

Novedades & Claves en CÁNCER de PULMÓN 2024

Enfermedad metastásica
(incluyendo inmunoterapia)

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Organizado por:



Patrocinado por:



Johnson & Johnson

Agenda

Advanced NSCLC

Without driver alteration

1L setting

- *Interim Analysis of NVALT trial*
- *Primary Analysis of Phase III trial HARMONi-2*

2L setting

- *Primary results from the phase 3 EVOKE-01 study*
- *Final OS from TROPION-Lung01 trial*
- *New Biomarker predictive of outcome in TROPION-Lung 01 trial*

With driver alterations

EGFR

- *Primary results from PALOMA-3 trial*
- *A secondary analysis from the phase 3 MARIPOSA study*
- *Results from CHRYSALIS-2 trial*

ALK

- *5-year progression-free survival and safety from the CROWN study*
- *Phase 1/2 ALKOVE-1 study*

KRAS G12C

- *Primary results from KRYSTAL-12 trial*

Organizado por:

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KRAS G12C

- *Primary results from KRYSTAL-12 trial*

Organizado por:

Advanced NSCLC without driver alteration

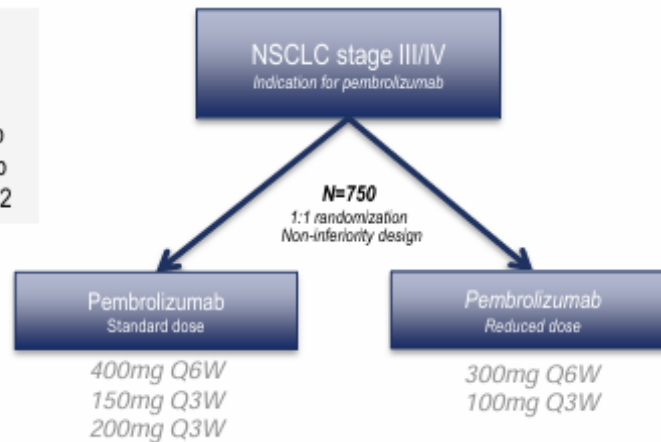
1258MO - Low dose versus standard dose pembrolizumab for treatment of stage IV stage non-small cell lung carcinoma: Results of the pre-planned interim analysis of the NVALT-30 clinical trial

Design

DEDICATION-1 trial (NVALT-30)

Stratification factors:

- Type of treatment:
 - o Pembrolizumab
 - o Pemetrexed / platinum / pembrolizumab
 - o Carboplatin / paclitaxel / pembrolizumab
- Smoking, PDL1 status, Gender, PS 0/1 vs 2

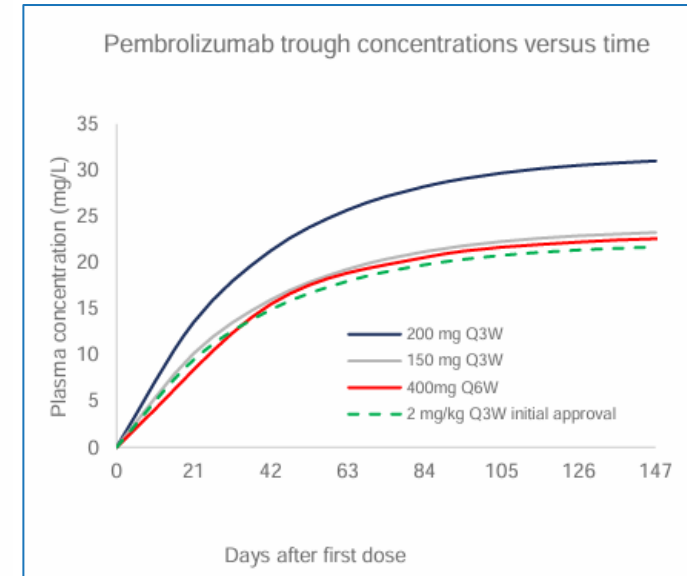


Primary objective:

To investigate the non-inferiority of reduced dose pembrolizumab vs. standard dose for treatment of advanced stage NSCLC in terms of overall survival

Secondary objectives:

- DCR, PFS, OS, 1yr-DCR, ORR
- To develop, assess, and validate immune checkpoint inhibitor response biomarkers



Interim analysis:

was preplanned after the first 250 patients were included and followed for a year

A difference of 10% between arms in one-year overall survival (OS) was considered clinically relevant and set as stopping criterion for the interim analysis

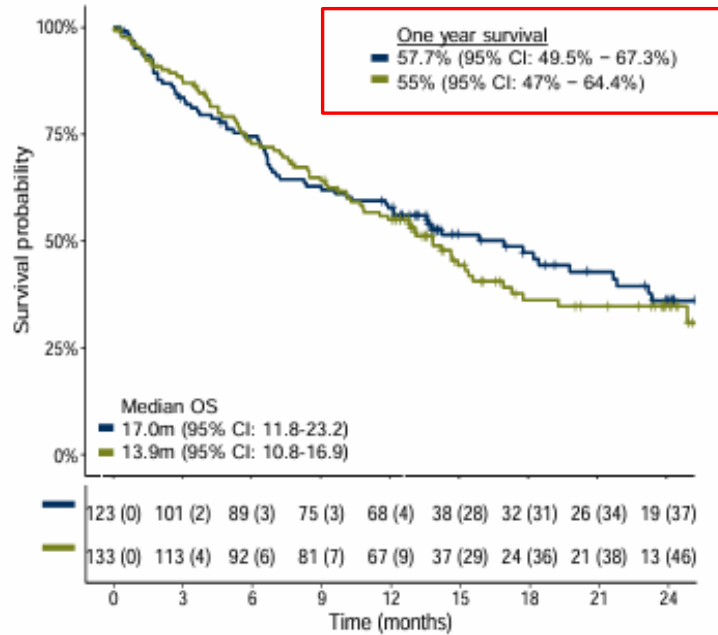
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NVALT-30 TRIAL

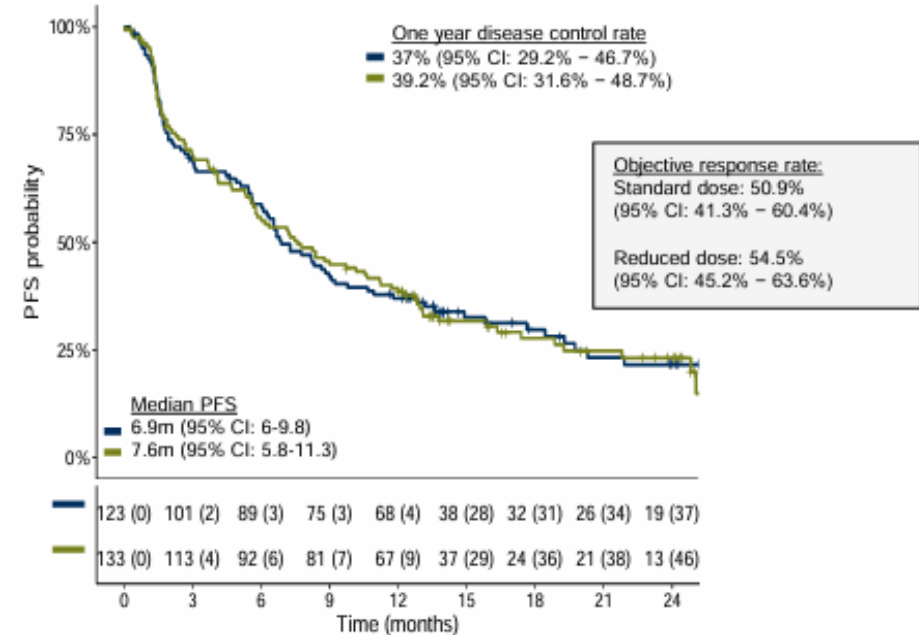
Survival analysis

DEDICATION-1 trial (NVALT-30)

