (90.0) / 37/44 (84.1)
Median TTR, ^c mo (95% CI)	1.4 (1.3–1.4)
IC efficacy	(n=9) ^d
IC-ORR, % (95% CI)	66.7 (29.9–92.5)

Data cutoff: October 28, 2024. BOR, best overall response; CI, confidence interval; CR, complete response; mo, months; NE, not evaluable; NR, not reached; PD, progressive disease; PR, partial response; SD, stable disease.
^aResponse evaluable population includes patients with ≥1 measurable lesion at baseline who received ≥1 dose of taletrectinib. ^bOne patient with cBOR of NE is not shown in the waterfall plot. ^cTTR and DOR reported in responders only.
^dPatients with ≥1 measurable brain metastasis at baseline. *One patient with cBOR of SD had a best percent change of 0%.

Taletrectinib: Efficacy Outcomes in TKI-pretreated ROS1+ NSCLC

TKI-pretreated (n=47)^a
Median follow-up: 20.4 mo (range: 8.6–34.5)



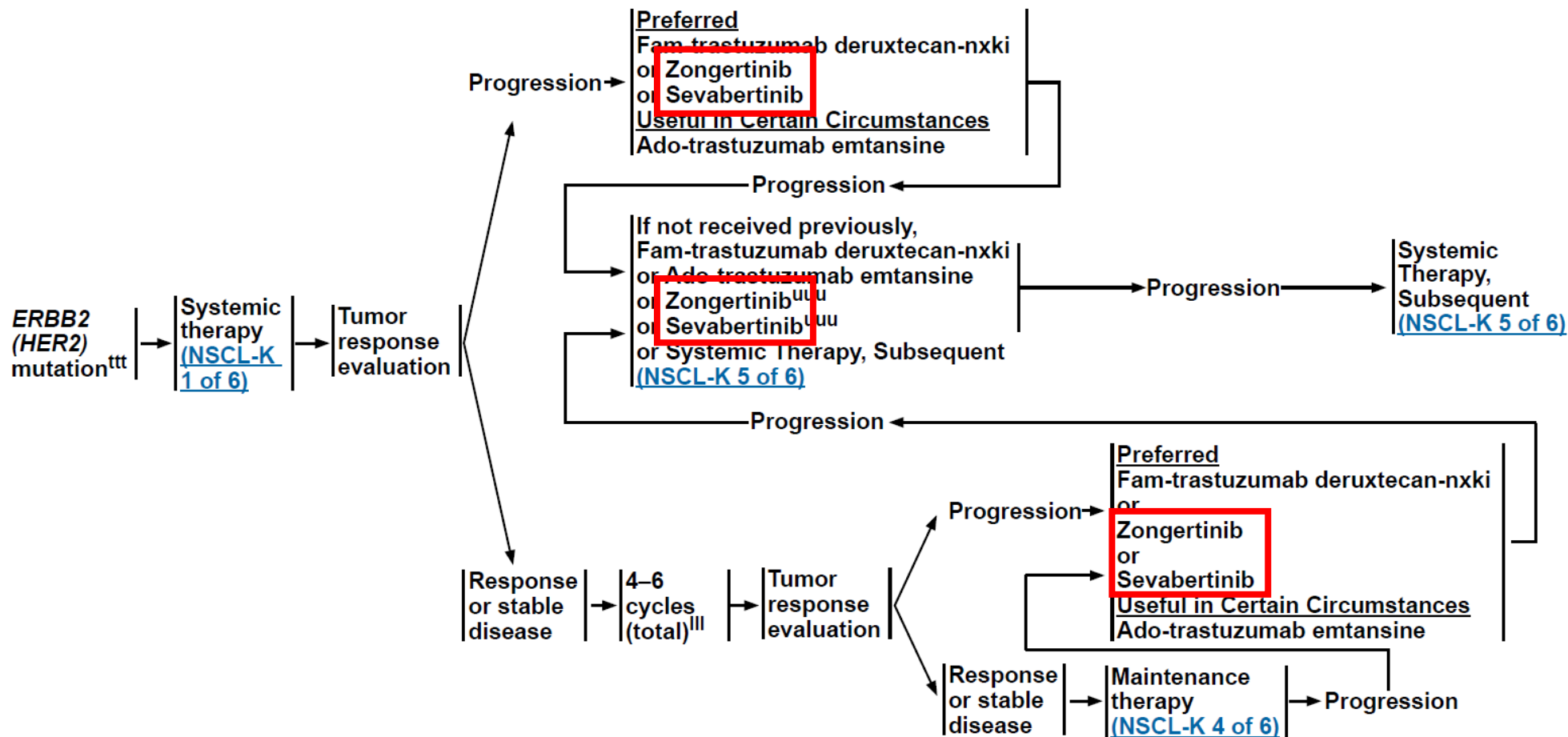
Efficacy	TKI-pretreated (n=47)
cORR: prior chemo, yes / no, n/N (%)	15/19 (78.9) / 14/28 (50.0)
Median TTR, ^c mo (95% CI)	1.4 (1.4–1.6)
IC efficacy	(n=16) ^d
IC-ORR, % (95% CI)	56.3 (29.9–80.3)

Data cutoff: October 28, 2024. ^aResponse evaluable population includes patients with ≥ 1 measurable lesion at baseline who received ≥ 1 dose of taletrectinib. ^bAll other patients received prior crizotinib. ^cTTR and DOR reported in responders only. ^dPatients with ≥ 1 measurable brain metastasis at baseline. *One patient with cBOR of SD had a best percent change of 0%.

ERBB2 (HER2) MUTATION^{rr,sss}

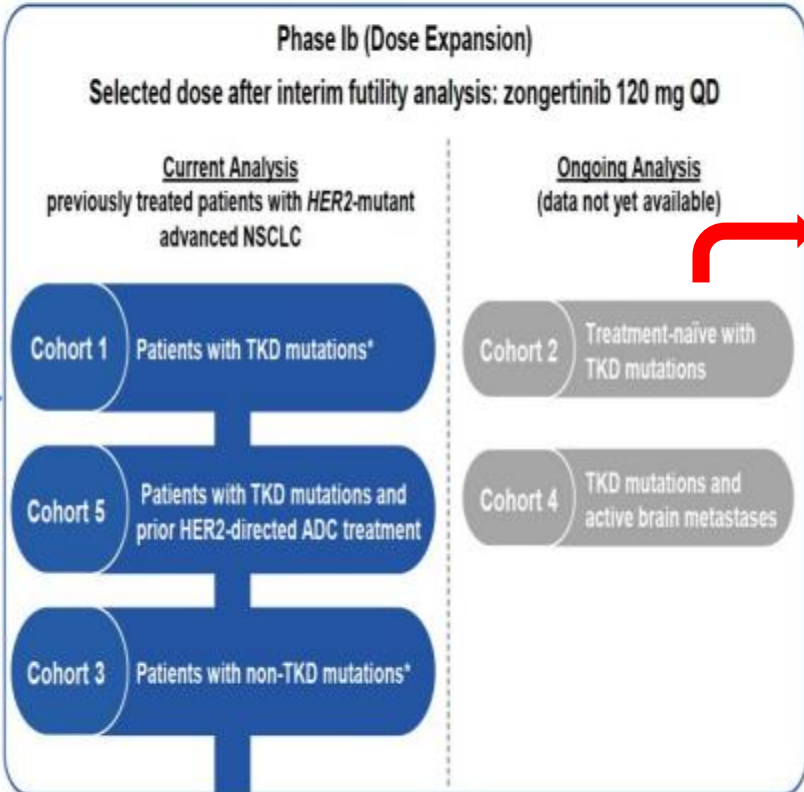
FIRST-LINE THERAPY

SUBSEQUENT THERAPY^{vv}



BEAMION LUNG-1 PHASE IB

FDA Approved



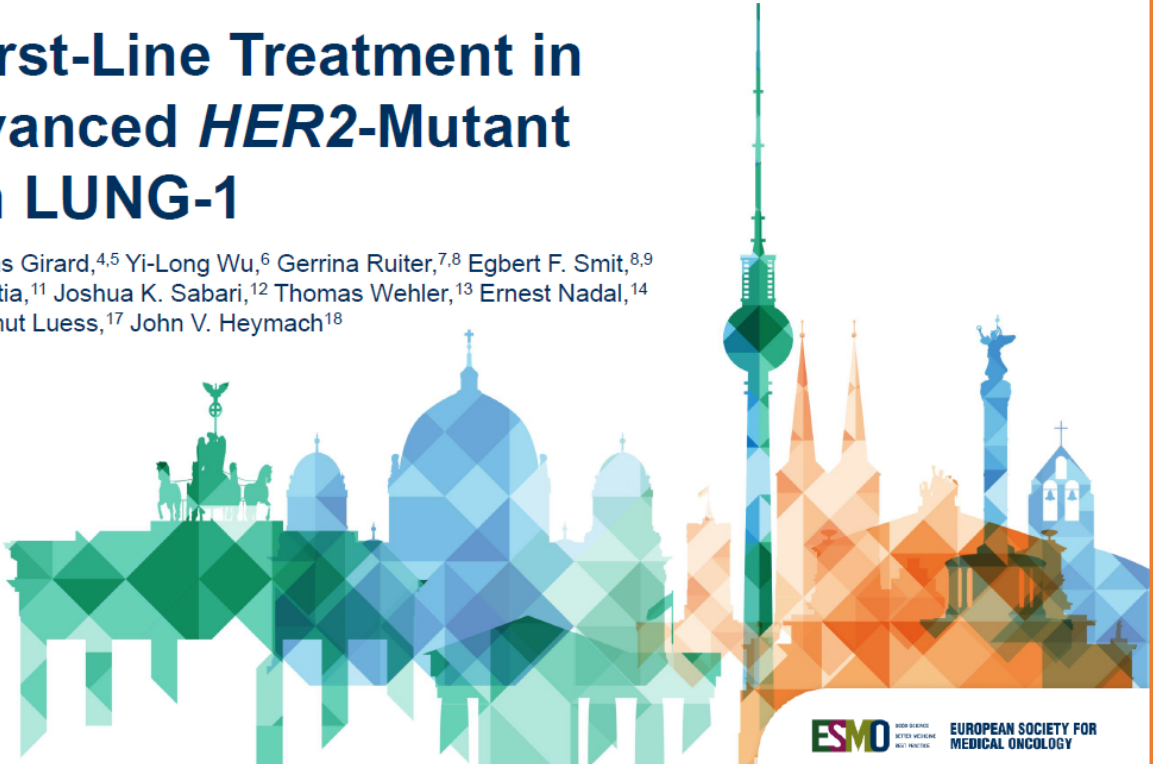
BERLIN 2025 **ESMO** congress

Zongertinib as First-Line Treatment in Patients with Advanced *HER2*-Mutant NSCLC: Beamion LUNG-1

Sanjay Popat,^{1,2} Noboru Yamamoto,³ Nicolas Girard,^{4,5} Yi-Long Wu,⁶ Gerrina Ruiter,^{7,8} Egbert F. Smit,^{8,9} Kiyotaka Yoh,¹⁰ Hai-Yan Tu,⁶ Jon Zugazagoitia,¹¹ Joshua K. Sabari,¹² Thomas Wehler,¹³ Ernest Nadal,¹⁴ Julia Stöhr,¹⁵ Behbood Sadrolhafari,¹⁶ Hartmut Luess,¹⁷ John V. Heymach¹⁸

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October 17-21, 2025



Heymach J AACR 2025, NEJM 2025

Sevabertinib (BAY 2927088) in advanced *HER2*-mutant non-small cell lung cancer (NSCLC): results from the SOHO-01 study

Xiuning Le, MD, PhD

MD Anderson Cancer Center, Houston, TX, USA

October 17, 2025

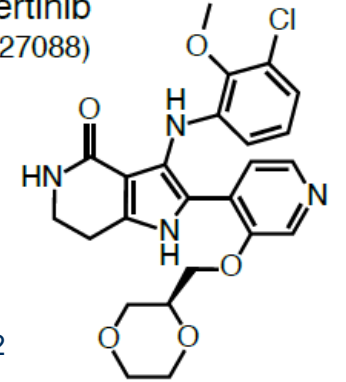
Xiuning Le,¹ Tae Min Kim,² Herbert H. Loong,^{3,4} Arsela Prelaj,⁵ Boon Cher Goh,^{6,7} Lin Li,⁸ Yong Fang,⁹ Shun Lu,¹⁰ Xiaorong Dong,¹¹ Lin Wu,¹² Yuki Shinno,¹³ Gennaro Daniele,¹⁴ Tsung-Ying Yang,¹⁵ Hye Ryun Kim,^{16,17} Gerrina Ruiters,¹⁸ Jun Zhao,¹⁹ Silvia Novello,²⁰ Liyun Miao,²¹ Pasi A. Jänne,²² Koichi Goto,²³ Dominik Rüttinger,²⁴ Tine Descamps,²⁵ Jan Christoph Brase,²⁶ Weichao Bao,²⁷ Rui Li,²⁷ Nicoletta Brega,²⁶ Paolo Grassi,²⁸ Nicolas Girard,²⁹ Daniel Shao-Weng Tan,^{30,31} for the SOHO-01 investigators

¹MD Anderson Cancer Center, Houston, TX, USA; ²Seoul National University Hospital, Seoul National University College of Medicine, Seoul, South Korea; ³Department of Clinical Oncology, The Chinese University of Hong Kong, Hong Kong SAR, China; ⁴Phase 1 Clinical Trial Centre, The Chinese University of Hong Kong, Hong Kong SAR, China; ⁵Oncologia Medica Toracica Dept., Fondazione IRCCS - Istituto Nazionale dei Tumori, Milan, Italy; ⁶Department of Hematology-Oncology, National University Cancer Institute, Singapore, Singapore; ⁷Cancer Science Institute of Singapore, National University of Singapore, Singapore, Singapore; ⁸Department of Medical Oncology, Beijing Hospital, National Center of Gerontology, Institute of Geriatric Medicine, Chinese Academy of Medical Sciences, Beijing, China; ⁹Sir Run Run Shaw Hospital, Zhejiang University School of Medicine, Hangzhou, China; ¹⁰Shanghai Chest Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China; ¹¹Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China; ¹²Department of Thoracic Medical Oncology, Hunan Cancer Hospital, The Affiliated Cancer Hospital of Xiangya School of Medicine, Central South University, Changsha, China; ¹³National Cancer Center Hospital, Chuo-ku, Tokyo, Japan; ¹⁴Phase 1 Unit, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy; ¹⁵Department of Chest Medicine, Taichung Veterans General Hospital, Taichung, Taiwan; ¹⁶Division of Medical Oncology, Department of Internal Medicine, Yonsei Cancer Center, Seoul, South Korea; ¹⁷Graduate School of Medical Science, Brain Korea 21 Project, Yonsei University College of Medicine, Seoul, South Korea; ¹⁸Departments of Clinical Pharmacology and Thoracic Oncology, Netherlands Cancer Institute, Amsterdam, Netherlands; ¹⁹Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education/Beijing), Department I of Thoracic Oncology, Peking University Cancer Hospital & Institute, Beijing, China; ²⁰Department of Oncology, Azienda Ospedaliero-Universitaria San Luigi Gonzaga, Orbassano, Turin, Italy; ²¹Nanjing Drum Tower Hospital, The Affiliated Hospital of Nanjing University Medical School, Nanjing, China; ²²Lowe Center for Thoracic Oncology, Dana-Farber Cancer Institute, Boston, MA, USA; ²³National Cancer Center Hospital East, Kashiwa, Japan; ²⁴Bayer AG, Berlin, Germany; ²⁵Bayer plc, Reading, UK; ²⁶Bayer Consumer Care AG, Basel, Switzerland; ²⁷Bayer HealthCare Pharmaceuticals, Inc., Whippany, NJ, USA; ²⁸Bayer S.p.A., Milan, Italy; ²⁹Institut Curie, Paris, France; ³⁰National Cancer Centre Singapore, Singapore, Singapore; ³¹Duke-NUS Medical School, Singapore, Singapore