Overall survival



Progression free survival



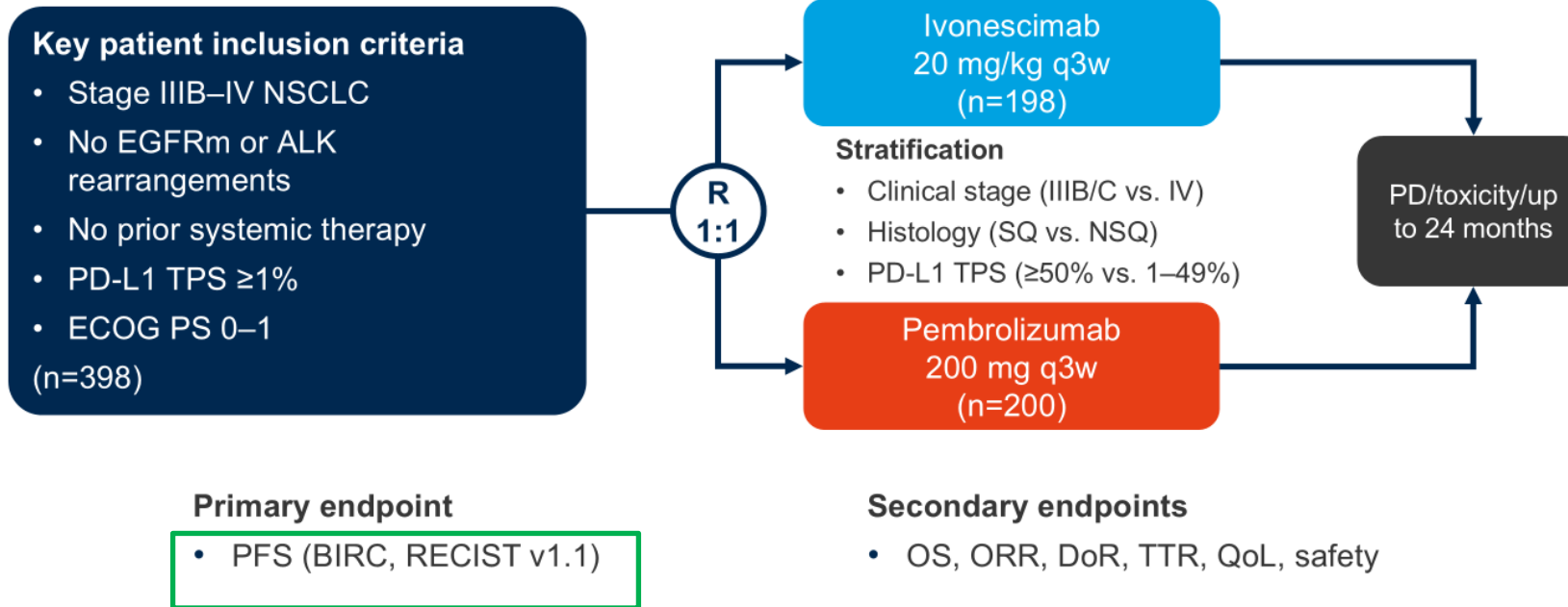
Standard dose Reduced dose

Estudio que reporta una diferencia de un 2.7% en la tasa de SG al año y cumple el objetivo preespecificado
Reclutamiento ongoing
Estudio clínicamente relevante

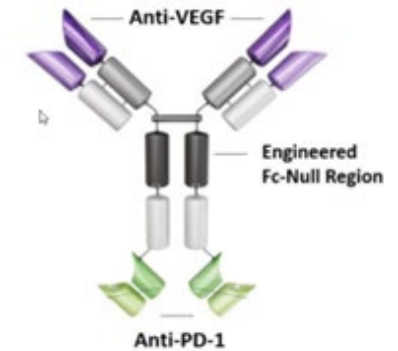
Advanced NSCLC without driver alteration

PL02.04: Phase 3 Study of Ivonescimab (AK112) vs. Pembrolizumab as First-line Treatment for PD-L1-positive Advanced NSCLC: Primary Analysis of HARMONi-2

HARMONi-2 Study Design



Bispecific antibody



Advanced NSCLC without driver alteration

HARMONi-2

*Asian Population
Chinese Trial*

Characteristics, n (%)		Ivonescimab (n = 198 ^a)	Pembrolizumab (n = 200 ^a)	Total (n = 398 ^a)
Age (years)	<65	97 (49.0)	85 (42.5)	182 (45.7)
	≥65	101 (51.0)	115 (57.5)	216 (54.3)
Sex	Male	164 (82.8)	169 (84.5)	333 (83.7)
	Female	34 (17.2)	31 (15.5)	65 (16.3)
ECOG PS	0	25 (12.6)	26 (13.0)	51 (12.8)
	1	173 (87.4)	174 (87.0)	347 (87.2)
Smoker	Never	39 (19.7)	38 (19.0)	77 (19.3)
	Current	39 (19.7)	42 (21.0)	81 (20.4)
	Former	120 (60.6)	120 (60.0)	240 (60.3)
Clinical stage	IIIB/C	15 (7.6)	16 (8.0)	31 (7.8)
	IV	183 (92.4)	184 (92.0)	367 (92.2)
Pathology	SQ	90 (45.5)	91 (45.5)	181 (45.5)
	Tumor centrally located ^b	65 (72.2)	57 (62.6)	122 (67.4)
	Tumor with cavitation/necrosis ^b	9 (10.0)	7 (7.7)	16 (8.8)
	Tumor encasing large blood vessel ^b	6 (6.7)	1 (1.1)	7 (3.9)
	Non-SQ	108 (54.5)	109 (54.5)	217 (54.5)
PD-L1 TPS	≥50%	83 (41.9)	85 (42.5)	168 (42.2)
	1-49%	115 (58.1)	115 (57.5)	230 (57.8)
Liver metastases	Yes	25 (12.6)	28 (14.0)	53 (13.3)
	No	173 (87.4)	172 (86.0)	345 (86.7)
Brain metastases	Yes	33 (16.7)	39 (19.5)	72 (18.1)
	No	165 (83.3)	161 (80.5)	326 (81.9)

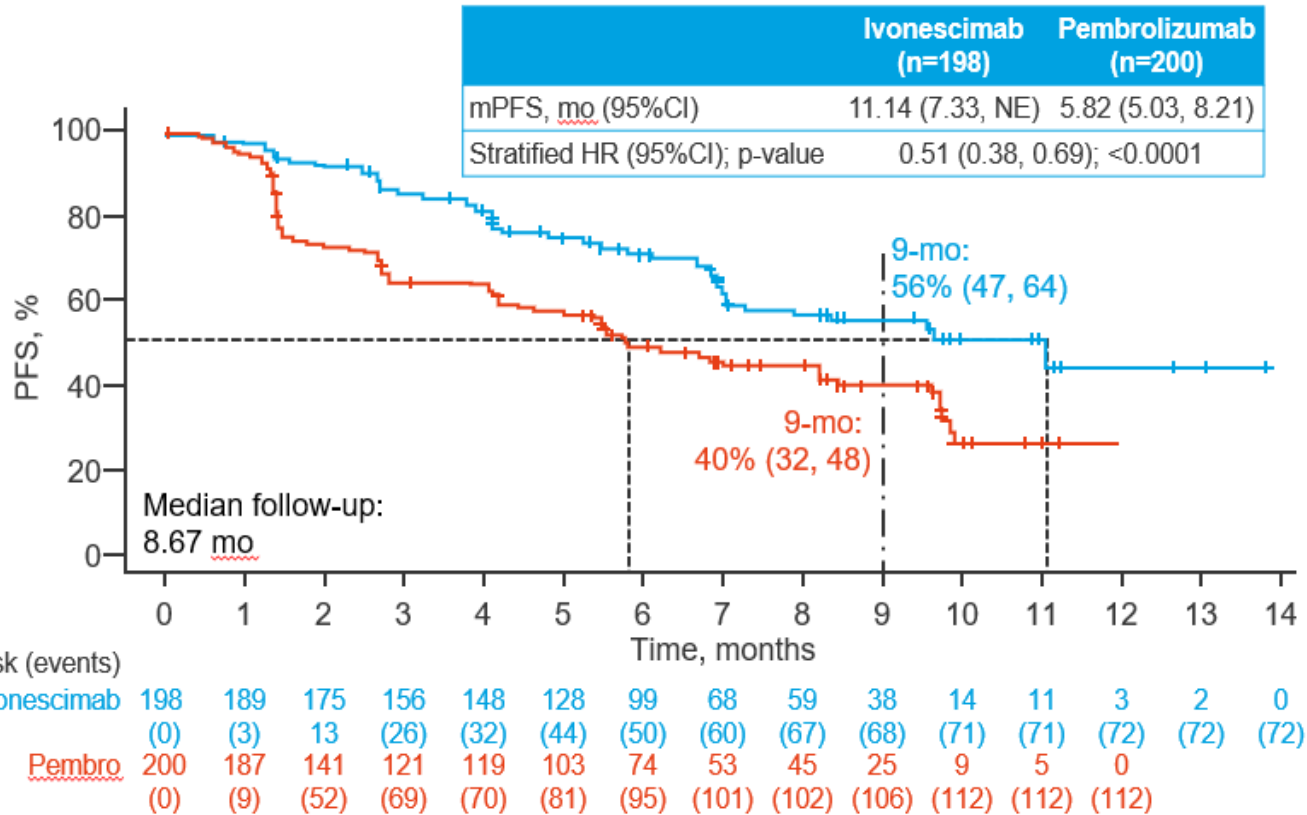
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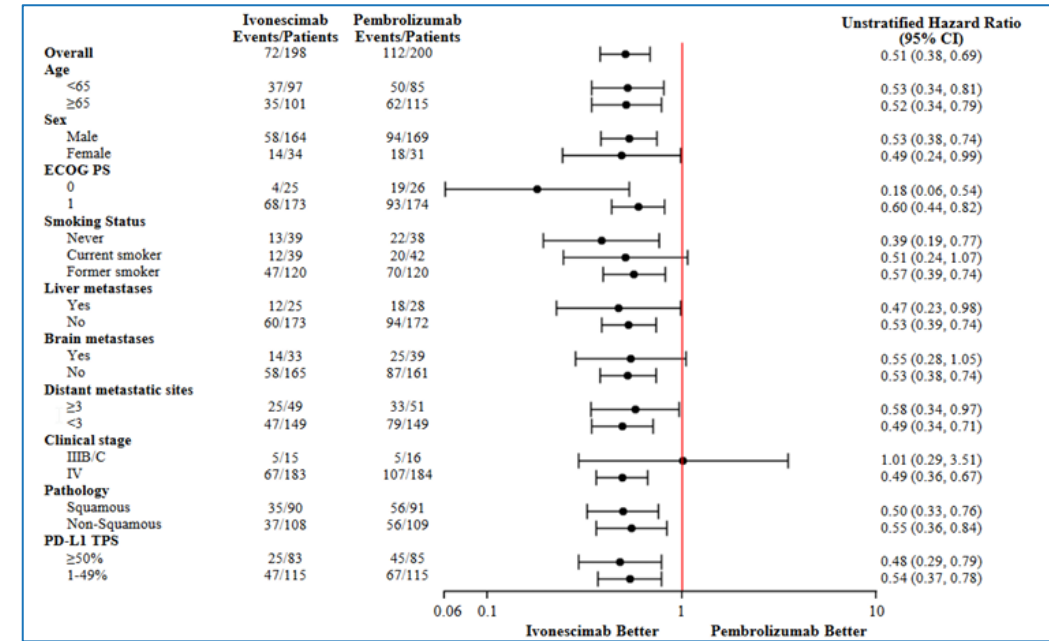
Advanced NSCLC without driver alteration

HARMONi-2

Progression-free survival (BIRC)



Ivescimab demonstrated a statistically significant improvement in PFS vs. pembrolizumab with HR = 0.51, and a 5.3 months improvement in mPFS.



Outcomes	Ivescimab (n=198)	Pembrolizumab (n=200)
ORR, % (95%CI)	50.0 (42.8, 57.2)	38.5 (31.7, 45.6)
DCR, % (95% CI)	89.9 (84.8, 93.7)	70.5 (63.7, 76.7)
mDoR, mo (95%CI)	NR (NE, NE)	NR (8.3, NE)



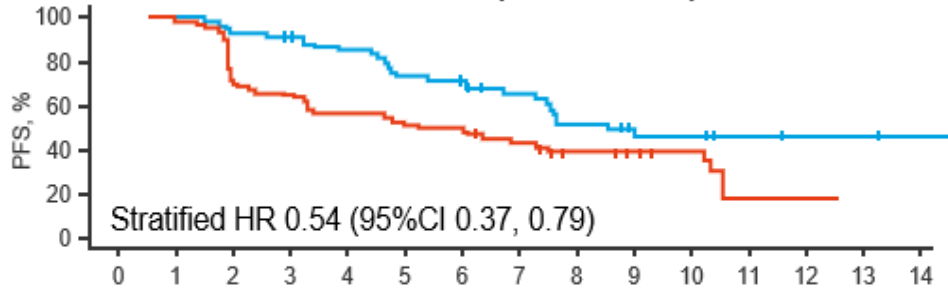
Advanced NSCLC without driver alteration

HARMONi-2

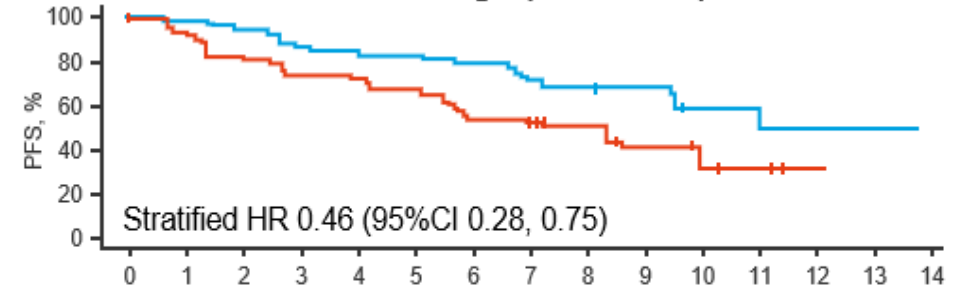
Progression-free survival by PD-L1 expression and NSCLC histology