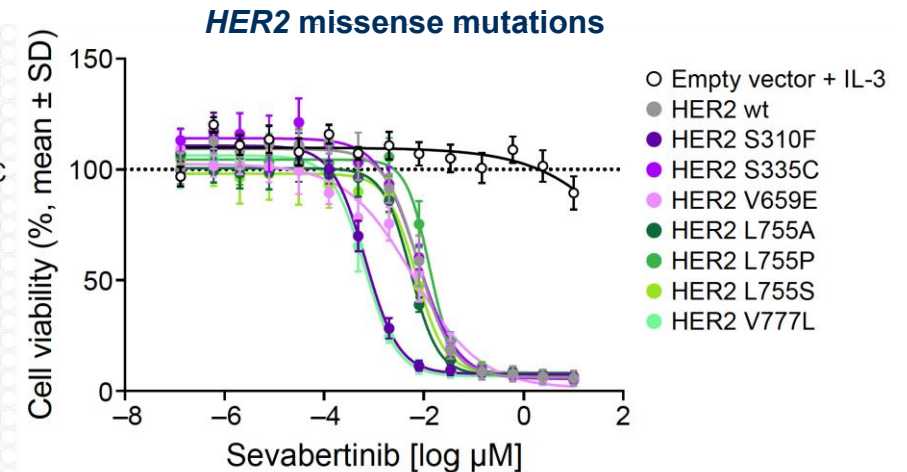
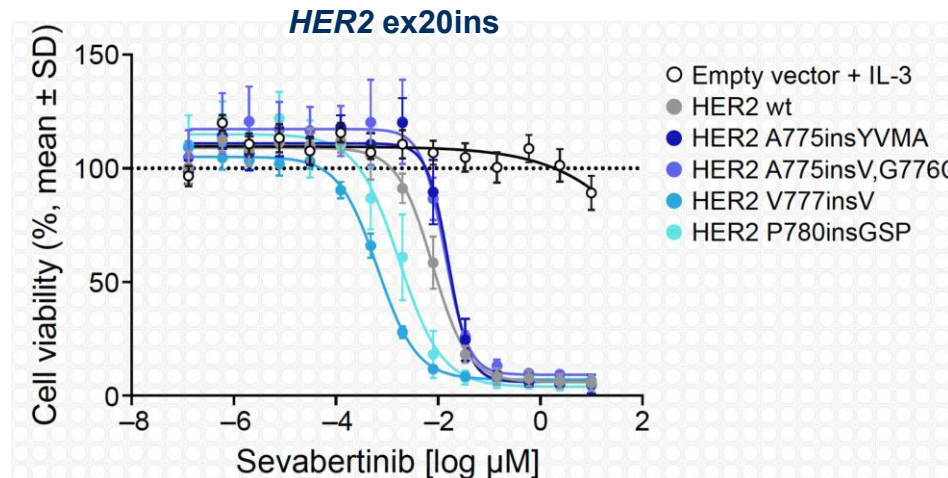
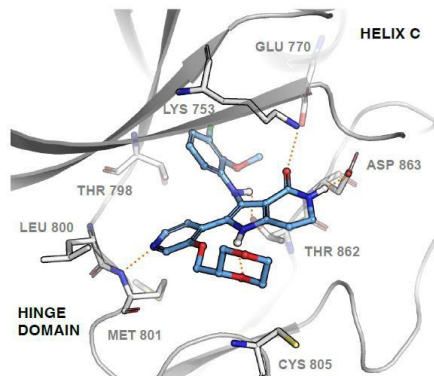
Sevabertinib is an oral, reversible HER2 TKI

Sevabertinib
(BAY 2927088)



- Sevabertinib is an oral, reversible TKI that potently inhibits activating *HER2* (*ERBB2*) mutations and has demonstrated efficacy against *HER2* insertions and missense mutations, secondary resistance including irreversible binding site mutation (C805S), and gatekeeper mutations (T798M/T798I)¹
- Sevabertinib has anti-tumor activity and a manageable safety profile in patients with *HER2*-mutant NSCLC²
- In May 2025, the FDA granted NDA Priority Review for sevabertinib in patients with previously treated *HER2*-mutant NSCLC³

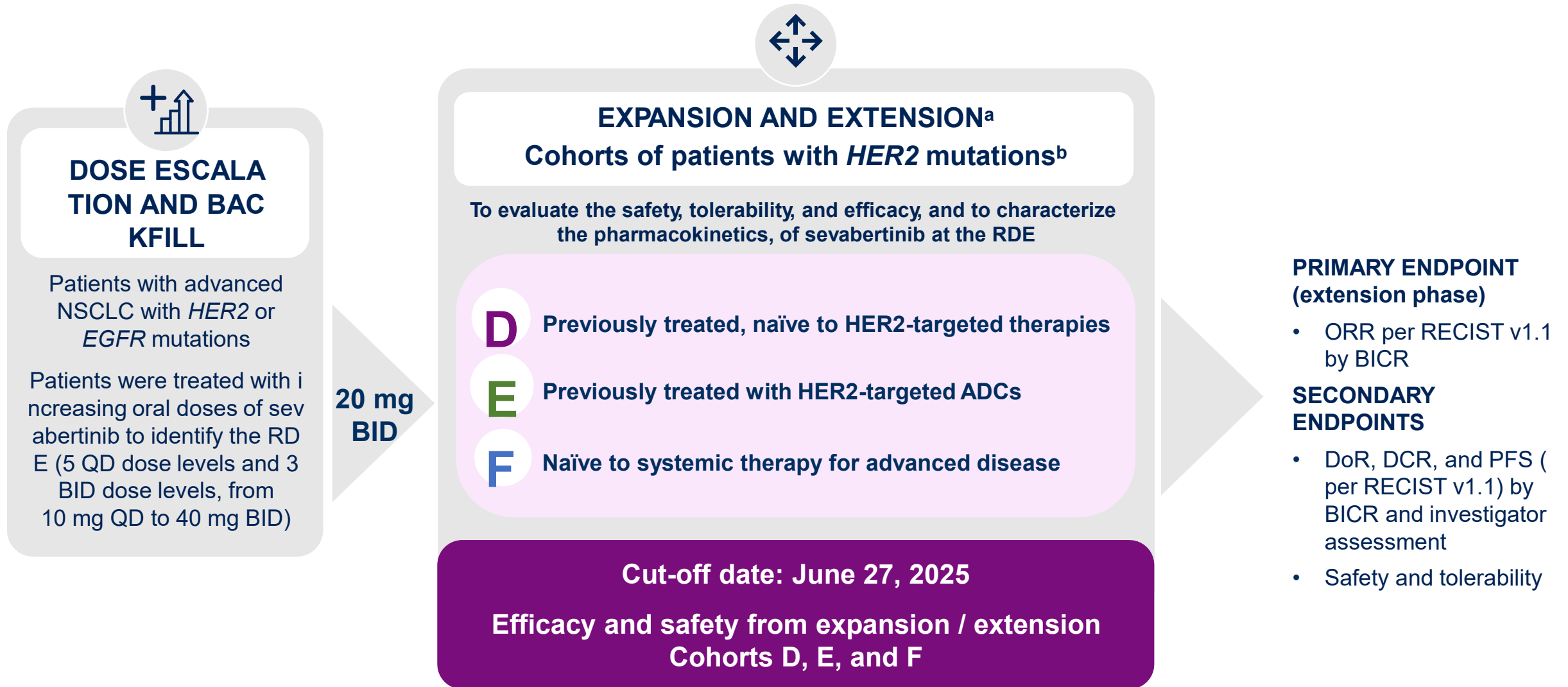
Sevabertinib proposed binding mode



Figures adapted with permission from Siegel F et al. *Cancer Discov* 2025; doi: 10.1158/2159-8290.CD-25-0605

1. Siegel F et al. *Cancer Discov* 2025; doi: 10.1158/2159-8290.CD-25-0605; 2. Girard N et al. *J Clin Oncol* 2024; 42 (17 Suppl): LBA8598; 3. Bayer. Sevabertinib (BAY 2927088) granted FDA Priority Review for the treatment of patients with HER2-mutant non-small cell lung cancer. May 28, 2025. <https://www.bayer.com/en/us/news-stories/sevabertinib/>. Accessed October 2025

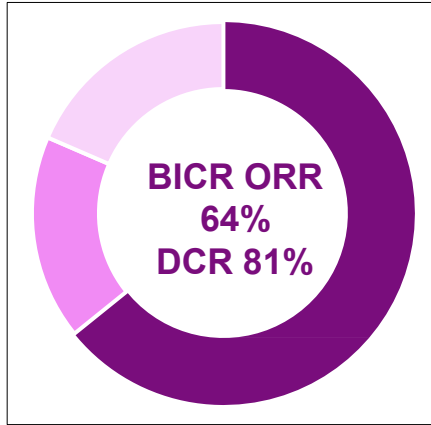
SOHO-01 study design (NCT05099172)



^aPatients from dose escalation / backfill treated with 20 mg BID and who met the same eligibility criteria were combined for statistical analysis; ^bCohorts of patients with *EGFR* mutations are not shown

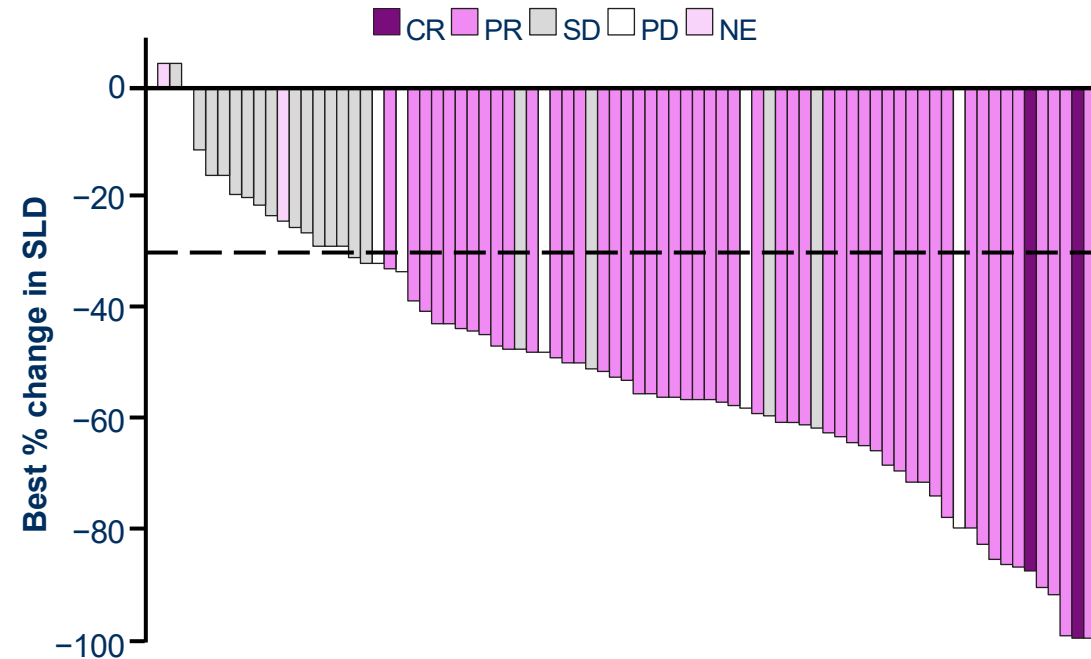
Cohort D (previously treated, n=81): Objective response (ORR) by BICR

Median follow-up: 13.8 months (range 1-32)



<i>n</i> (%)	
CR	2 (2)
PR	50 (62)
SD	20 (25)
PD	6 (7)
Not evaluable ^a	3 (4)
ORR ^b [95% CI]	52 (64) [53, 75]
DCR ^c [95% CI]	66 (81) [71, 89]
DoR, median (months) [95% CI]	9.2 [6.3, 13.5]
PFS, median (months) [95% CI]	8.3 [6.9, 12.3]

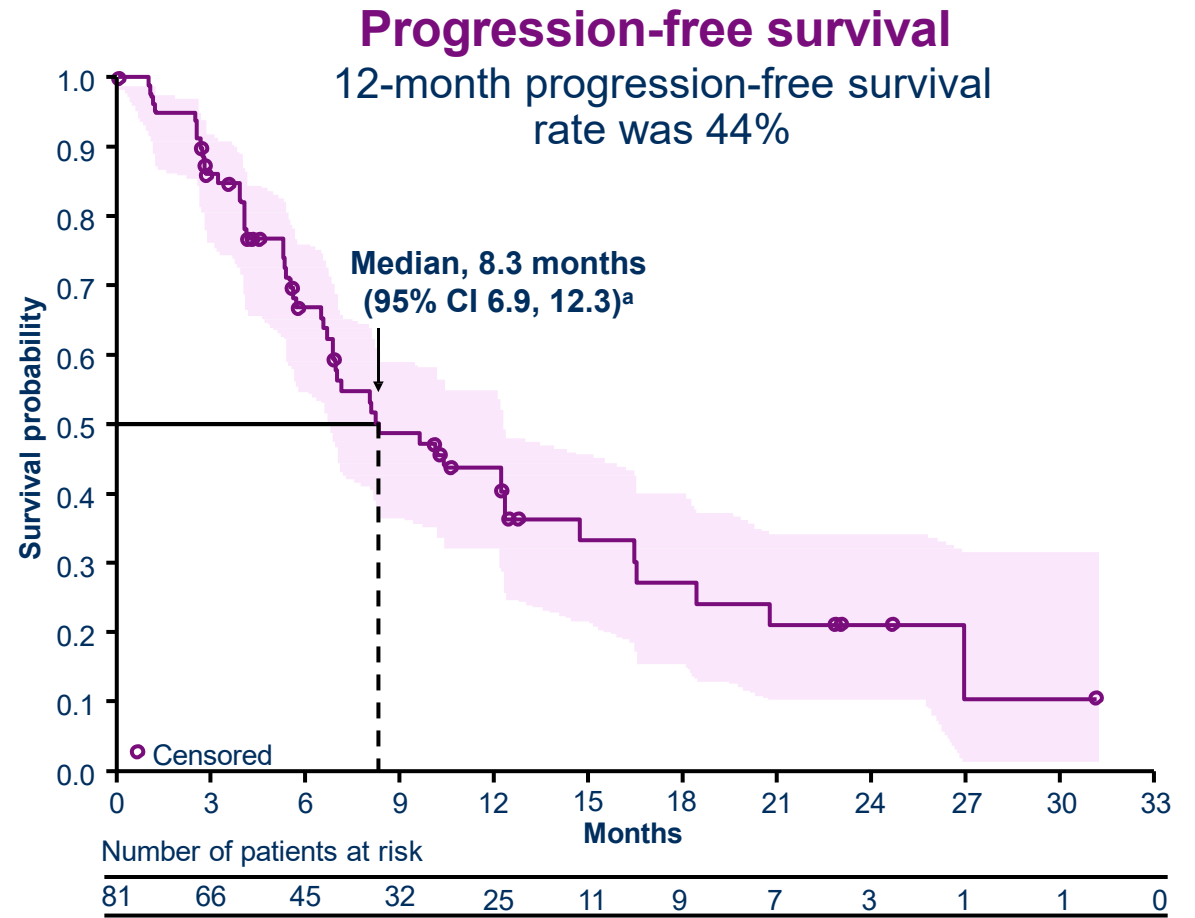
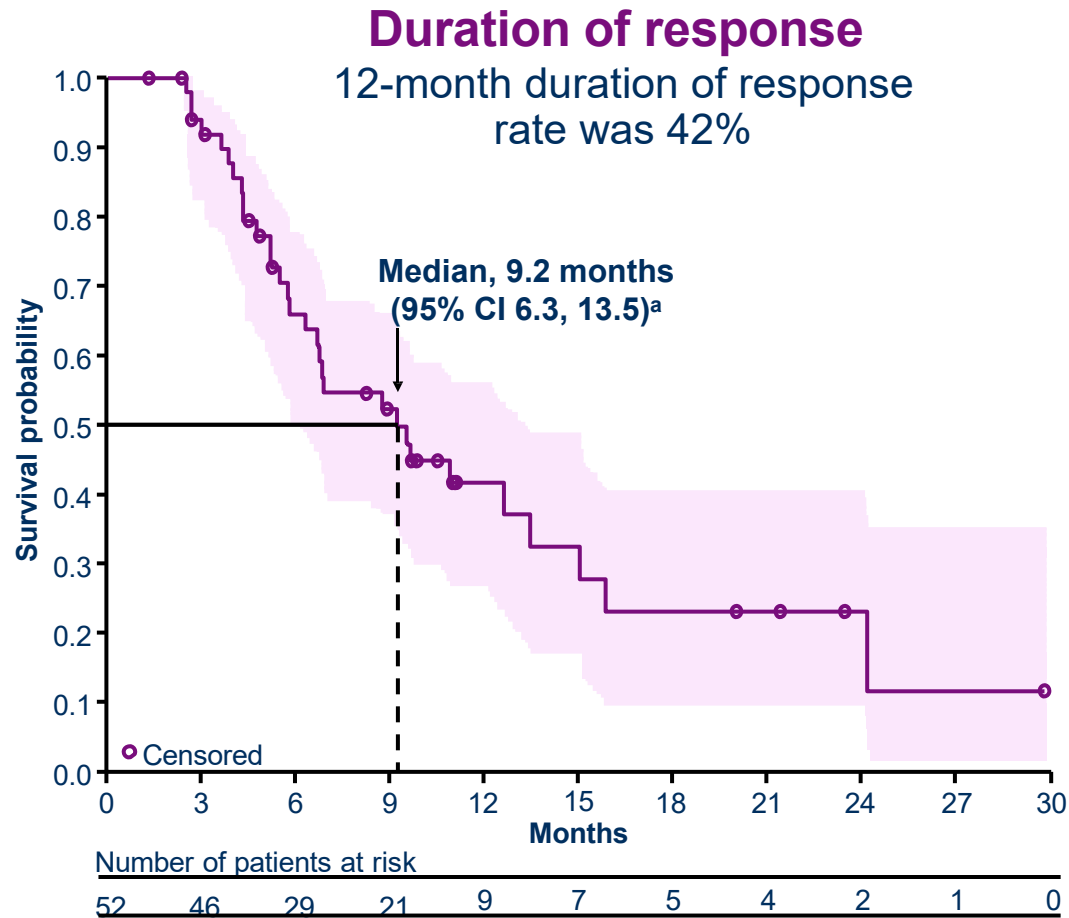
Best overall response (RECIST v1.1 by BICR)