PD-L1 expression

PD-L1 low (TPS 1–49%)

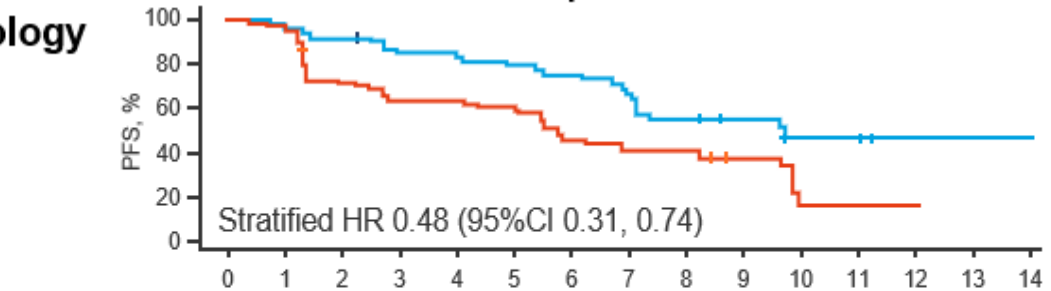


PD-L1 high (TPS ≥50%)

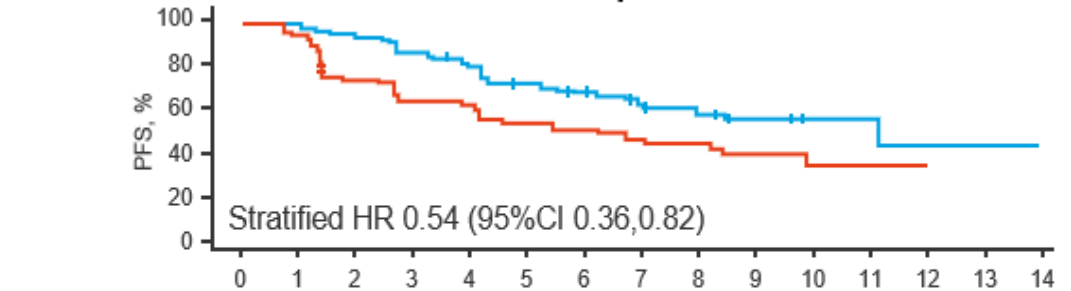


NSCLC histology

Squamous



Non-squamous



Advanced NSCLC without driver alteration

HARMONi-2

TRAEs, n (%)	Ivonescimab (n=197)	Pembrolizumab (n=199)
Any	177 (89.8)	163 (81.9)
Grade ≥ 3	58 (29.4)	31 (15.6)
Serious	41 (20.8)	32 (16.1)
Led to discontinuation	3 (1.5)	6 (3.0)
Led to death	1 (0.5)	2 (1.0)

irAEs, n (%)	Ivonescimab (n=197)	Pembrolizumab (n=199)
Any	59 (29.9)	56 (28.1)
Grade ≥ 3	14 (7.1)	16 (8.0)
Serious	11 (5.6)	22 (11.1)
Led to discontinuation	0	5 (2.5)

VEGR-related AEs, n (%)	Ivonescimab (n=197)	Pembrolizumab (n=199)
Any	94 (47.7)	42 (21.1)
Grade ≥ 3	20 (10.2)	5 (1.0)
Proteinuria	6 (3.1)	0
Hypertension	10 (5.1)	1 (0.5)
Hemorrhage	2 (1.0)	1 (0.5)
Arterial thromboembolism	2 (1.0)	0
Venous thromboembolism	0	0

Estudio con resultados muy prometedores en relación a la SLP
 El comparador, pembrolizumab, no sería el estándar en población con TPS 1-49%
 Necesidad de confirmar eficacia en OS y en población no asiática

Organizado por:



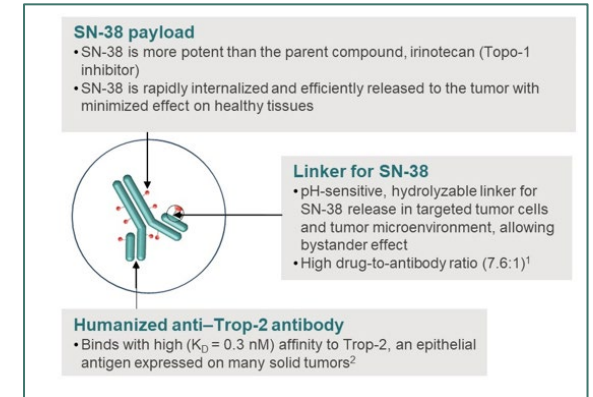
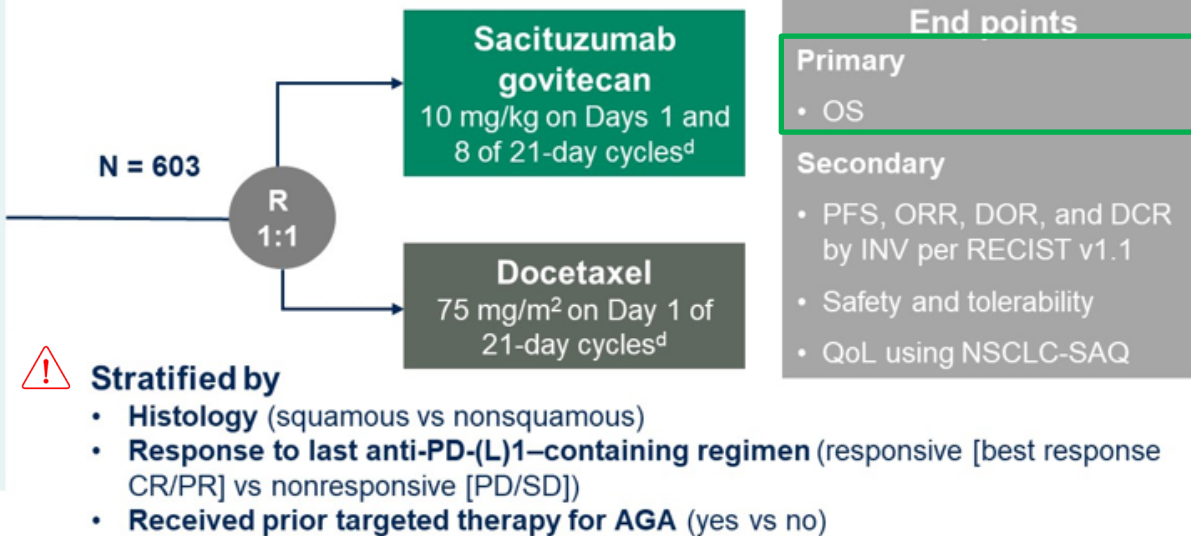
Advanced NSCLC without driver alteration

LBA8500: Sacituzumab govitecan (SG) vs docetaxel (doc) in patients (pts) with metastatic non-small cell lung cancer (mNSCLC) previously treated with platinum (PT)-based chemotherapy (chemo) and PD(L)-1 inhibitors (IO): Primary results from the phase 3 EVOKE-01 study

EVOKE-01: Global, Randomized, Open-Label, Phase 3 Study

Key eligibility criteria

- Measurable stage IV NSCLC
- ECOG PS 0–1
- Radiographic progression after platinum-based and anti-PD-(L)1-containing regimen^a
- In addition, patients with known AGAs must have received ≥ 1 approved TKI^b
 - *EGFR/ALK* test required. Testing of other AGAs recommended^c
- Previously treated stable brain metastases were included
- No prior treatment with Topo-1 inhibitors, Trop-2-targeted therapies, or docetaxel