Analysis cut-off date was June 27, 2025. Data for patients without target lesion measurements are not shown in the waterfall plot. ^aRequirement for CR, PR, SD, or PD was not met; ^bConfirmed CR or confirmed PR; ^cConfirmed CR, confirmed PR, or SD for ≥12 weeks

Cohort D (previously treated, n=81): DoR and PFS by BICR

Median follow-up: 13.8 months (range 1-32)



Analysis cut-off date was June 27, 2025

^aShading represents 95% CI

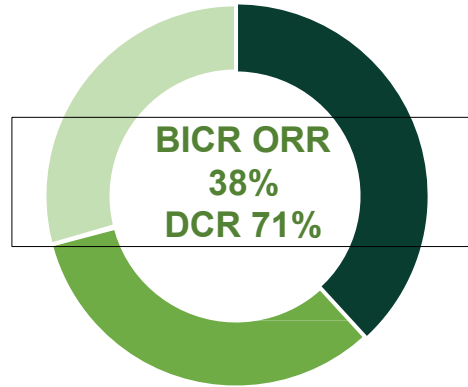
Presented by: Xiuning Le, MD, PhD

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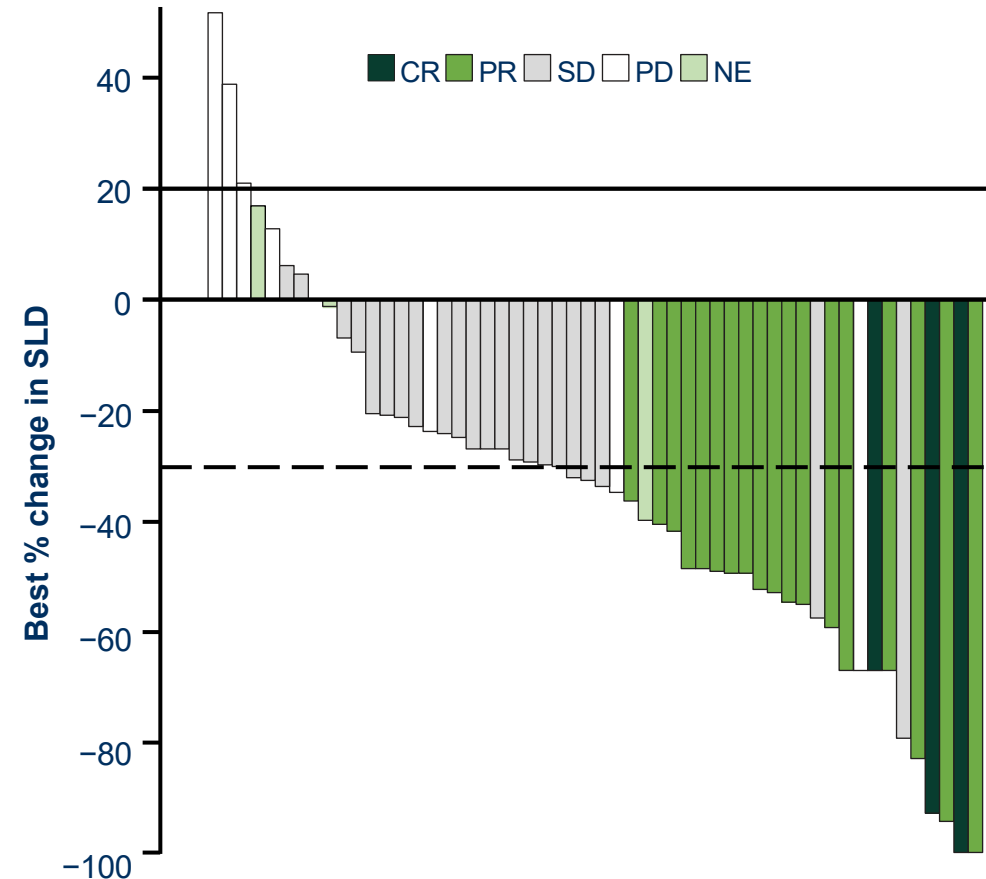
Cohort E (previous HER2 ADCs, n=55): Objective response by BICR

Median follow-up: 11.6 months (range 2-22)



n (%)	
CR	3 (5)
PR	18 (33)
SD	23 (42)
PD	7 (13)
Not evaluable ^a	4 (7)
ORR ^b [95% CI]	21 (38) [25, 52]
DCR ^c [95% CI]	39 (71) [57, 82]
DoR, median (months) [95% CI]	8.5 [5.6, 16.4]
PFS, median (months) [95% CI]	5.5 [4.3, 8.3]

Best overall response (RECIST v1.1 by BICR)



• Patients in Cohort E who had previously received trastuzumab deruxtecan achieved an ORR of 34% (14/41)

Analysis cut-off date was June 27, 2025. Data for patients without target lesion measurements are not shown in the waterfall plot

^aRequirement for CR, PR, SD, or PD was not met; ^bConfirmed CR or confirmed PR; ^cConfirmed CR, confirmed PR, or SD for ≥12 weeks

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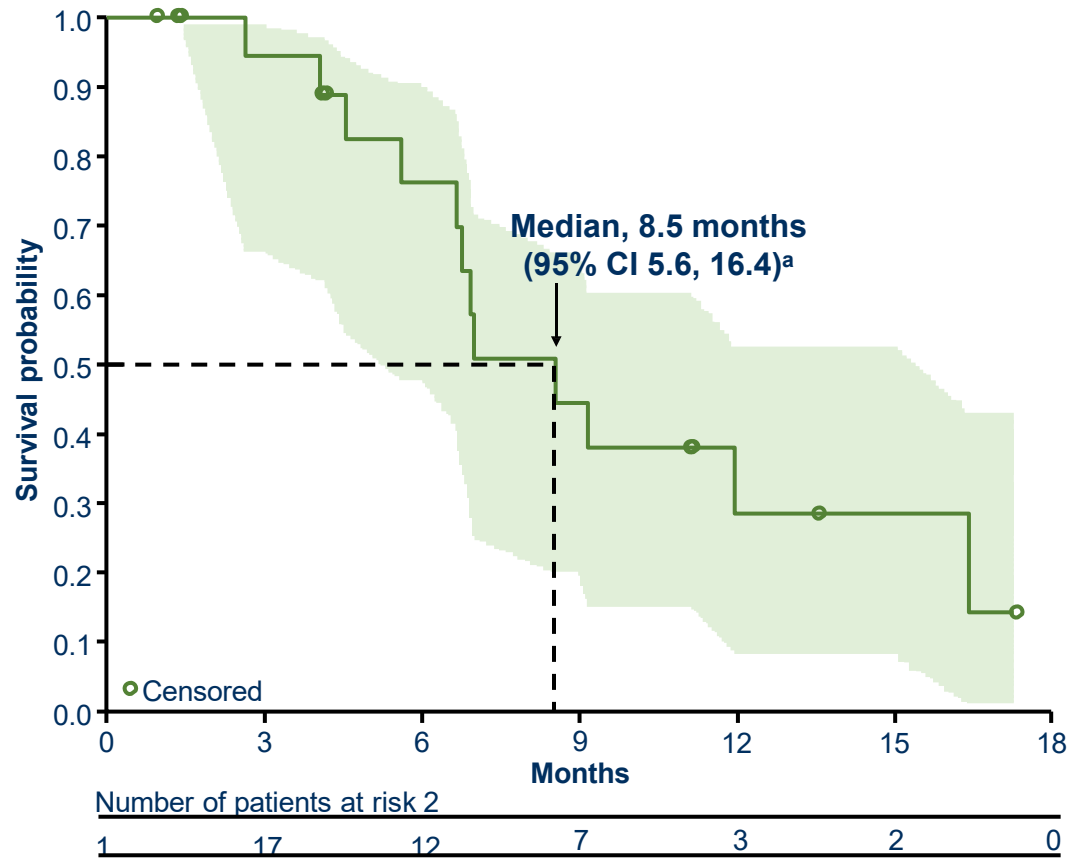
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Cohort E (previous HER2 ADCs, $n=55$): DoR and PFS by BICR

Median follow-up: 11.6 months (range 2-22)

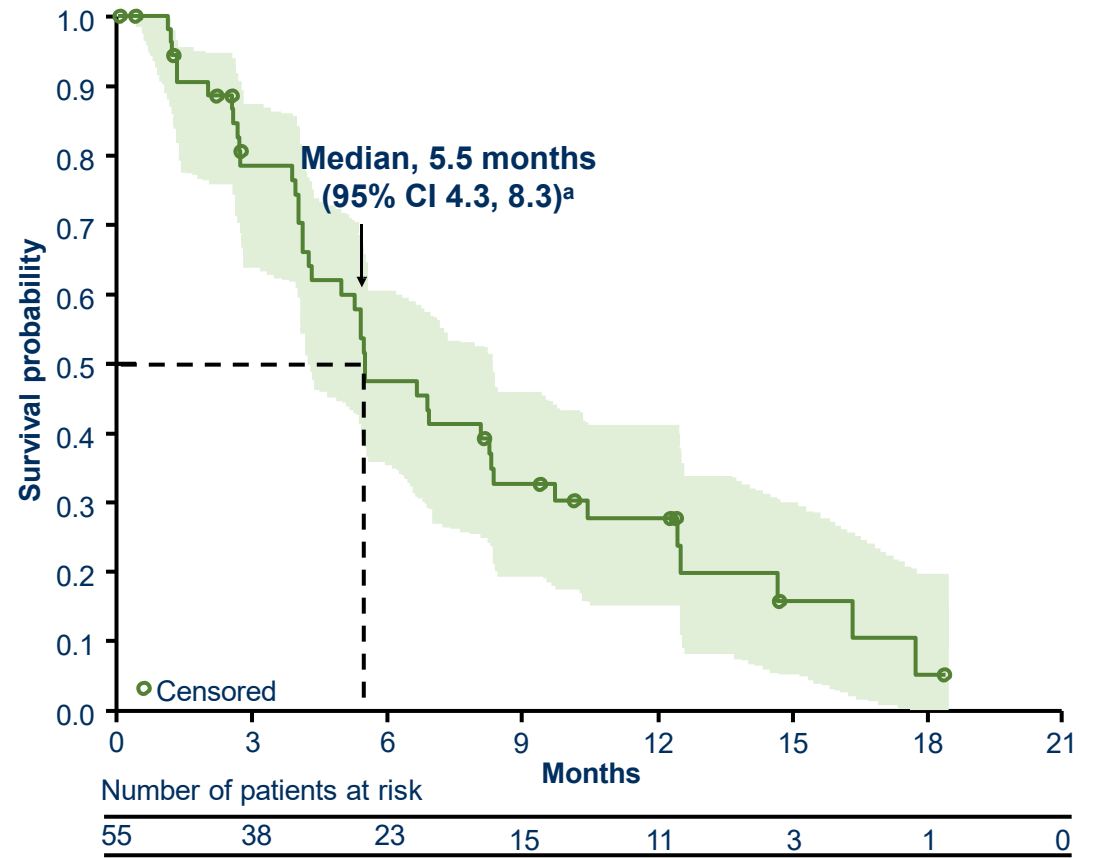
Duration of response

12-month duration of response rate was 29%



Progression-free survival

12-month progression-free survival rate was 28%



Analysis cut-off date was June 27, 2025

^aShading represents 95% CI

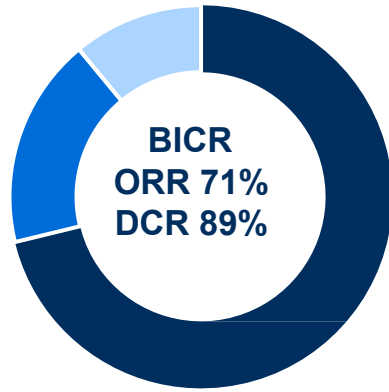
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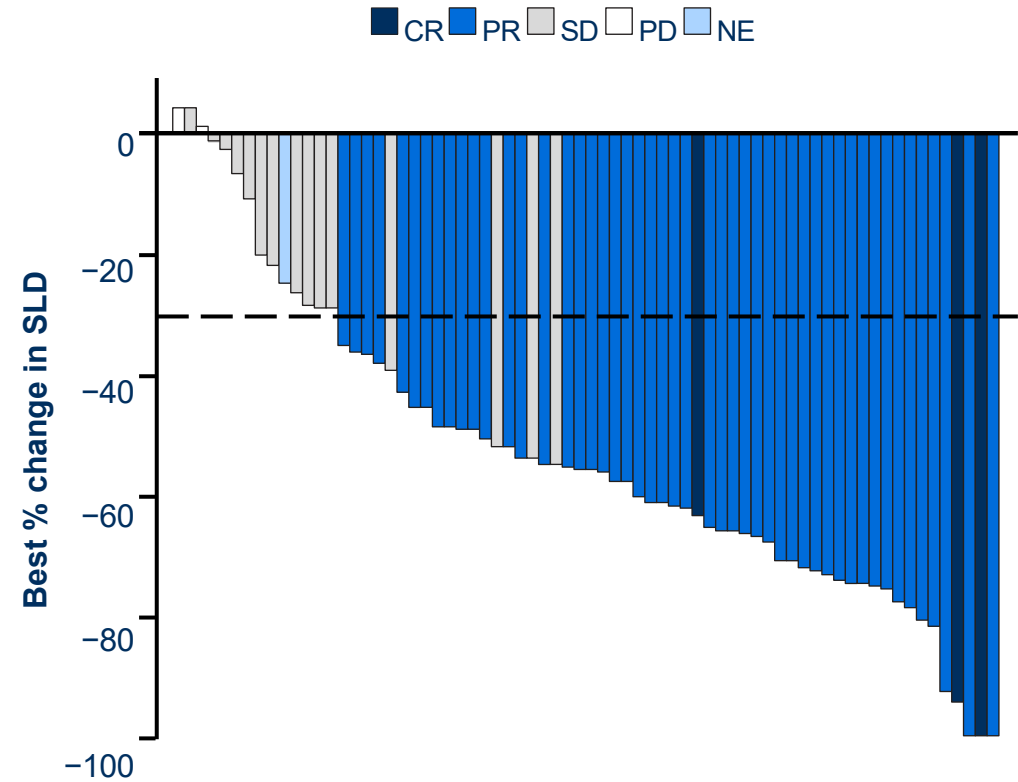
Cohort F (treatment-naïve, $n=73$): Objective response by BICR

Median follow-up: 9.9 months (range <1-15)



<i>n</i> (%)	
CR	3 (4)
PR	49 (67)
SD	16 (22)
PD	2 (3)
Not evaluable ^a	1 (1)
Not available ^b	2 (3)
ORR ^c [95% CI]	52 (71) [59, 81]
DCR ^d [95% CI]	65 (89) [80, 95]
DoR, median (months) [95% CI]	11.0 [8.1, not estimable]
PFS, median (months) [95% CI]	Not estimable [9.6, not estimable]

Best overall response (RECIST v1.1 by BICR)



Analysis cut-off date was June 27, 2025. Data for patients without target lesion measurements are not shown in the waterfall plot

^aRequirement for CR, PR, SD, or PD was not met; ^bPatients who have no post-baseline tumor assessment, but who discontinued due to a drug-related toxicity, death, or progression by clinical judgment before disease was re-evaluated and were therefore considered evaluable (considered as non-responder); ^cConfirmed CR or confirmed PR; ^dConfirmed CR, confirmed PR, or SD for ≥ 12 week

^s

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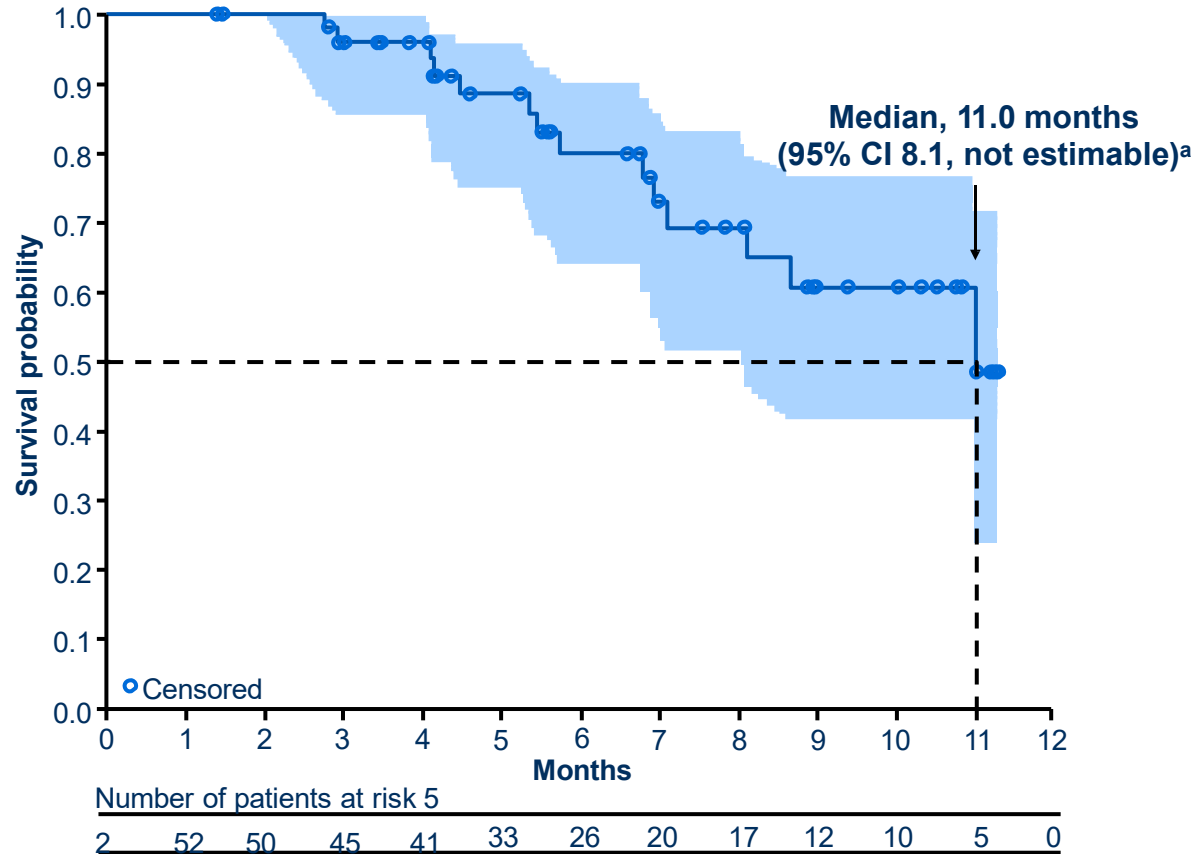
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Cohort F (treatment-naïve, $n=73$): DoR and PFS by BICR

Median follow-up: 9.9 months (range <1-15)

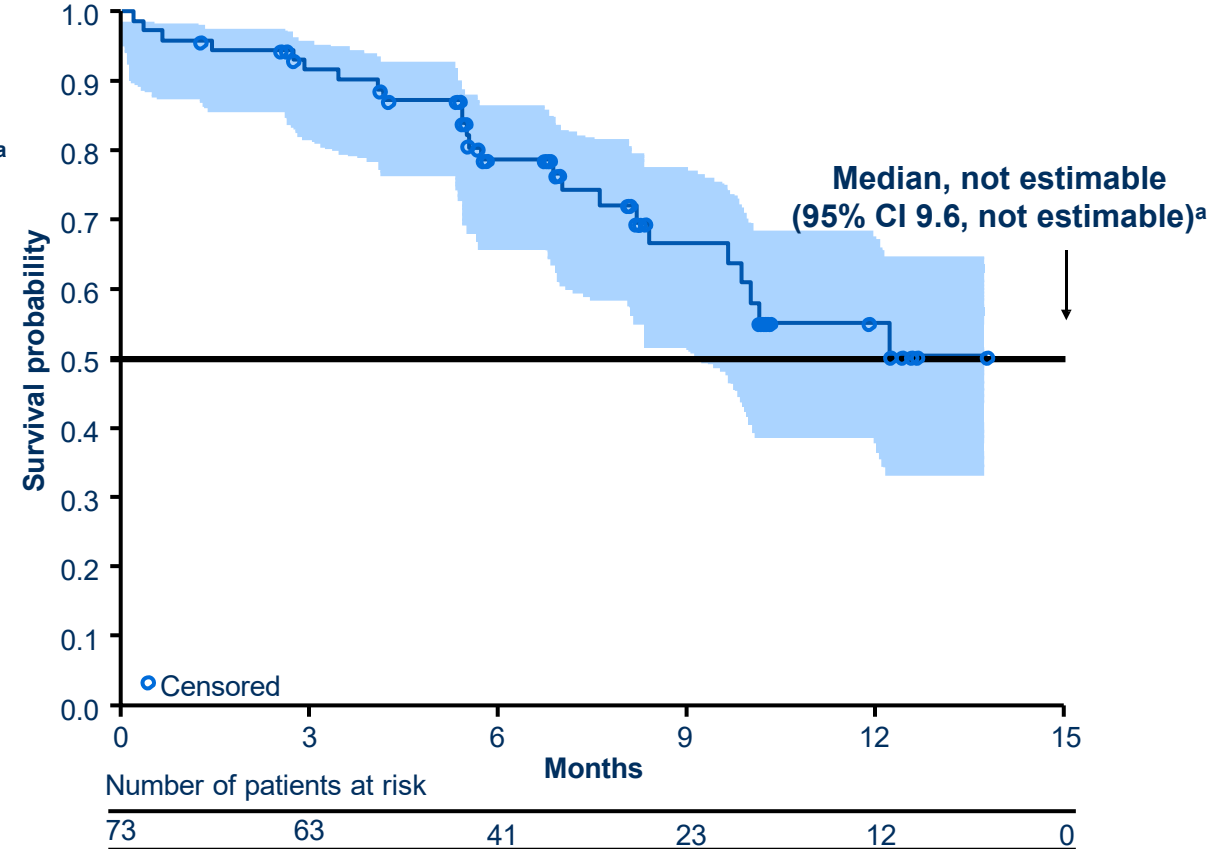
Duration of response

12-month duration of response rate was not estimable due to censored data
38 patients (73%) were censored



Progression-free survival

12-month progression-free survival rate was 55%
49 patients (67%) were censored



Analysis cut-off date was June 27, 2025

^aShading represents 95% CI

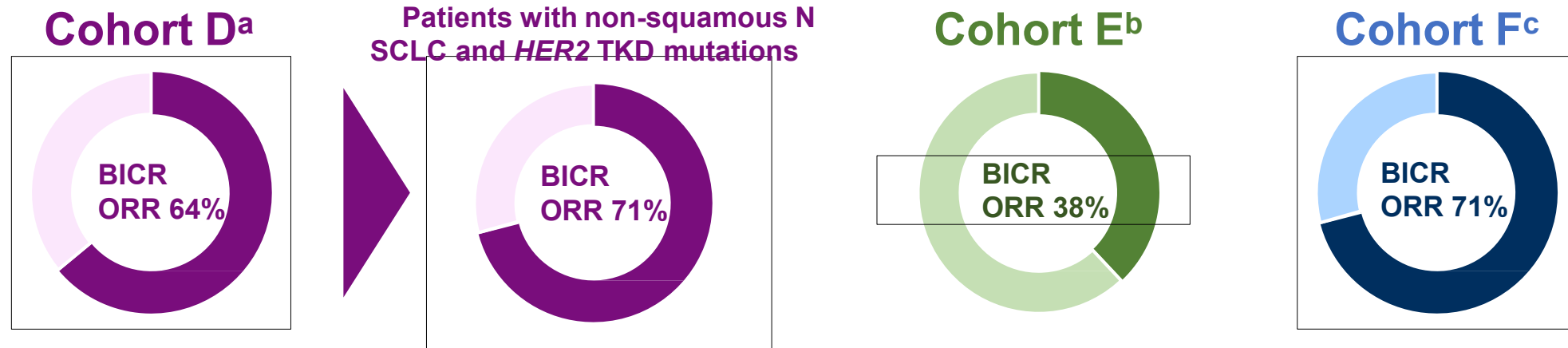
Presented by: Xiuning Le, MD, PhD

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Conclusions

- Sevabertinib demonstrated robust and durable responses in patients with *HER2*-mutant advanced NSCLC in both pretreated and first-line settings



- The most common side effect of sevabertinib was diarrhea, which was manageable; there were no reported cases of interstitial lung disease (ILD) or pneumonitis
- These data support sevabertinib as a potential new targeted therapy for patients with *HER2*-mutant NSCLC
- The safety and efficacy of sevabertinib as first-line therapy for locally advanced or metastatic NSCLC with *HER2* mutations are being investigated in the ongoing Phase III, randomized SOHO-02 trial (NCT06452277)

Analysis cut-off date was June 27, 2025

^aPatients were naïve to *HER2*-targeted therapies; ^bPatients were pretreated with *HER2*-targeted ADCs; ^cPatients were naïve to systemic therapy for advanced diseases

^e

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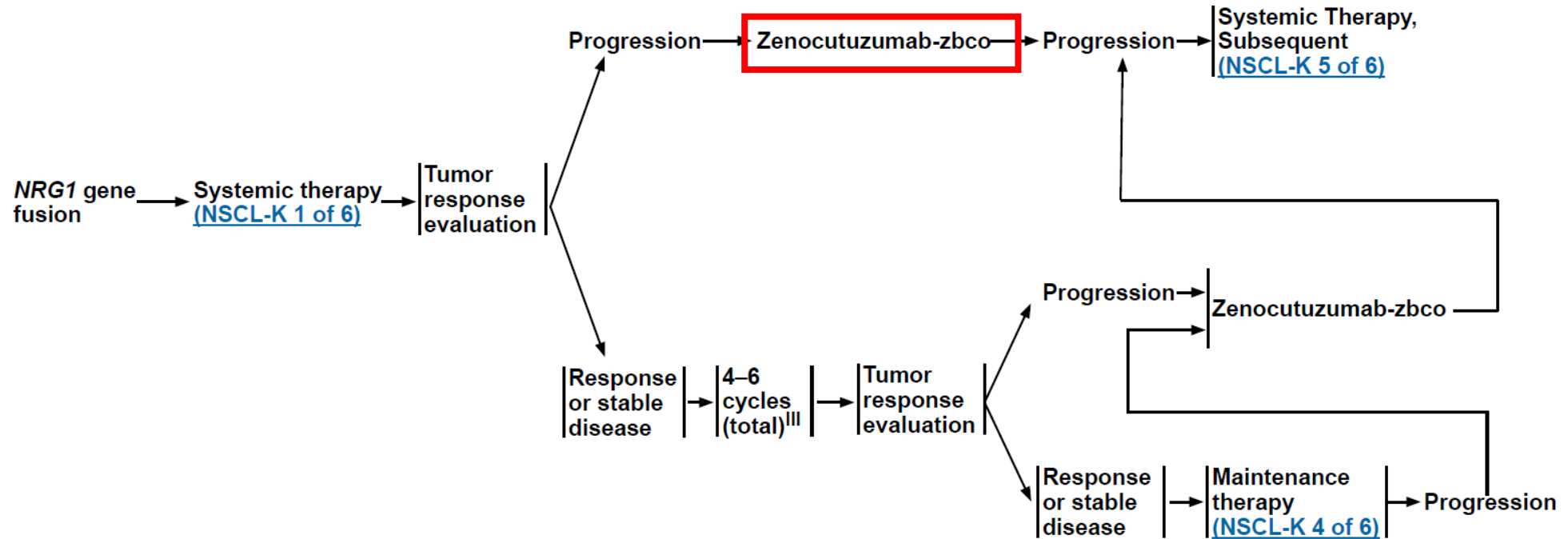
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NCCN Guidelines (NSCLC) ver3. 2026

NRG1 GENE FUSION^{IT}

FIRST-LINE THERAPY

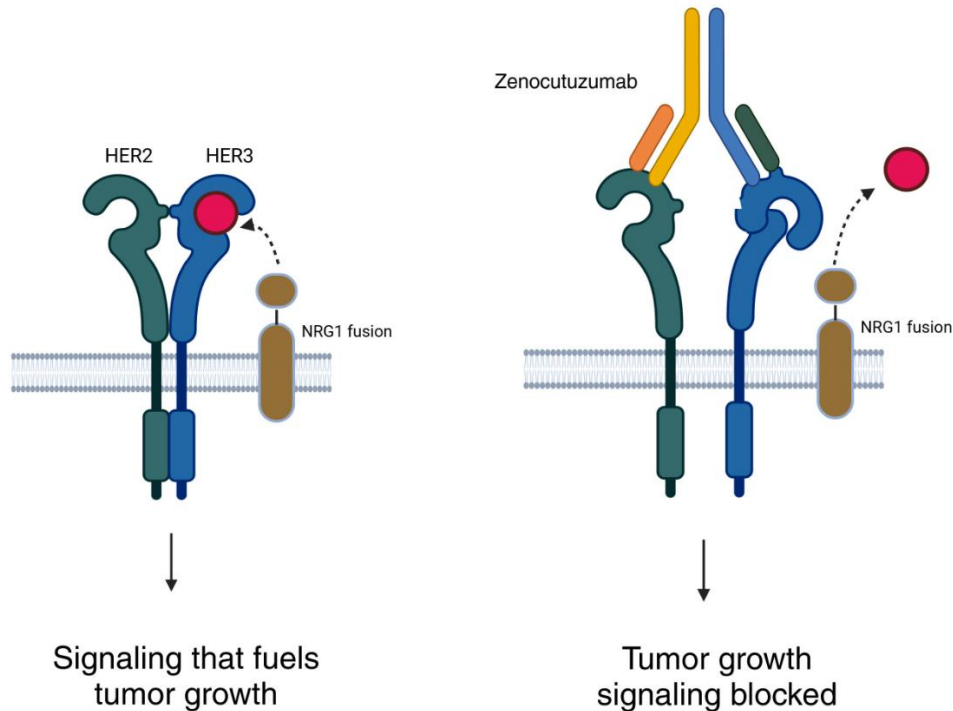
SUBSEQUENT THERAPY^{VV}



Efficacy of Zenocutuzumab in NRG1 Fusion-Positive Cancer (eNRGy study)

Open-label, registrational, Phase 1-2 clinical study

MOA of Zenocutuzumab



Baseline Characteristics

Primary tumor type — no. (%)	
Non-small-cell lung cancer§	94 (58)
Pancreatic cancer¶	36 (22)
Cholangiocarcinoma	10 (6)
Breast cancer	9 (6)
Colorectal cancer	6 (4)
Cancer of unknown primary site	2 (1)
Endometrial cancer	1 (1)
Gastric cancer	1 (1)
Ovarian cancer	1 (1)
Renal-cell carcinoma	1 (1)
Central nervous system metastasis — no. (%)	14 (9)
NRG1 fusion partner — no. (%)	
CD74	56 (35)
SLC3A2	22 (14)
ATP1B1	17 (11)
SDC4	12 (7)
RBPM5	5 (3)
Other**	49 (30)
Median no. of previous systemic therapies (range)	2 (0–10)
Previous systemic treatment — no. (%)	
None	14 (9)
Chemotherapy	142 (88)
Immunotherapy††	62 (39)
Targeted therapy‡‡	44 (27)
Hormonal therapy	8 (5)

Efficacy of Zenocutuzumab in NRG1 Fusion-Positive Cancer (eNRGy study)

Open-label, registrational, Phase 1-2 clinical study

Efficacy of Zenocutuzumab in NRG1 Fusion-Positive Cancer across Multiple Tumor Types

Tumor Type	Investigator Assessment			Blinded Independent Central Review		
	Overall Response†		Median Duration of Response (Range)‡	Overall Response†		Median Duration of Response (Range)‡
	no./total no.	% (95% CI)	mo	no./total no.	% (95% CI)	mo
All NRG1 fusion-positive tumor types§	47/158	30 (23 to 37)	11.1 (1.7+ to 29.5+)	50/160	31 (24 to 39)	11.5 (1.9+ to 29.5+)
Non-small-cell lung cancer	27/93	29 (20 to 39)	12.7 (1.8+ to 29.5+)	29/94	31 (22 to 41)	13.4 (1.9+ to 29.5+)
Pancreatic cancer	15/36	42 (25 to 59)	7.4 (2.1+ to 20.7)	16/36	44 (28 to 62)	9.1 (1.9+ to 16.6)
Cholangiocarcinoma	2/10	20 (2 to 56)	9.2 (7.4 to 11.1)	2/10	20 (2 to 56)	8.3 (3.7 to 12.9)
Breast cancer	1/7¶	14	1.7+	0/8	0	NA
Colorectal cancer	0/6	0	NA	1/6¶	17	11.7
Cancer of unknown primary site	0/2	0	NA	0/2	0	NA
Endometrial cancer	0/1	0	NA	0/1	0	NA
Gastric cancer	1/1¶	100	1.9+	1/1¶	100	1.9+
Ovarian cancer	1/1¶	100	12.8	1/1¶	100	12.8+
Renal-cell carcinoma	0/1	0	NA	0/1	0	NA