At data cutoff (29 November 2023), the study median follow-up was 12.7 months (range, 6.0–24.0)

Patient Baseline Characteristics (ITT)

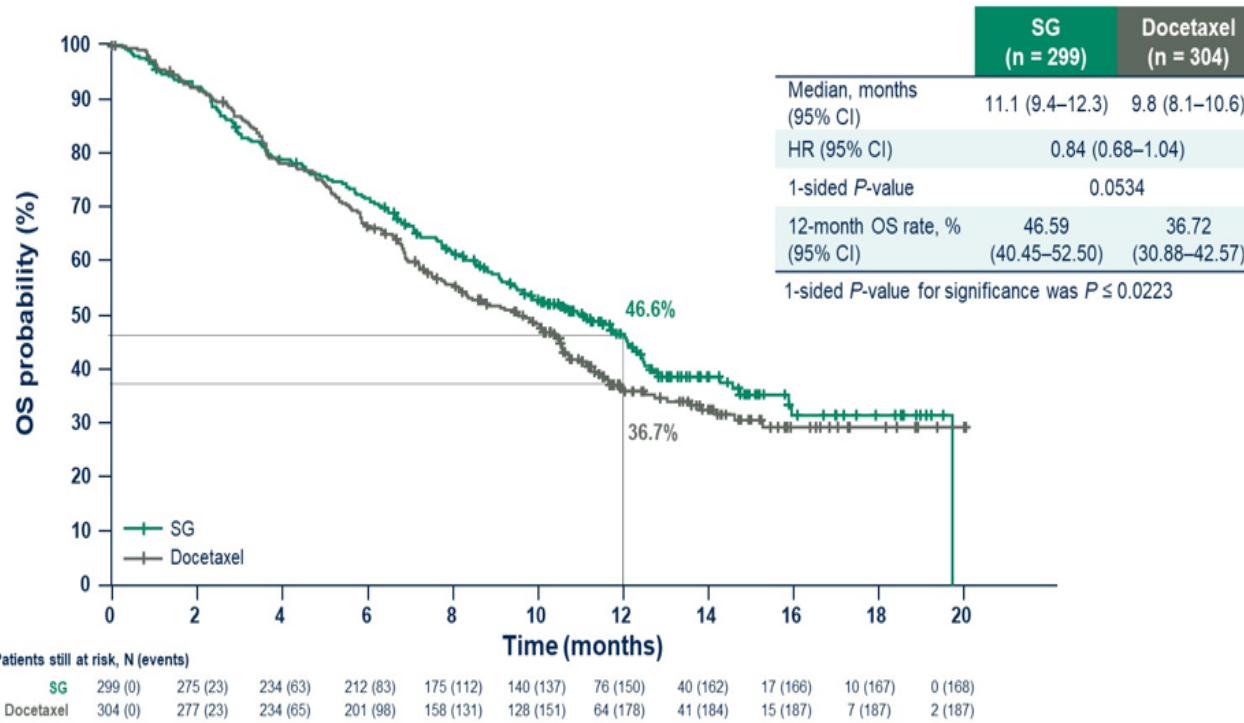
Characteristic	SG (n = 299)	Docetaxel (n = 304)
Median age (range), years	66 (31–84)	64 (32–83)
Male, %	64.9	71.1
Race, %		
Asian	5.7	8.6
Black	2.0	2.3
White	76.6	71.1
Other ^a	15.7	18.1
ECOG PS, ^b %		
0	33.8	29.3
1	66.2	69.7
Disease stage at diagnosis, ^c %		
Stage I-III	25.4	33.6
Stage IV	73.2	66.4
Prior lines of therapy, %		
1	55.9	54.9
2	34.4	33.2
≥ 3	9.7	11.8
History of brain metastasis, %	11.7	12.8

Characteristic	SG (n = 299)	Docetaxel (n = 304)
Histology, ^d %		
Nonsquamous ^e	71.9	73.7
Squamous	28.1	26.3
Best response to last anti-PD-(L)1-containing regimen, ^d %		
Responsive (CR/PR)	35.5	37.2
Nonresponsive (PD/SD)	64.2	62.8
Not available	0.3	0
Prior therapy for AGA, ^d %		
No	93.6	91.8
Yes ^f	6.4	8.2
<i>EGFR</i>	2.0	4.3
<i>ALK</i>	0.3	0.3
Other ^g	5.7	4.9

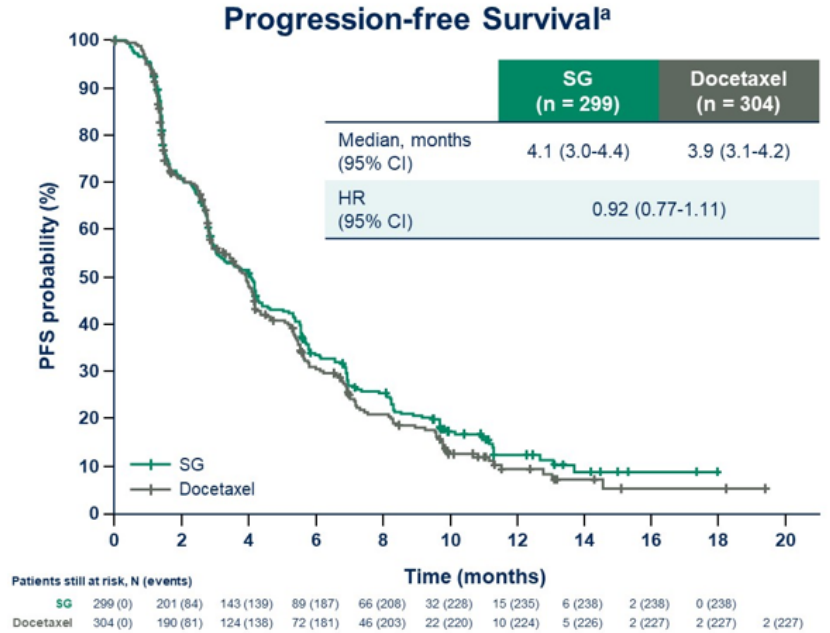
Advanced NSCLC without driver alteration

EVOKE-01 TRIAL

Primary End Point: Overall Survival (ITT)



Secondary End Points (ITT)