Contents

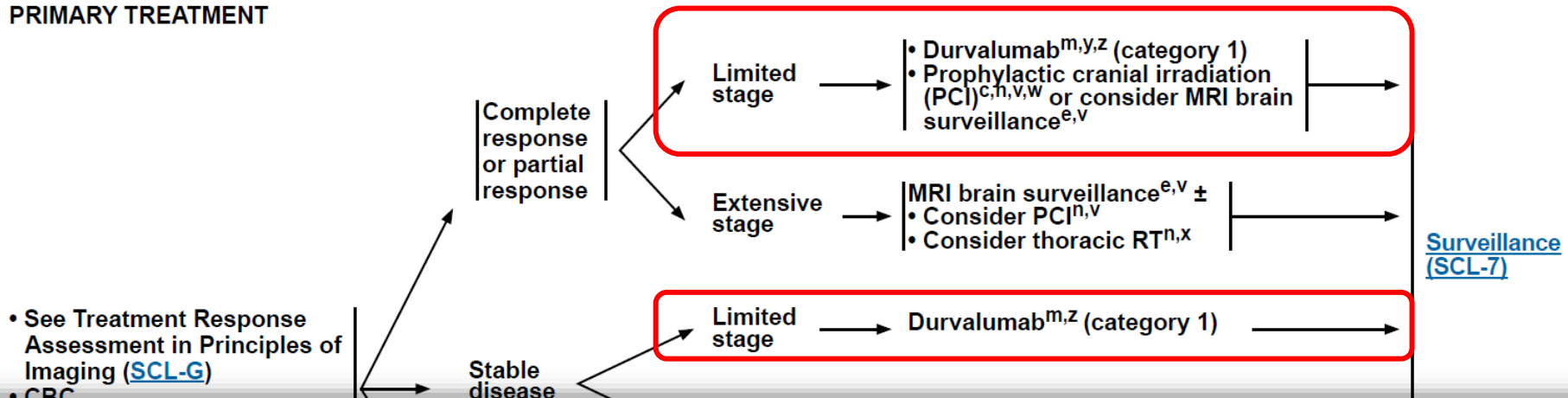
01 Update treatment of NSCLC

02 Update treatment of SCLC

03 Summary

RESPONSE ASSESSMENT FOLLOWING PRIMARY TREATMENT

ADJUVANT THERAPY



PRINCIPLES OF SYSTEMIC THERAPY

PRIMARY OR ADJUVANT THERAPY FOR LIMITED STAGE SCLC:

<p>Four cycles of cytotoxic chemotherapy are recommended. Planned cycle length should be every 21–28 days during concurrent RT. During cytotoxic chemotherapy + RT, Cisplatin/Etoposide is recommended (category 1). The use of myeloid growth factors is not recommended during concurrent cytotoxic chemotherapy therapy plus RT (category 1 for not using GM-CSF).¹</p>
<p>Preferred</p> <ul style="list-style-type: none"> • Cisplatin 75 mg/m² Day 1 and Etoposide 100 mg/m² Days 1, 2, 3² • Cisplatin 60 mg/m² Day 1 and Etoposide 120 mg/m² Days 1, 2, 3³ • Carboplatin area under the curve (AUC) 5–6 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3^{b,4}
<ul style="list-style-type: none"> • Consolidation Therapy <ul style="list-style-type: none"> ▸ Durvalumab 1500 mg Day 1 every 28 Days (category 1)^{a,5}
<p>Other Recommended</p> <ul style="list-style-type: none"> • Cisplatin 25 mg/m² Days 1, 2, 3 and Etoposide 100 mg/m² Days 1, 2, 3²

ADRIATIC: durvalumab as consolidation treatment for patients with limited-stage small-cell lung cancer (LS-SCLC)

David R. Spigel, Ying Cheng, Byoung Chul Cho, Konstantin Laktionov, Jian Fang, Yuanbin Chen, Yoshitaka Zenke, Ki Hyeong Lee, Qiming Wang, Alejandro Navarro, Reyes Bernabe, Eva Buchmeier, John Wen-Cheng Chang, Isamu Okamoto, Sema Sezgin Goksu, Andrzej Badzio, Bethany Gill, Hema Gowda, Haiyi Jiang, Suresh Senan

ADRIATIC study design

Phase 3, randomized, double-blind, placebo-controlled, multicenter, international study (NCT03703297)

- Stage I–III LS-SCLC (stage I/II inoperable)
- WHO PS 0 or 1
- Had not progressed following cCRT*
- PCI* permitted before randomization

cCRT components

- Four cycles of platinum and etoposide (three permitted†)
- RT: 60–66 Gy QD over 6 weeks or 45 Gy BID over 3 weeks
- RT must commence no later than end of cycle 2 of CT

N=730

R[‡]

Stratified by:
Disease stage (I/II vs III)
PCI (yes vs no)

Durvalumab

1500 mg Q4W
N=264

Placebo

Q4W
N=266

Durvalumab + tremelimumab

D 1500 mg Q4W + T 75 mg Q4W for 4 doses,
followed by D 1500 mg Q4W
N=200

Treatment until investigator-determined progression or intolerable toxicity, or for a **maximum of 24 months**

Dual primary endpoints:

- Durvalumab vs placebo
 - OS
 - PFS (by BICR, per RECIST v1.1)

Key secondary endpoints:

- Durvalumab + tremelimumab vs placebo
 - OS
 - PFS (by BICR, per RECIST v1.1)

Other secondary endpoints:

- OS/PFS landmarks
- Safety

*cCRT and PCI treatment, if received per local standard of care, must have been completed within 1–42 days prior to randomization.

†If disease control was achieved and no additional benefit was expected with an additional cycle of chemotherapy, in the opinion of the investigator.

‡The first 600 patients were randomized in a 1:1:1 ratio to the 3 treatment arms; subsequent patients were randomized 1:1 to either durvalumab or placebo.

2024 ASCO
ANNUAL MEETING

#ASCO24

PRESENTED BY: Dr David R. Spigel

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BICR, blinded independent central review; BID, twice daily; CT, chemotherapy; D, durvalumab; PCI, prophylactic cranial irradiation; PS, performance status; Q4W, every 4 weeks; QD, once daily; RECIST, Response Evaluation Criteria in Solid Tumors; RT, radiotherapy; T, tremelimumab; WHO, World Health Organization.

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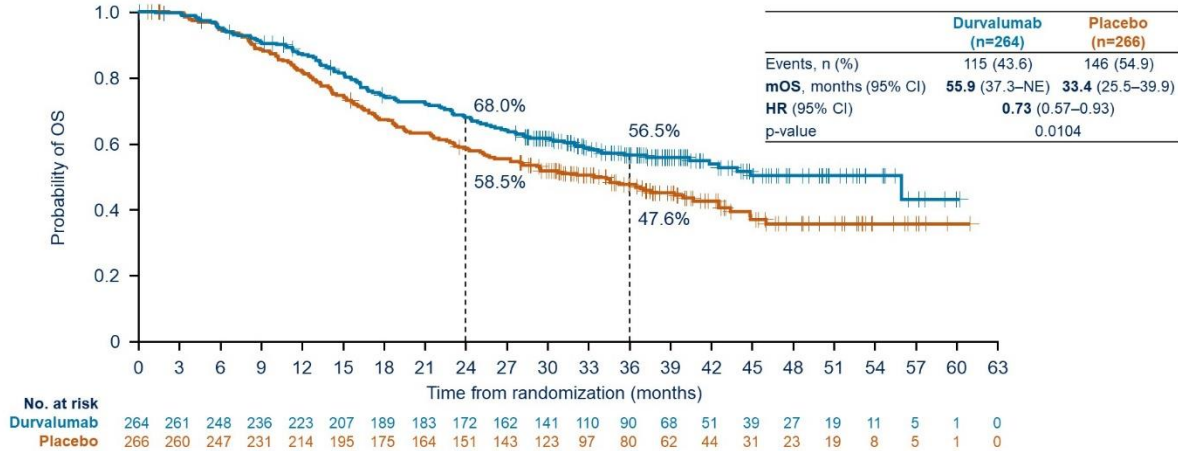
의료에 신뢰를 더하다. JBUH⁺

ADRIATIC study design

Phase 3, randomized, double-blind, placebo-controlled, multicenter, international study (NCT03703297)

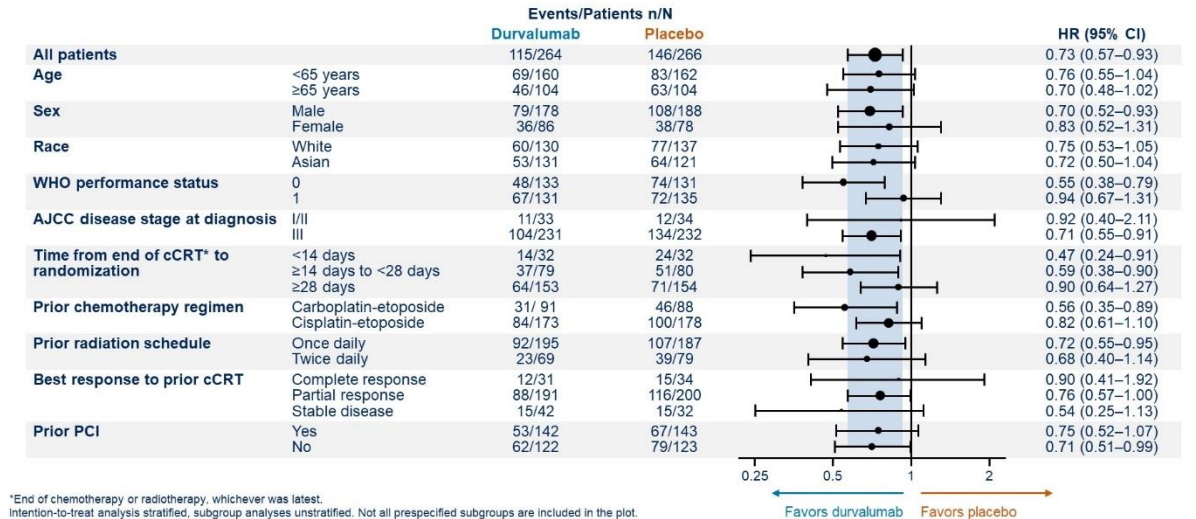
Overall survival (dual primary endpoint)

- Median duration of follow up in censored patients: 37.2 months (range 0.1–60.9)



OS was analyzed using a stratified log-rank test adjusted for receipt of PCI (yes vs no). The significance level for testing OS at this interim analysis was 0.01679 (2-sided) at the overall 4.5% level, allowing for strong alpha control across interim and final analysis timepoints.

OS subgroup analysis

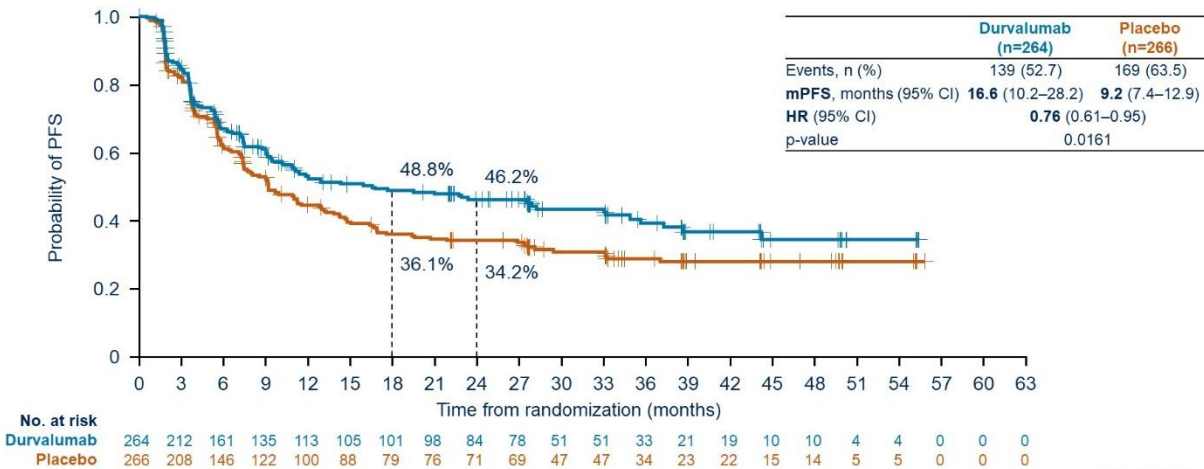


ADRIATIC study design

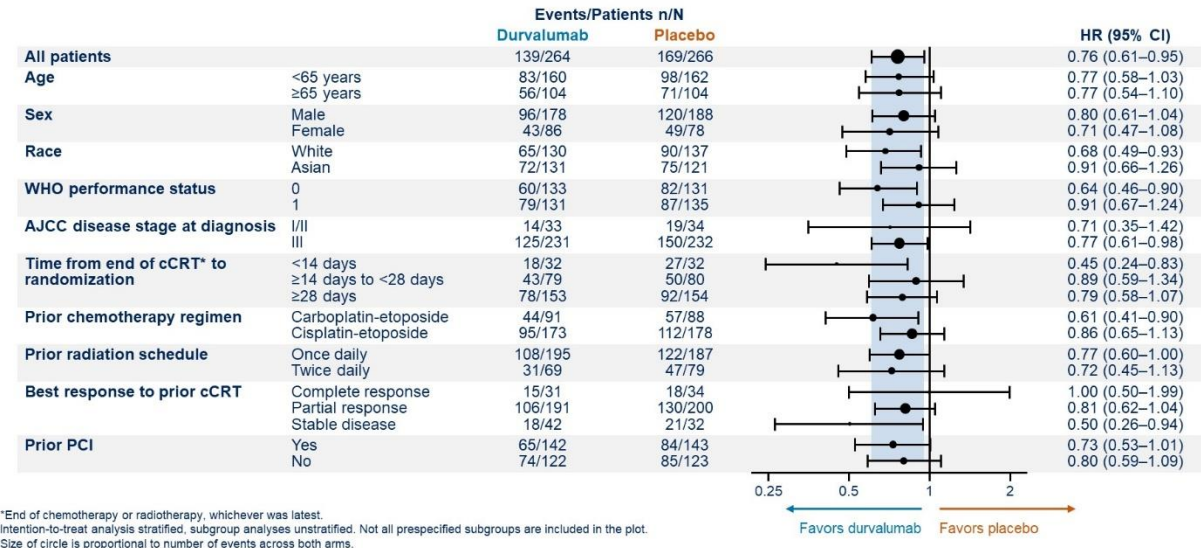
Phase 3, randomized, double-blind, placebo-controlled, multicenter, international study (NCT03703297)

Progression-free survival* (dual primary endpoint)

• Median duration of follow up in censored patients: 27.6 months (range 0.0–55.8)



PFS subgroup analysis



*PFS was analyzed using a stratified log-rank test adjusted for disease stage (I/II vs III) and receipt of PCI (yes vs no). The significance level for testing PFS at this interim analysis was 0.00184 (2-sided) at the 0.5% level, and 0.02805 (2-sided) at the overall 5% level. Statistical significance for PFS was achieved through the recycling multiple testing procedure framework and testing at the 5% (2-sided) alpha level (adjusted for an interim and final analysis).

*End of chemotherapy or radiotherapy, whichever was latest. Intention-to-treat analysis stratified, subgroup analyses unstratified. Not all prespecified subgroups are included in the plot. Size of circle is proportional to number of events across both arms.

Durvalumab as consolidation therapy in limited-stage SCLC (LS-SCLC): Outcomes by prior concurrent chemoradiotherapy (cCRT) regimen and prophylactic cranial irradiation (PCI) use in the ADRIATIC trial

Suresh Senan,¹ David Spigel,² Byoung Chul Cho,³ Konstantin K. Laktionov,⁴ Yoshitaka Zenke,⁵ Ki Hyeong Lee,⁶ Qiming Wang,⁷ Alejandro Navarro,⁸ Eva Lotte Buchmeier,⁹ Sema Sezgin Goksu,¹⁰ Andrzej Badzio,¹¹ Anhui Shi,¹² Davey B. Daniel,¹³ Milada Zemanova,¹⁴ Puneeth Iyengar,¹⁵ Luis Paz-Ares,¹⁶ Leah Szadkowski,¹⁷ Priti Chugh,¹⁸ W. Victoria Lai,¹⁹ Ying Cheng²⁰

¹Amsterdam University Medical Centers, Vrije Universiteit Amsterdam, Cancer Center Amsterdam, Amsterdam, Netherlands; ²Sarah Cannon Research Institute, Nashville, TN, USA; ³Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, South Korea; ⁴Federal State Budgetary Institution “N.N. Blokhin National Medical Research Center of Oncology” of the Ministry of Health of the Russian Federation (N.N. Blokhin NMRCO), Moscow, Russia; ⁵National Cancer Center Hospital East, Kashiwa, Japan; ⁶Chungbuk National University Hospital, Cheongju, South Korea; ⁷The Affiliated Cancer Hospital of Zhengzhou University & Henan Cancer Hospital, Zhengzhou, 450008, China; ⁸Hospital Vall d’Hebron and Vall d’Hebron Institute of Oncology, Barcelona, Spain; ⁹Hospitals of the City of Cologne gGmbH, Cologne, Germany; ¹⁰Akdeniz University Medical Faculty, Antalya, Türkiye; ¹¹Medical University of Gdansk, Gdansk, Poland; ¹²Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education/Beijing), Department of Radiation Oncology, Peking University Cancer Hospital & Institute, Beijing, China; ¹³Tennessee Oncology PLLC, Nashville, TN, USA; ¹⁴First Faculty of Medicine, Charles University, and General University Hospital, Prague, Czech Republic; ¹⁵Memorial Sloan Kettering Cancer Center, New York, NY, USA; ¹⁶Hospital Universitario 12 de Octubre, CNIO-H120 Lung Cancer Unit, Ciberonc and Universidad Complutense, Madrid, Spain; ¹⁷AstraZeneca, Mississauga, ON, Canada; ¹⁸AstraZeneca, Waltham, MA, USA; ¹⁹AstraZeneca, New York, NY, USA; ²⁰Jilin Cancer Hospital, Changchun, China.



Phase 3 ADRIATIC trial **subgroup analyses**

Post-hoc analyses of durvalumab versus placebo in prespecified subgroups defined by PCI use and prior cCRT-related variables

PCI/cCRT components (in line with standards of care)*

- PCI delivered before randomisation, as clinically indicated
- Four cycles of platinum (cisplatin or carboplatin) and etoposide (three permitted[†])
- RT: 60–66 Gy QD over 6 weeks or 45 Gy BID over 3 weeks[‡]

ITT population	Durvalumab (n = 264)	Placebo (n = 266)
Received PCI, %	54	54
Carboplatin / cisplatin CT, [§] %	34 / 66	33 / 67
BID / QD thoracic RT, %	26 / 74	30 / 70

- Analyses of OS, PFS, and safety with durvalumab vs placebo in subgroups of patients who received:
 - PCI or no PCI
 - Carboplatin- or cisplatin-based CT
 - BID or QD RT
- Multivariable analyses: for each subgroup, HRs for durvalumab vs placebo were calculated from an unstratified multivariable Cox proportional hazards model with a treatment-by-subgroup (PCI, CT, or RT) interaction term that was adjusted for PCI, CT, RT, time from cCRT to randomisation, response to cCRT, age, sex, WHO PS, and disease stage

BID, twice daily; CT, chemotherapy; Gy, gray; HR, hazard ratio; ITT, intention-to-treat; QD, once daily; RT, radiotherapy.

*The components and delivery of standard of care may vary based on patient characteristics and region.

[†]If disease control was achieved and no additional benefit was expected with an additional cycle of CT, in the opinion of the investigator.

[‡]RT must commence no later than end of cycle 2 of CT. [§]Based on the first cycle of CT.

Conclusions

- **Consolidation durvalumab consistently improved OS and PFS vs placebo across presented subgroups**
 - Magnitude of benefit with durvalumab vs placebo was consistent within PCI and RT subgroups and varied somewhat between CT subgroups
 - **Multivariable analyses showed no significant interactions between durvalumab treatment effect and PCI or cCRT subgroups**
- **Safety profiles were generally consistent across all subgroups**

Durvalumab demonstrated consistent benefit vs placebo irrespective of prior PCI use and cCRT components, further supporting consolidation durvalumab as the new standard of care in LS-SCLC



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PRIMARY THERAPY FOR EXTENSIVE STAGE SCLC^c:

Four cycles of cytotoxic chemotherapy are recommended, but some patients may receive up to 6 cycles based on response and tolerability after 4 cycles.

Preferred

- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and **Atezolizumab 1200 mg** Day 1 every 21 Days x 4 cycles^{d,e,i,k}
- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles^{d,e,k}
- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles followed by maintenance Lurbinectedin 3.2 mg/m² and Atezolizumab 1200 mg Day 1, every 21 Days^{l,m,48}
- Carboplatin AUC 5–6 Day 1 and Etoposide 80–100 mg/m² Days 1, 2, 3 and **Durvalumab 1500 mg** Day 1 every 21 Days x 4 cycles^{d,e,f,7}
- Cisplatin 75–80 mg/m² Day 1 and Etoposide 80–100 mg/m² Days 1, 2, 3 and Durvalumab 1500 mg Day 1 every 21 Days x 4 cycles^{d,e,f,7}
- Durvalumab 1500 mg Day 1 every 28 Days (category 1 for all)^{d,e,f,7}

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Other Recommended

- Carboplatin AUC 5–6 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3⁸
- Cisplatin 75 mg/m² Day 1 and Etoposide 100 mg/m² Days 1, 2, 3⁹
- Cisplatin 80 mg/m² Day 1 and Etoposide 80 mg/m² Days 1, 2, 3¹⁰
- Cisplatin 25 mg/m² Days 1, 2, 3 and Etoposide 100 mg/m² Days 1, 2, 3¹¹

Useful in Certain Circumstances

- Carboplatin AUC 5 Day 1 and Irinotecan 50 mg/m² Days 1, 8, 15¹²
- Cisplatin 60 mg/m² Day 1 and Irinotecan 60 mg/m² Days 1, 8, 15¹³
- Cisplatin 30 mg/m² Days 1, 8 and Irinotecan 65 mg/m² Days 1, 8¹⁴

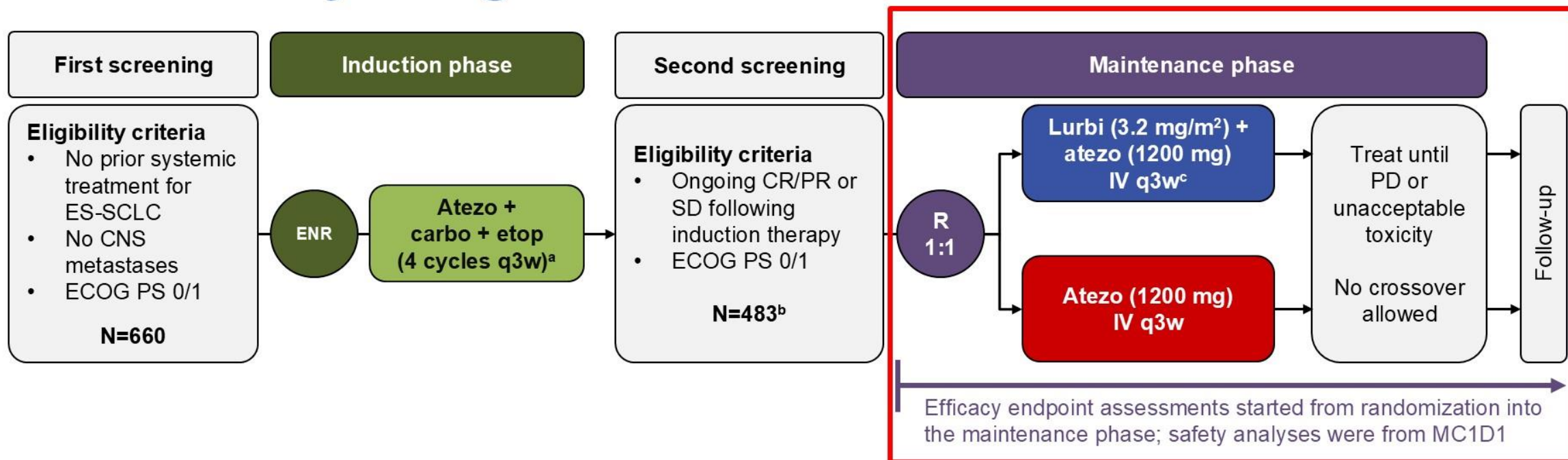
[Footnotes \(SCL-E 2 of 6\)](#)
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Lurbinectedin + atezolizumab as first-line maintenance treatment in patients with extensive-stage small cell lung cancer: Primary results of the Phase 3 IMforte trial

Luis Paz-Ares,¹ Hossein Borghaei,² Stephen V. Liu,³ Solange Peters,⁴ Roy S. Herbst,⁵ Katarzyna Stencel,⁶ Margarita Majem,⁷ Grzegorz Czyżewicz,⁸ Reyes Bernabé Caro,⁹ Ki Hyeong Lee,¹⁰ Melissa L. Johnson,¹¹ Nuri Karadurmuş,¹² Christian Grohé,¹³ Vaikunth Cuchelkar,¹⁴ Vilma Graupner,¹⁵ Monika Kaul,¹⁴ Ya-Chen Lin,¹⁴ Debasis Chakrabarti,¹⁶ Kamalnayan Bhatt,¹⁶ Martin Reck¹⁷

¹Hospital Universitario 12 de Octubre, H12O-CNIO Lung Cancer Unit, Universidad Complutense and Ciberonc, Madrid, Spain; ²Fox Chase Cancer Center, Philadelphia, PA, USA; ³Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA; ⁴University Hospital CHUV, Lausanne, Switzerland; ⁵Yale School of Medicine, New Haven, CT, USA; ⁶Wielkopolska Center of Pulmonology and Thoracic Surgery of Eugenia and Janusz Zeyland, Poznan, Poland; ⁷Hospital de la Santa Creu i Sant Pau, Barcelona, Spain; ⁸The John Paul II Specialist Hospital, Kraków, Poland; ⁹Hospital Universitario Virgen del Rocío, Seville, Spain; ¹⁰Chungbuk National University Hospital, Cheongju, South Korea; ¹¹Tennessee Oncology, Sarah Cannon Research Institute, Nashville, TN, USA; ¹²University of Health Sciences, Gülhane Training and Research Hospital, Ankara, Türkiye; ¹³Klinik für Pneumologie, Evangelische Lungenklinik Berlin, Berlin, Germany; ¹⁴Genentech Inc, South San Francisco, CA, USA; ¹⁵F. Hoffmann-La Roche Ltd, Basel, Switzerland; ¹⁶Jazz Pharmaceuticals plc, Dublin, Ireland; ¹⁷Lung Clinic Grosshansdorf, Airway Research Center North, German Center of Lung Research, Grosshansdorf, Germany

IMforte study design



Stratification factors for randomization

- ECOG PS (0/1)
- LDH (\leq ULN/ $>$ ULN)
- Presence of liver metastases (Y/N) at induction BL
- Prior receipt of PCI (Y/N)

Primary endpoints

IRF-PFS and OS

Secondary endpoints included

INV-PFS, ORR, DOR, and safety

Last patient randomized: April 30, 2024
Clinical cutoff: July 29, 2024

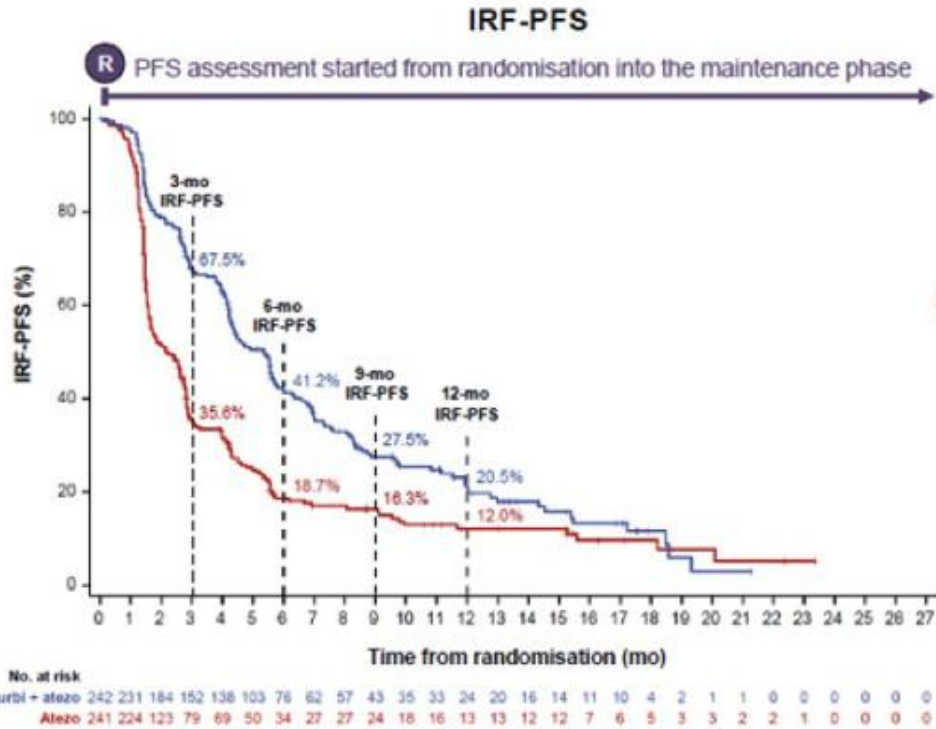
ClinicalTrials.gov ID: NCT05091567.

^a Administered per standard dose. ^b 73% of patients continued from induction to maintenance. ^c With prophylactic granulocyte colony-stimulating factor and anti-emetics.

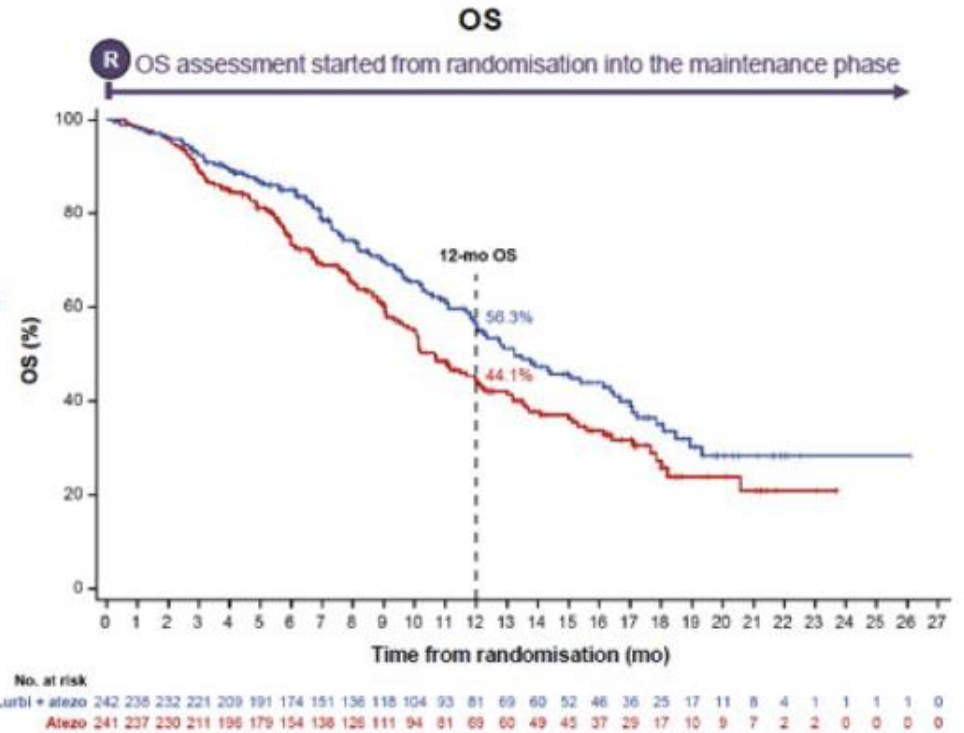
atezo, atezolizumab; BL, baseline; carbo, carboplatin; CNS, central nervous system; ECOG PS, Eastern Cooperative Oncology Group performance status; ENR, enrollment; etop, etoposide; INV-PFS, investigator-assessed PFS; IRF-PFS, independent review facility-assessed PFS; IV, intravenously; LDH, lactate dehydrogenase; lurbi, lurbinectedin; MC1D1, maintenance Cycle 1 Day 1; PCI, prophylactic cranial irradiation; q3w, every 3 weeks; R, randomization; ULN, upper limit of normal; Y/N, yes/no.

02 IMforte Study

PFS and OS from randomization into maintenance phase



Median time from induction C1D1 to randomisation: 3.2 mo in each arm



	Lurbi + atezo (n = 242)	Atezo (n = 241)	HR (95% CI)	P value
Median PFS, mo	5.4	2.1	0.54 (0.43, 0.67)	< .0001

	Lurbi + atezo (n = 242)	Atezo (n = 241)	HR (95% CI)	P value
Median OS, mo	13.2	10.6	0.73 (0.57-0.95)	.0174



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PRIMARY THERAPY FOR EXTENSIVE STAGE SCLC^c:

Four cycles of cytotoxic chemotherapy are recommended, but some patients may receive up to 6 cycles based on response and tolerability after 4 cycles.