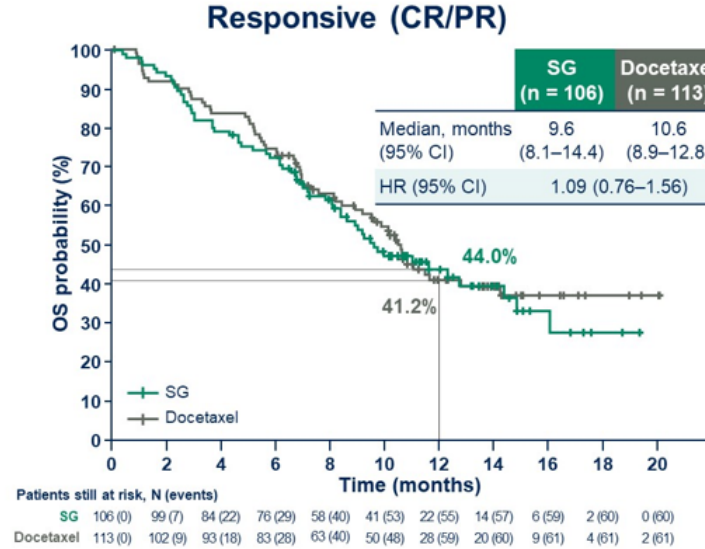
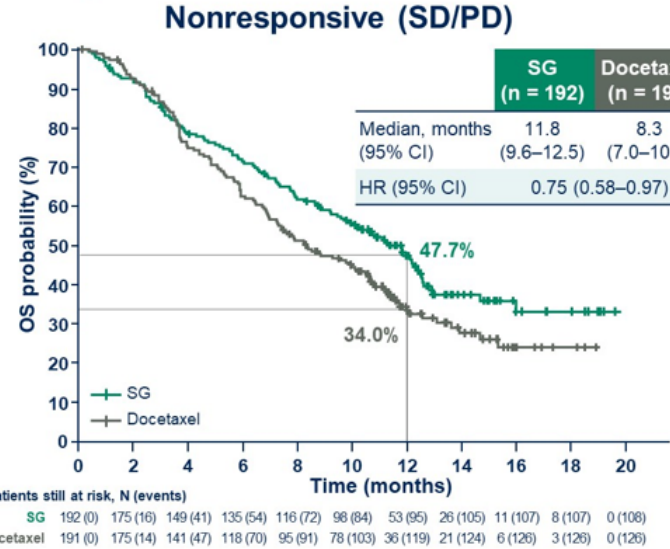
Objective Response Rate^a

	SG (n = 299)	Docetaxel (n = 304)
ORR, % (95% CI)	13.7 (10.0–18.1)	18.1 (13.9–22.9)
DCR, % (95% CI)	67.6 (61.9–72.8)	67.1 (61.5–72.4)
Median DOR, months (95% CI)	6.7 (4.4–9.8)	5.8 (4.1–8.3)
DOR rate at 6 months, % (95% CI)	52.5 (35.6–66.9)	46.5 (31.9–59.8)

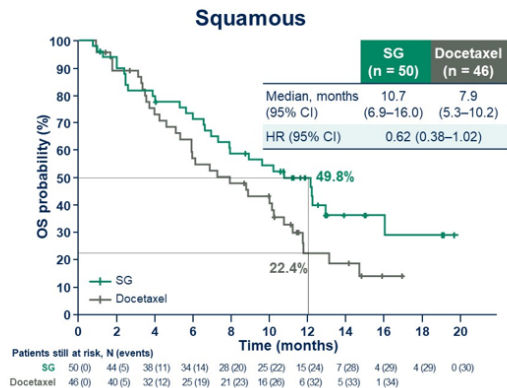
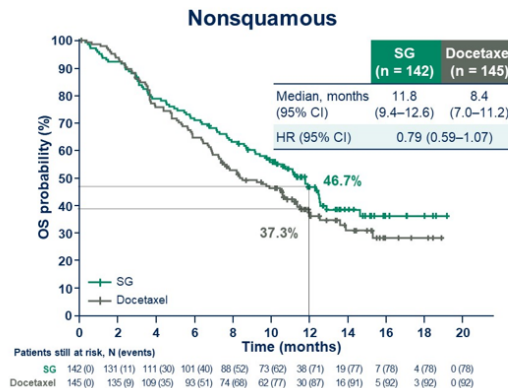
EVOKE-01 TRIAL

Overall Survival: Best Response to Last Anti-PD-(L)1-Containing Regimen

SG had a 3.5-month median OS improvement over docetaxel among subgroups with nonresponsive (SD/PD) disease



SG had similar OS benefit over docetaxel in both squamous and nonsquamous histology



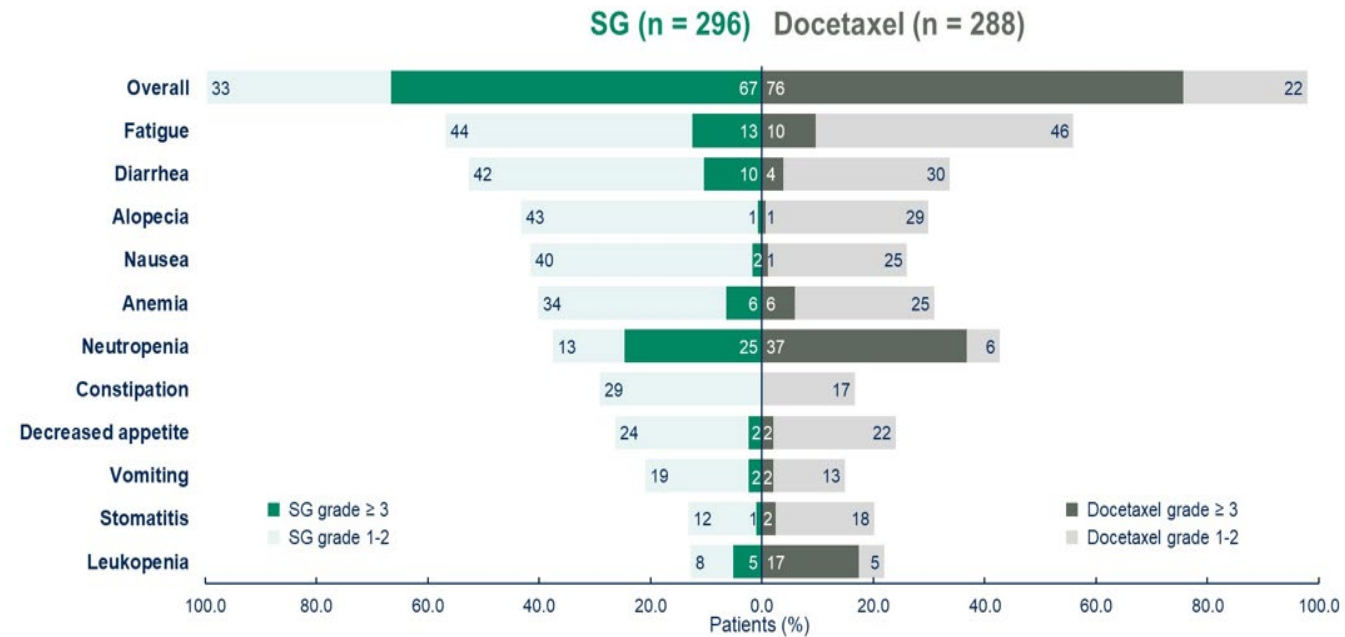
Advanced NSCLC without driver alteration

EVOKE-01 TRIAL

Overall Safety Summary

Safety-evaluable patients, n (%)	SG (n = 296)	Docetaxel (n = 288)
TEAE	TEAE	TEAE
Any grade	295 (99.7)	282 (97.9)
Grade ≥ 3	197 (66.6)	218 (75.7)
Serious	137 (46.3)	124 (43.1)
Leading to discontinuation	29 (9.8)	48 (16.7)
Leading to dose reduction	87 (29.4)	112 (38.9)
Leading to death ^a	10 (3.4)	13 (4.5)

In ≥ 20% of patients receiving SG or docetaxel



Estudio negativo con un beneficio modesto (numérico) en la OS
Se evalúa el rol de este fármaco en primera línea en combinación con IT



Advanced NSCLC without driver alteration

OA08.03: Datopotamab Deruxtecan Vs Docetaxel in Patients with Non-Small Cell Lung Cancer: Final Overall Survival from TROPION-Lung01