Preferred

- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles
Atezolizumab 1200 mg Day 1, every 21 Days (category 1 for all)^{d,e,k,6}
- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles
Atezolizumab 1680 mg Day 1, every 28 Days^{d,e,k}
- Carboplatin AUC 5 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles followed by
Lurbinectedin 3.2 mg/m² and Atezolizumab 1200 mg Day 1, every 21 Days^{l,m,48}
- Carboplatin AUC 5–6 Day 1 and Etoposide 80–100 mg/m² Days 1, 2, 3 and Durvalumab 1500 mg Day 1 every 21 Days x 4 cycles
Durvalumab 1500 mg Day 1 every 28 Days (category 1 for all)^{d,e,f,7}
- Cisplatin 75–80 mg/m² Day 1 and Etoposide 80–100 mg/m² Days 1, 2, 3 and Durvalumab 1500 mg Day 1 every 21 Days x 4 cycles
Durvalumab 1500 mg Day 1 every 28 Days (category 1 for all)^{d,e,f,7}

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Other Recommended

- Carboplatin AUC 5–6 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3⁸
- Cisplatin 75 mg/m² Day 1 and Etoposide 100 mg/m² Days 1, 2, 3⁹
- Cisplatin 80 mg/m² Day 1 and Etoposide 80 mg/m² Days 1, 2, 3¹⁰
- Cisplatin 25 mg/m² Days 1, 2, 3 and Etoposide 100 mg/m² Days 1, 2, 3¹¹

Useful in Certain Circumstances

- Carboplatin AUC 5 Day 1 and Irinotecan 50 mg/m² Days 1, 8, 15¹²
- Cisplatin 60 mg/m² Day 1 and Irinotecan 60 mg/m² Days 1, 8, 15¹³
- Cisplatin 30 mg/m² Days 1, 8 and Irinotecan 65 mg/m² Days 1, 8¹⁴

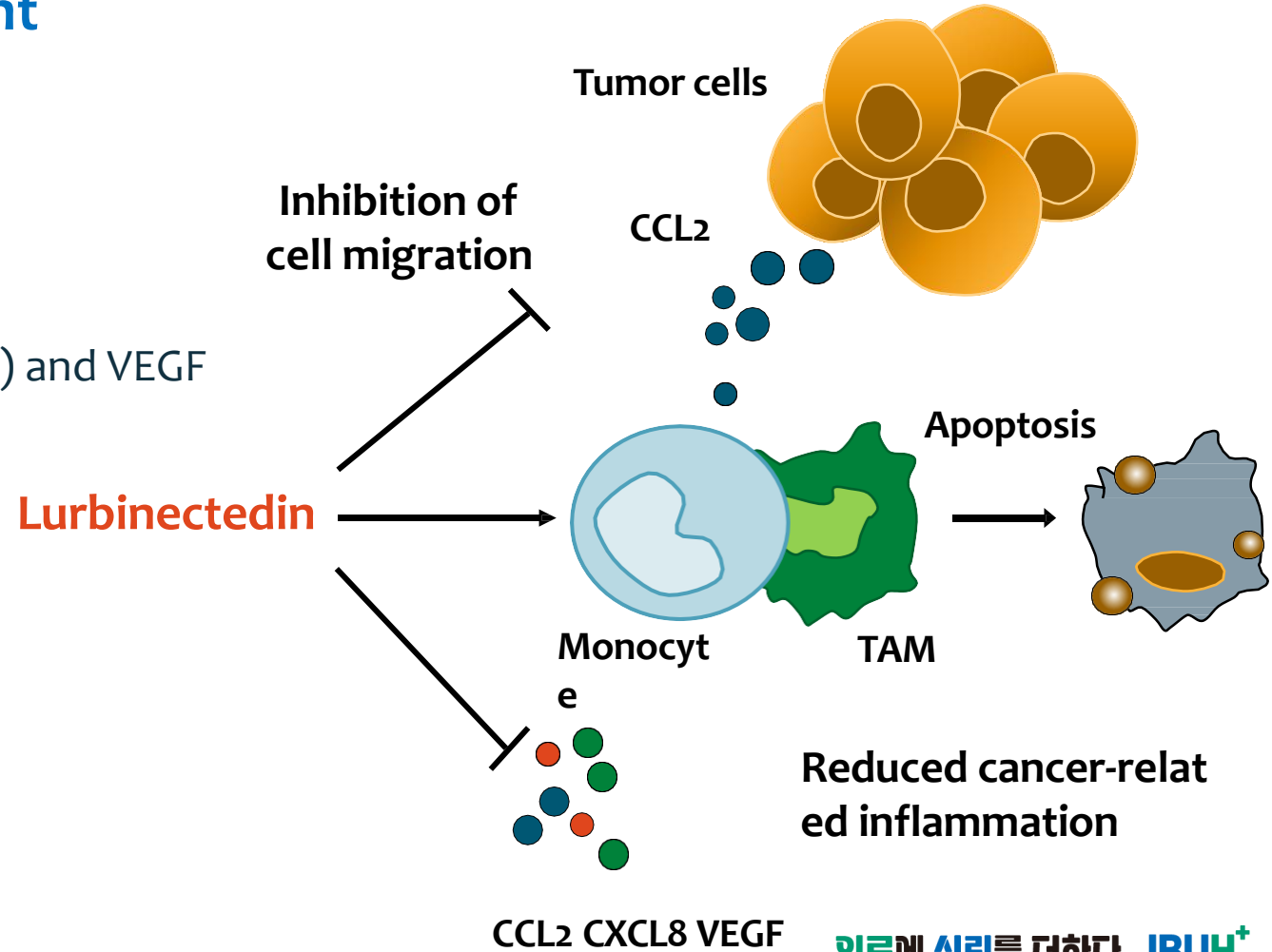
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02 Lurbinectedin

- **Effects on the tumor microenvironment**

Based on a preclinical study:

- Induce apoptosis in tumor-associated macrophages
- Reduce macrophage infiltration
- Reduce inflammatory chemokines (CCL2 and CXCL8) and VEGF





SCLC SUBSEQUENT SYSTEMIC THERAPY (PS 0–2) ^g Consider dose reduction or growth factor support for patients with PS 2	
CHEMOTHERAPY-FREE INTERVAL (CTFI) >6 MONTHS	
<p>Preferred Regimens</p> <ul style="list-style-type: none"> • Clinical trial enrollment • Re-treatment with platinum-based doublet^{h,15-19} 	
<p>Other Recommended Regimens</p> <ul style="list-style-type: none"> • Lurbinectedin^{20,21} • Topotecan oral (PO) or intravenous (IV)²²⁻²⁵ • Irinotecan^{i,25,26} • Tarlatamab-dlle^{j,28} 	
CTFI ≤6 MONTHS	
<p>Preferred Regimens</p> <ul style="list-style-type: none"> • Clinical trial enrollment • Lurbinectedin^{20,21} • Topotecan oral (PO) or intravenous (IV)^{17,22-25} • Irinotecan^{i,25,26} • Tarlatamab-dlle^{j,28} • Re-treatment with platinum-based doublet may be considered for CTFI 3–6 months^{h,17-19} 	
<p>Other Recommended Regimens</p> <ul style="list-style-type: none"> • Nivolumab^k or pembrolizumab (if not previously treated with an ICI)^{d,29-33} • Paclitaxel^{34,35} • Temozolomide^{36,37} • Cyclophosphamide/doxorubicin/vincristine (CAV)²² • Docetaxel³⁸ • Gemcitabine^{27,39,40} • Oral etoposide^{41,42} 	



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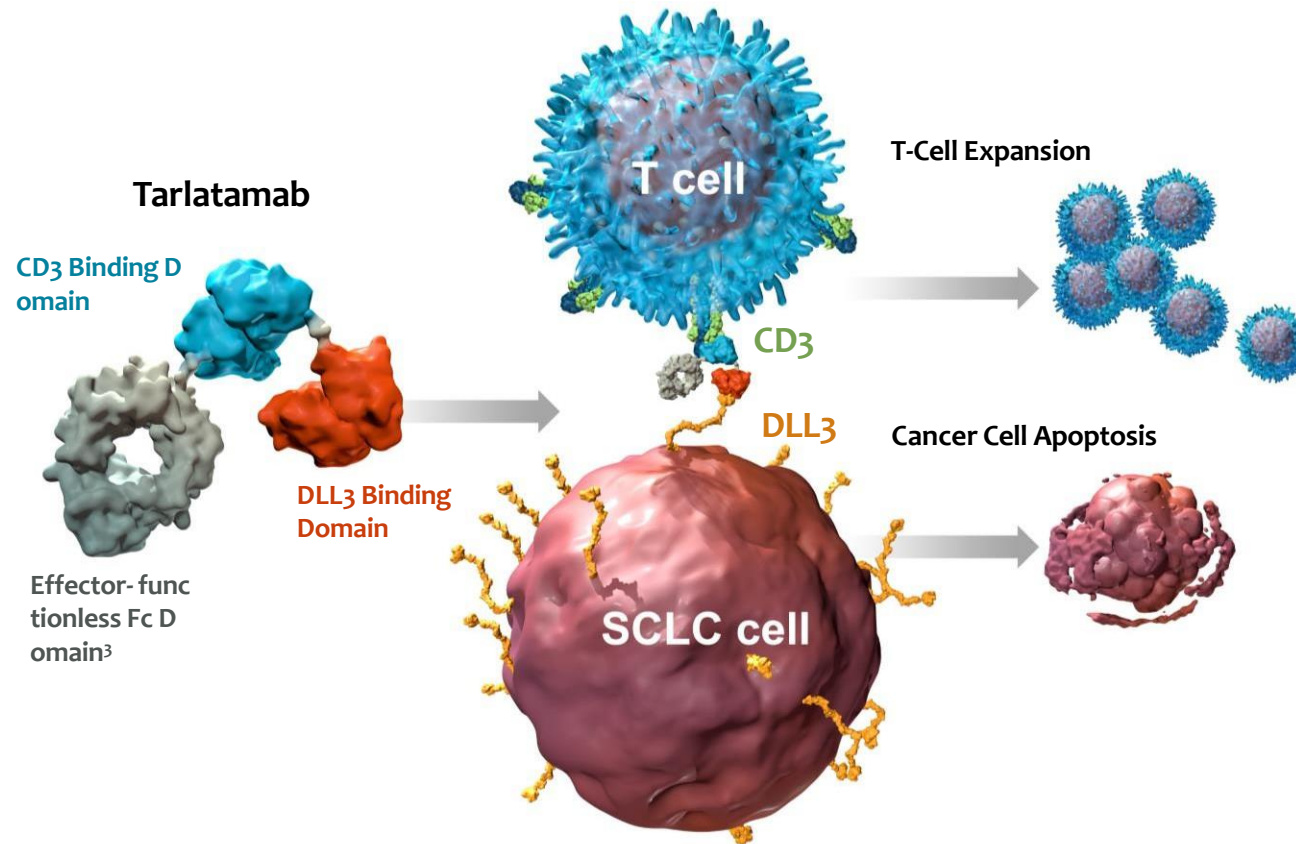
SCLC **SUBSEQUENT** SYSTEMIC THERAPY (PS 0–2)⁹ Consider dose reduction or growth factor support for patients with PS 2

Preferred

- **Tarlatamab-dlle^{i,27} (category 1)**
- Clinical trial enrollment
- Irinotecan^{i,25,26}
- Lurbinectedin (if not previously used)^{20,21}
- If prolonged disease free time, re-treatment with platinum-based doublet with or without immunotherapy¹⁵⁻¹⁹
- Topotecan Oral (PO) or Intravenous (IV)^{17,22-25}

Other Recommended

- CAV (Cyclophosphamide/Doxorubicin/Vincristine)²²
- Docetaxel³⁶
- Gemcitabine^{37,38,39}
- Nivolumabⁿ or Pembrolizumab (if not previously treated with an ICI)^{d,28-31}
- Oral Etoposide^{40,41}
- Paclitaxel^{32,33}
- Temozolomide^{34,35}



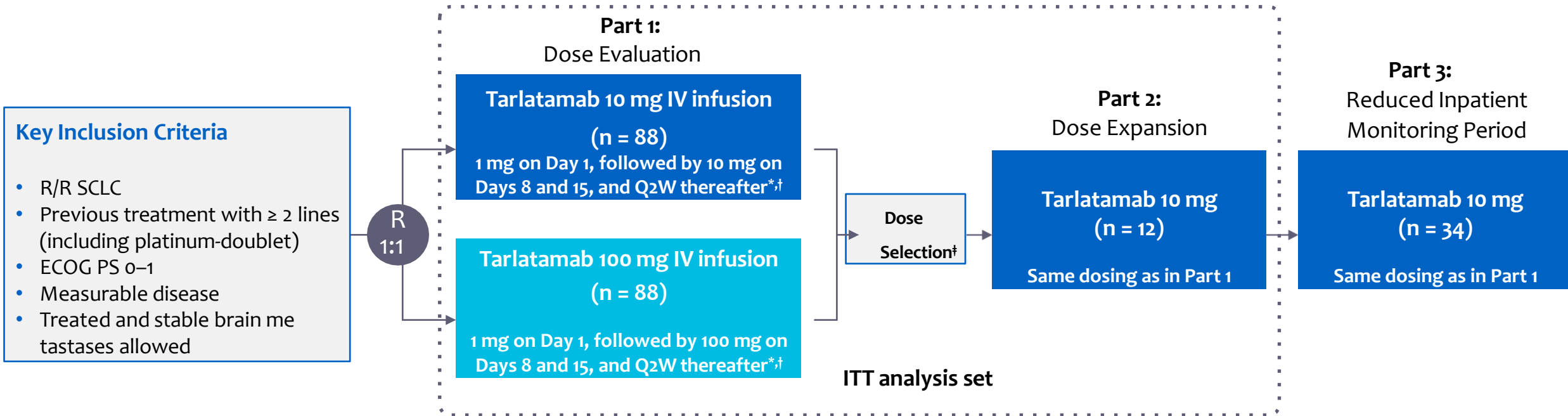
Tarlatamab Mechanism of Action¹

- Tarlatamab binds both DLL3 on cancer cells and CD3 on T cells, leading to T-cell mediated cancer cell lysis¹
- Binding creates a cytolytic synapse between T cells and cancer cells, and can activate T cells without relying on MHC I^{2,3}

CD3, cluster of differentiation 3; DLL3, Delta-like ligand 3; Fc, fragment crystallizable; MHC I, major histocompatibility complex class I; SCLC, small cell lung cancer.

1. Owen DH, et al. *J Hematol Oncol.* 2019;12:61. 2. Nagorsen D, et al. *Exp. Cell Res.* 2011; 317:1255-1260. 3. Giffin MJ, et al. *Clin Cancer Res.* 2021;27:1526-1537.

Phase 2, open-label study (NCT05060016)



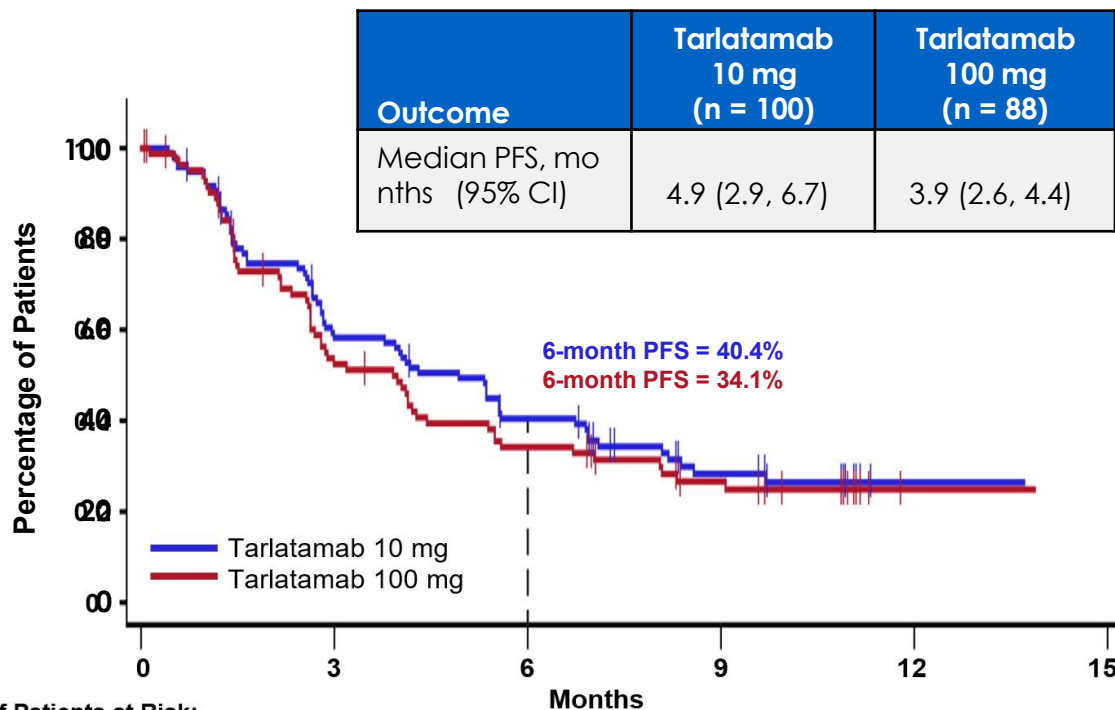
Primary Efficacy Endpoint: ORR per RECIST 1.1 by BICR

Key Secondary Endpoints: DOR, DCR, PFS per RECIST 1.1 by BICR, OS, adverse events during the treatment period

*Dexamethasone was administered on days 1 and 8 of cycle 1, and IV hydration was administered following all tarlatamab doses in cycle 1. †28-day cycles. ‡Once 30 patients per dose level had the opportunity to confirm an objective response after the first post-treatment scan or up to 13 weeks of follow-up, whichever occurred first.