Study Design

TROPION-Lung01

Randomized, Phase 3, Open-Label, Global Study (NCT04656652)

Key eligibility criteria

- NSCLC (stage IIIB, IIIC, or IV)
- ECOG PS of 0–1
- No prior docetaxel
- Without actionable genomic alterations**
 - One to two prior lines, including platinum-based CT and anti-PD-(L)1 mAb therapy
- With actionable genomic alterations**
 - Positive for *EGFR*, *ALK*, *NTRK*, *BRAF*, *ROS1*, *MET* exon 14 skipping, or *RET*
 - One to two prior approved targeted therapies + platinum-based CT, and ≤ 1 anti-PD-(L)1 mAb

1:1

Dato-DXd
6 mg/kg Q3W
(N=299)

Docetaxel
75 mg/m² Q3W
(N=305)

Dual primary endpoints

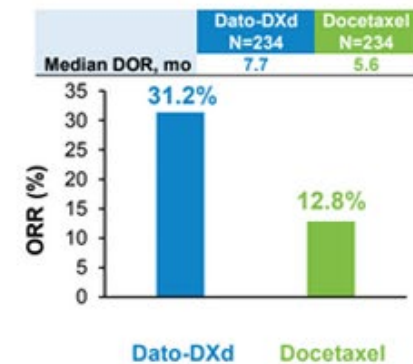
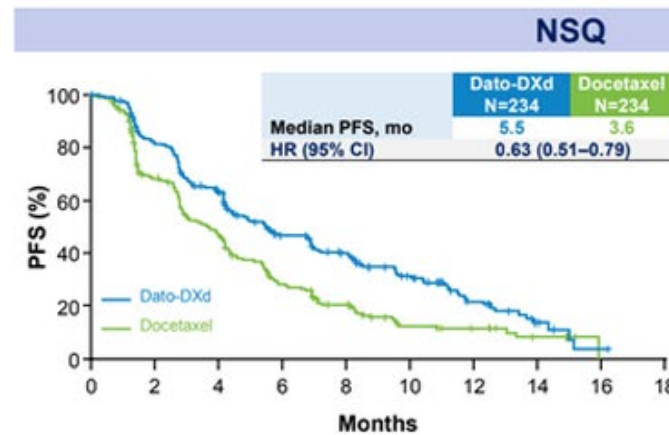
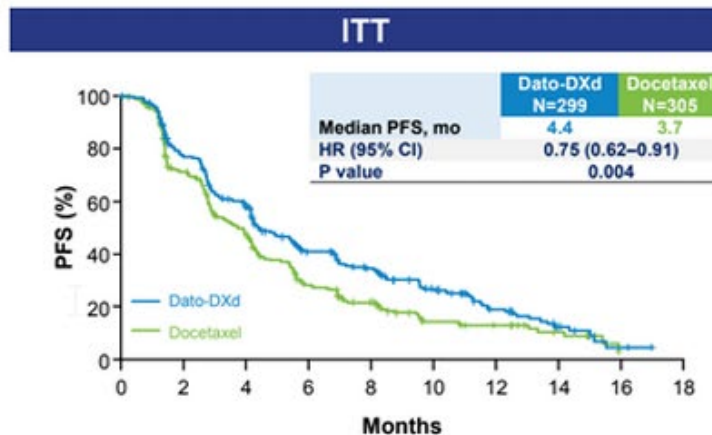
- PFS by BICR^a
- OS

Secondary endpoints

- ORR^a
- DOR^a
- Safety and tolerability

Stratified by histology (nonsquamous vs squamous), actionable genomic alteration status,^b anti-PD-(L)1 mAb included in most recent prior therapy, and geography^c

Statistical considerations: Study deemed positive if either of the dual primary endpoints (PFS by BICR or OS) were statistically significant; the pre-specified P-value boundary for the OS analysis was $\alpha=0.045$



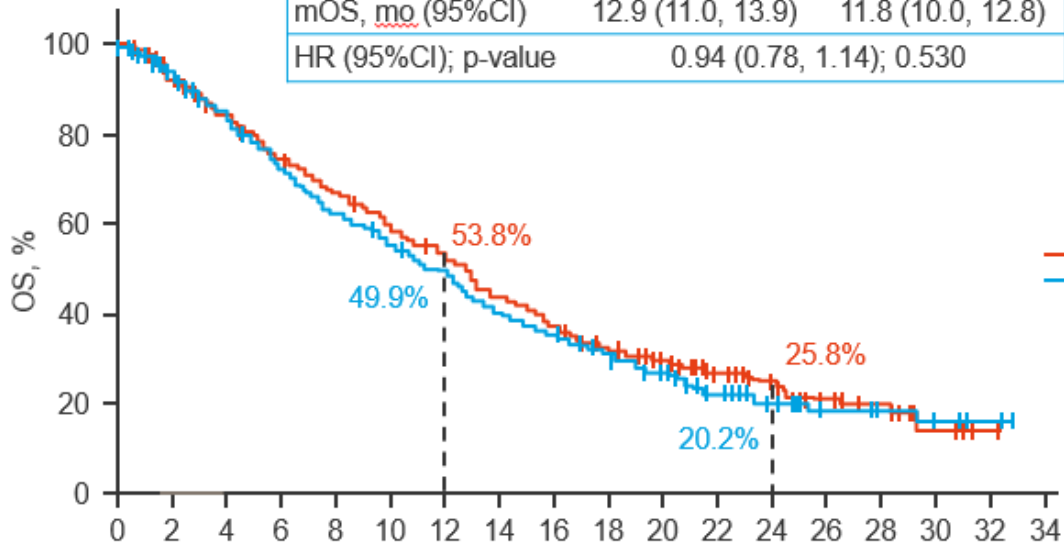
- Differential PFS outcomes by histology for Dato-DXd have been independently reported in two other NSCLC trials^{5,6}

Advanced NSCLC without driver alteration

TROPION-LUNG01 TRIAL

Overall survival

	Dato-DXd (n=299)	Docetaxel (n=305)
mOS, mo (95%CI)	12.9 (11.0, 13.9)	11.8 (10.0, 12.8)
HR (95%CI); p-value	0.94 (0.78, 1.14); 0.530	

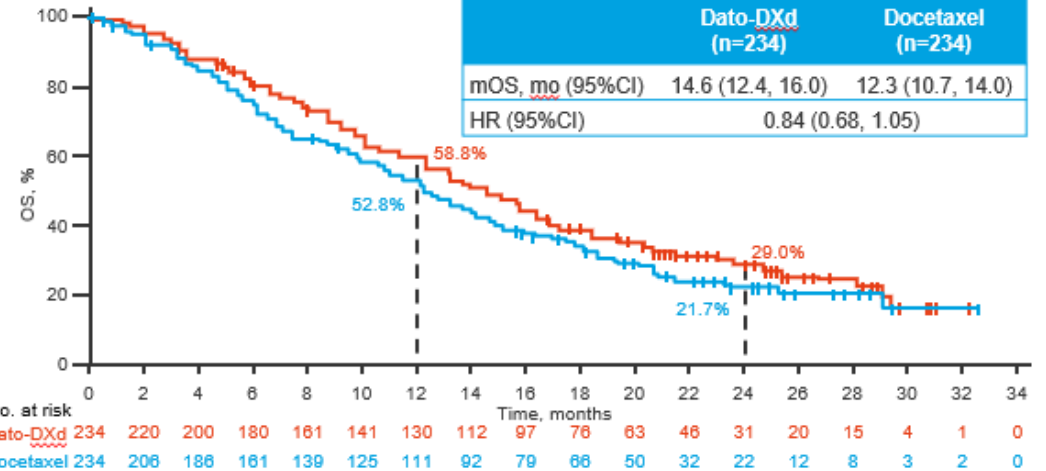


No. at risk	Time, months																	
	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Dato-DXd	299	272	242	213	190	168	151	124	106	84	71	51	35	22	16	5	1	0
Docetaxel	305	273	239	205	175	157	138	112	98	81	63	41	26	15	11	4	2	0

*Median (95% CI) OS follow-up was 23.1 (22.0, 24.8) months for Dato-DXd and 23.1 (21.7, 24.2) months for docetaxel. †At primary OS analysis (data cutoff: March 1, 2024), 433 OS events (IF) were observed. IF, information fraction.