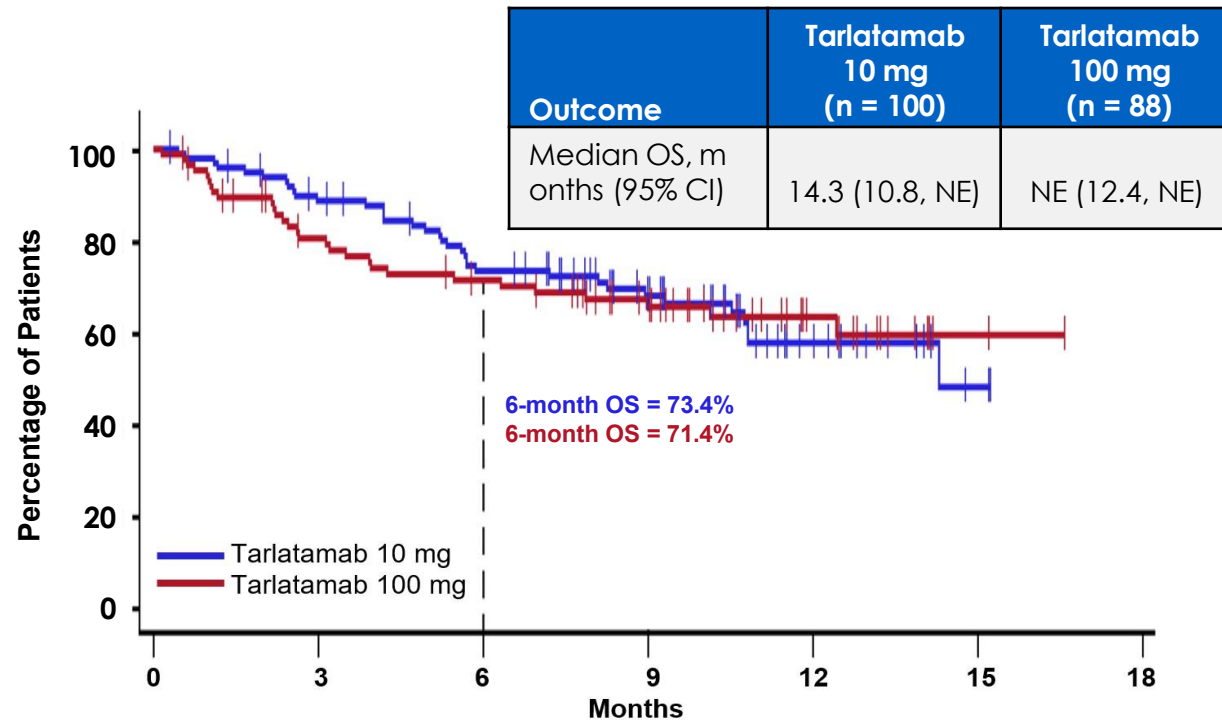
BICR, blinded independent central review; **DCR**, disease control rate; **DOR**, duration of response; **ECOG PS**, Eastern Cooperative Oncology Group performance status; **ITT**, intention-to-treat; **IV**, intravenous; **ORR**, objective response rate; **OS**, overall survival; **PFS**, progression-free survival; **Q2W**, every 2 weeks; **R**, randomization; **R/R**, relapse/refractory; **RECIST**, Response Evaluation Criteria in Solid Tumors; **SCLC**, small cell lung cancer.

1. Ahn MJ, et al. *N Engl J Med.* 2023;389:2063-2075. 2. Ahn MJ, et al. *N Engl J Med.* 2023;389:2063-2075; Appendix.



Number of Patients at Risk:

	0	3	6	9	12	15
Tarlatamab 10 mg	100	53	35	18	2	0
Tarlatamab 100 mg	88	41	26	15	3	0



	0	3	6	9	12	15	18
Tarlatamab 10 mg	100	84	67	44	17	3	0
Tarlatamab 100 mg	88	62	53	39	16	2	0

OS data is not yet mature; at the last follow-up 57% of patients in the tarlatamab 10 mg group and 51% of patients in the tarlatamab 100 mg group were still alive

Median follow-up was 10.6 months for tarlatamab 10 mg and 10.3 months for tarlatamab 100 mg.

CI, confidence interval; NE, not evaluable; OS, overall survival; PFS, progression-free survival.

1. Ahn MJ, et al. *N Engl J Med.* 2023;389:2063-2075.

Tarlatamab versus chemotherapy as second-line treatment for small cell lung cancer (SCLC): primary analysis of the phase 3 DeLLphi-304 study

Charles M. Rudin, Giannis S. Mountzios, Longhua Sun, Byoung Chul Cho, Umut Demirci, Sofia Baka, Mahmut Gumus, Antonio Lugini, Tudor-Eliade Ciuleanu, Myung-Ju Ahn, Pedro Rocha, Bo Zhu, Fiona Blackhall, Tatsuya Yoshida, Taofeek K. Owonikoko, Luis Paz-Ares, Shuang Huang, Diana Gauto, Gonzalo Recondo, Martin Schuler

Speaker: **Charles M. Rudin, MD, PhD**, Fiona and Stanley Druckenmiller Center for Lung Cancer Research, Memorial Sloan Kettering Cancer Center, New York, USA.

Randomized, controlled, phase 3 DeLLphi-304 study (NCT05740566)

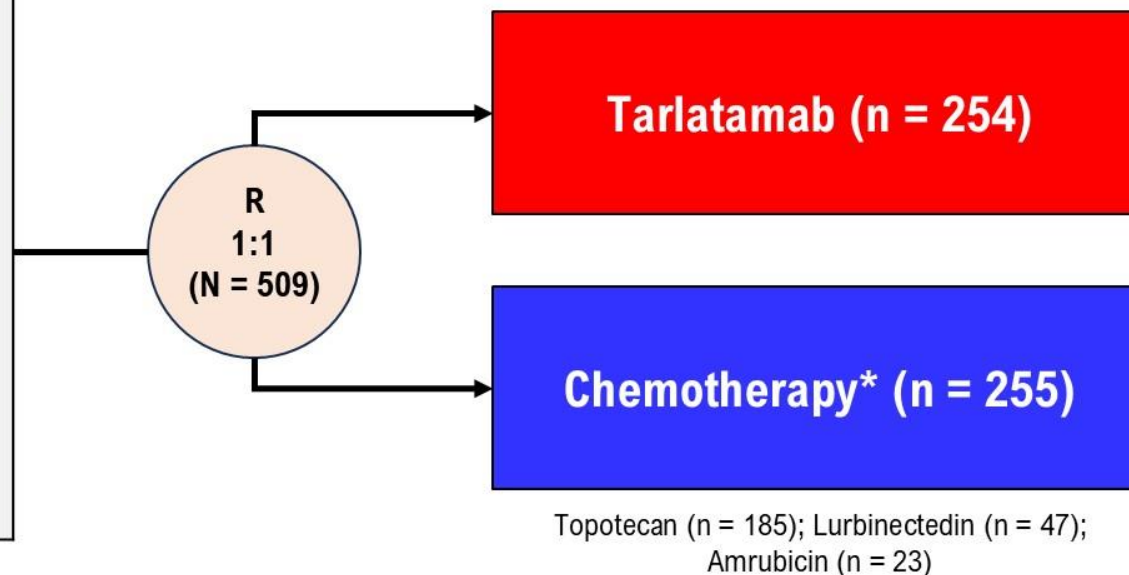


Key inclusion criteria

- Histologically or cytologically confirmed SCLC
- Progression after 1L platinum-based chemotherapy +/- anti-PD-(L)1
- ECOG PS 0 or 1
- Asymptomatic, treated or untreated brain metastases

Randomization stratified by

- Prior anti-PD-(L)1 exposure (yes/no)
- Chemotherapy-free interval (< 90 days vs ≥ 90 to < 180 days vs ≥ 180 days)
- Presence of (previous/current) brain metastases (yes/no)
- Intended chemotherapy (topotecan/amrubicin vs lurbinectedin)



Primary Endpoint: Overall survival

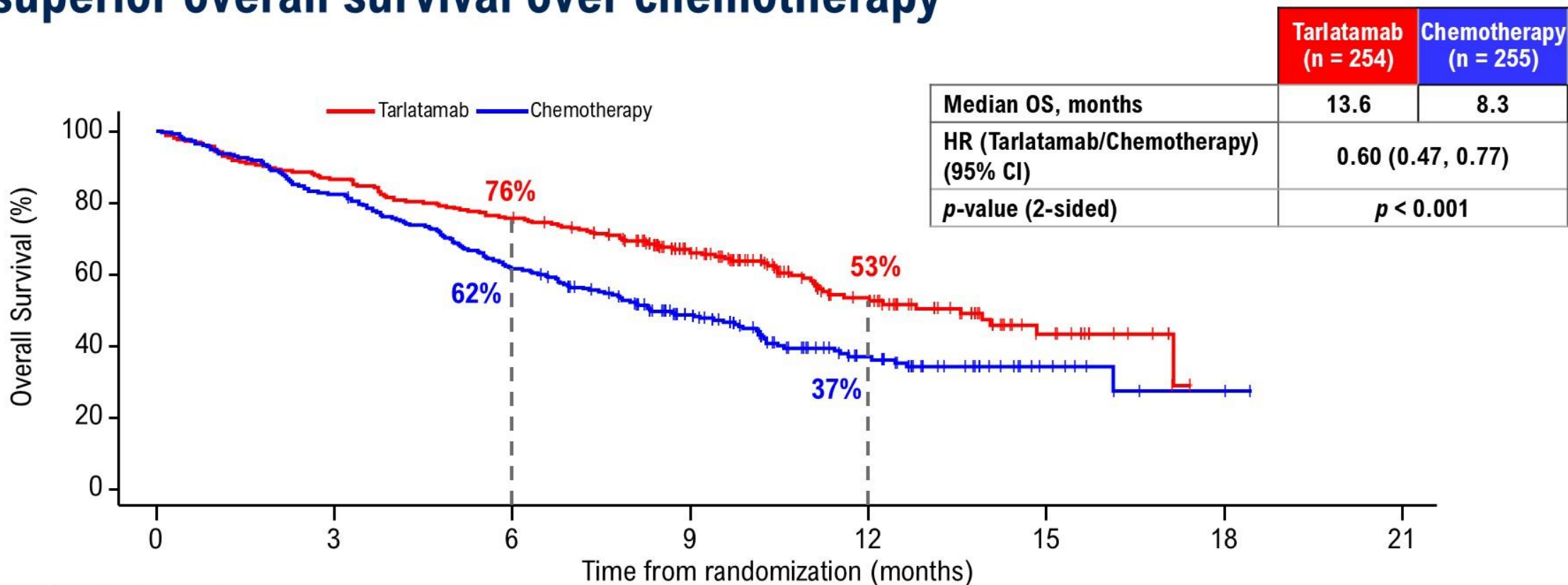
Key Secondary Endpoints: Progression-free survival, patient-reported outcomes

Other Secondary Endpoints: Objective response, disease control, duration of response, safety

*Topotecan was used in all countries except Japan, lurbinectedin in Australia, Canada, Republic of Korea, Singapore and the United States, and amrubicin in Japan.

1L, first-line; ECOG PS, Eastern Cooperative Oncology Group performance status; PD-(L)1, programmed death (ligand)-1; R, randomization; SCLC, small cell lung cancer.

DeLLphi-304 met its primary endpoint with tarlatamab demonstrating superior overall survival over chemotherapy

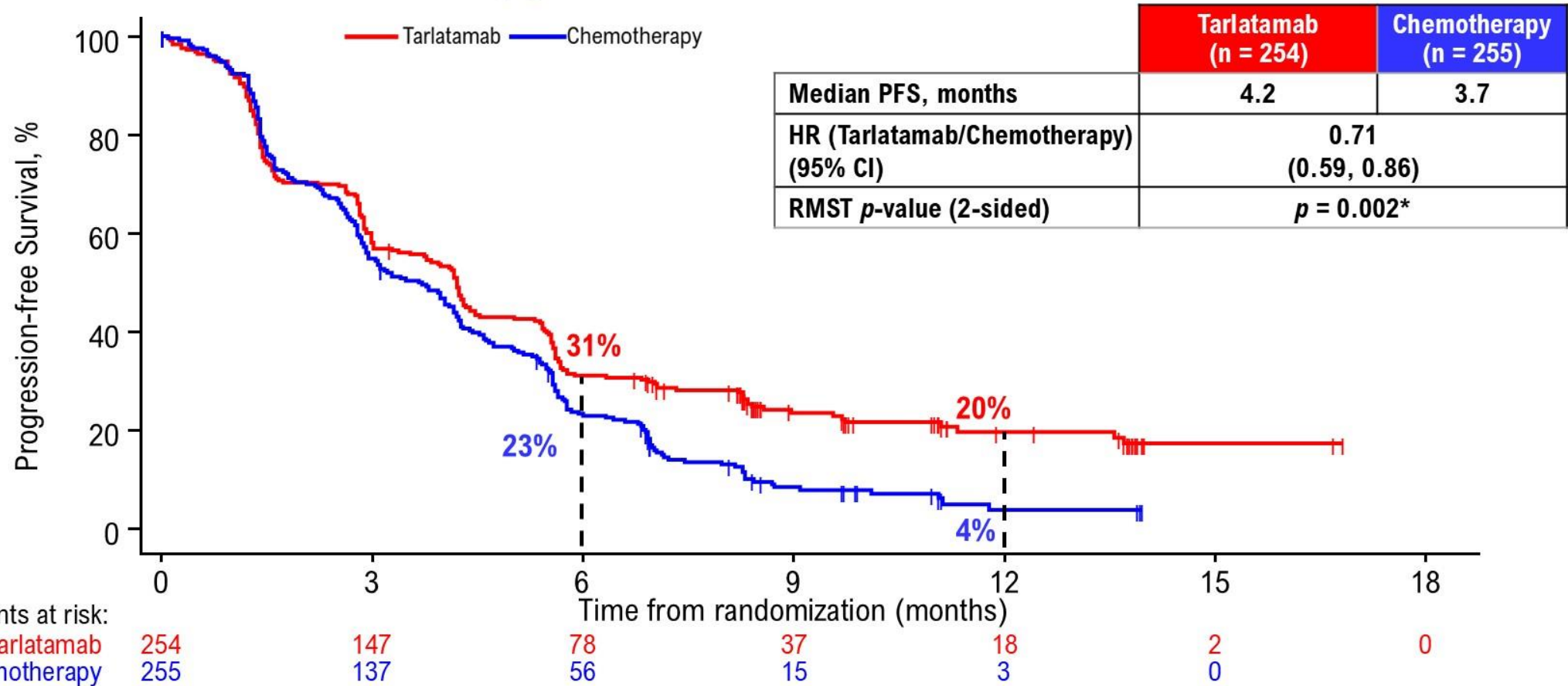


Number of patients at risk:

	0	3	6	9	12	15	18	21
Tarlatamab	254	220	192	131	60	17	0	
Chemotherapy	255	210	156	97	42	9	2	0

Median follow-up time: 11.2 months for the tarlatamab group and 11.7 months for the chemotherapy group. p-value was calculated using a stratified log-rank test. HR, hazard ratio; OS, overall survival.

Progression-free survival was significantly longer with tarlatamab vs chemotherapy



Median follow-up time: 11.0 months for the tarlatamab and the chemotherapy group. *The restricted mean PFS time in the tarlatamab and the chemotherapy group was 5.3 months and 4.3 months at 12 months respectively, resulting in statistically significant improvement of the tarlatamab group over the chemotherapy group.
HR: hazard ratio; **PFS,** progression-free survival.

• 1. NSCLC

- Systematic EBUS & EUS for N2 subdivision
- EGFR, ALK, and PD-L1 : TAT
- Perioperative Tx : IO+CTx
- Adjuvant Tx : Alectinib
- CCRTx -> Osimertinib consolidation
- Advanced Tx : Exon 20ins, ROS-1, HER2, NRG1

• 2. SCLC

- LS : Durvalumab consolidation
- ES : Atezolizumab+Lurbinectedin maintenance and Tarlatamab

의료에 신뢰를 더하다. JBUH⁺

감사합니다.