Nonsquamous

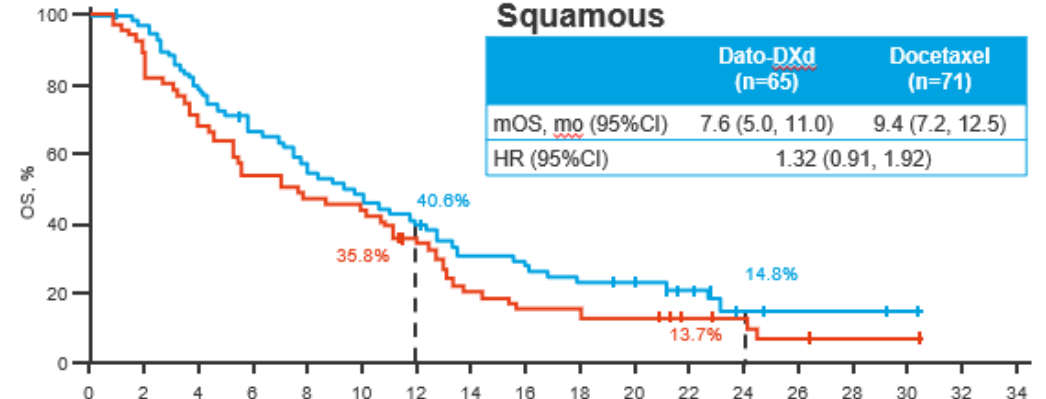
	Dato-DXd (n=234)	Docetaxel (n=234)
mOS, mo (95%CI)	14.6 (12.4, 16.0)	12.3 (10.7, 14.0)
HR (95%CI)	0.84 (0.68, 1.05)	



No. at risk	Time, months																	
	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Dato-DXd	234	220	200	180	161	141	130	112	97	76	63	46	31	20	15	4	1	0
Docetaxel	234	208	186	161	139	125	111	92	79	66	50	32	22	12	8	3	2	0

Squamous

	Dato-DXd (n=65)	Docetaxel (n=71)
mOS, mo (95%CI)	7.6 (5.0, 11.0)	9.4 (7.2, 12.5)
HR (95%CI)	1.32 (0.91, 1.92)	



No. at risk	Time, months																	
	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Dato-DXd	65	52	42	33	29	27	21	12	9	8	5	4	2	1	1	0	0	0
Docetaxel	71	67	53	44	36	32	27	20	19	15	13	9	4	3	3	1	0	0

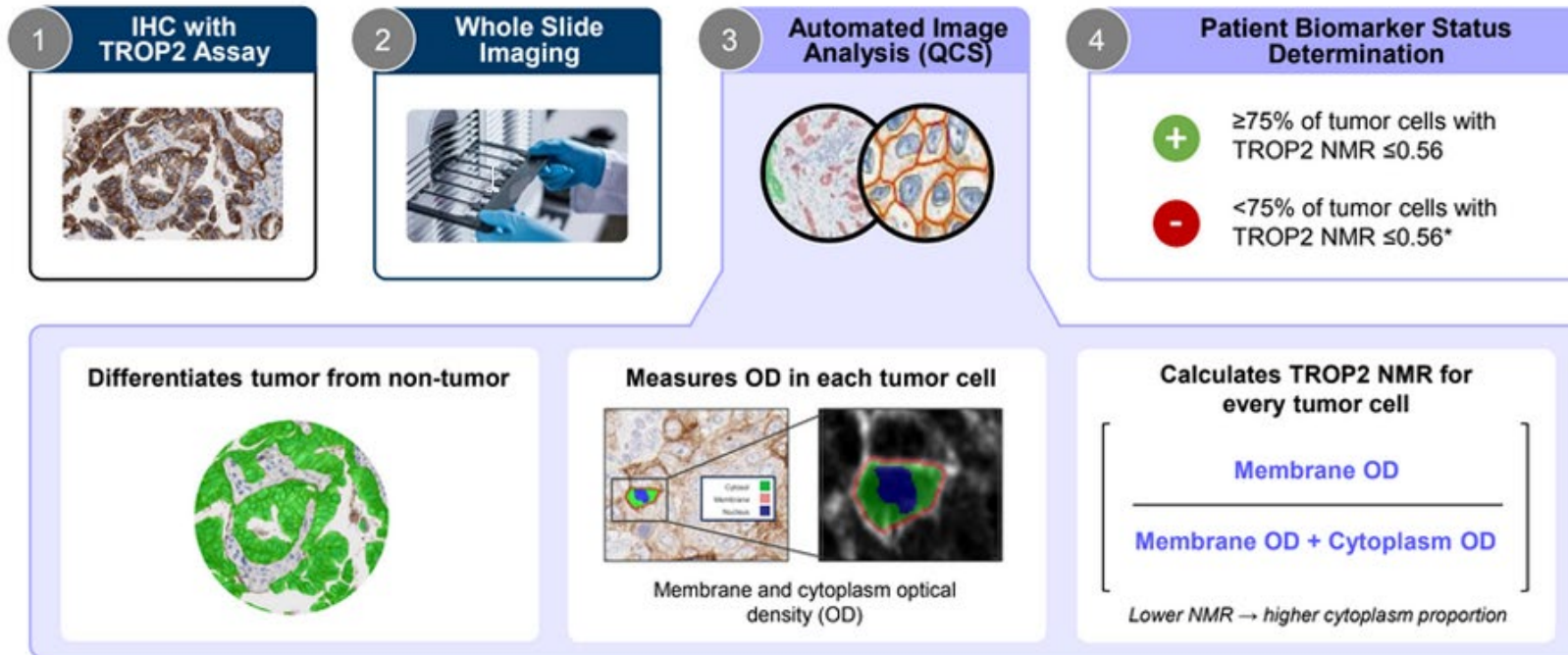
La mejora en PFS no se traslada en una mejora en la OS
OS numéricamente mayor en la rama de Dato-Dxt en población no escamosa

Advanced NSCLC without driver alteration

PL02.11: Normalized Membrane Ratio of TROP2 by Quantitative Continuous Scoring is predictive of Clinical Outcomes in TROPION-Lung 01

TROP2 Normalized Membrane Ratio (NMR) measured by Quantitative Continuous Scoring (QCS)

QCS is a novel, fully-supervised computational pathology approach that precisely quantifies and locates targets like TROP2



Prevalence

Histology subgroup	Prevalence of TROP2 QCS-NMR+, % (n)
Biomarker-evaluable population, n=352	
NSQ	66% (179/272)
NSQ/non-AGA	63% (140/221)
NSQ/AGA	76% (39/51)
SQ	44% (35/80)

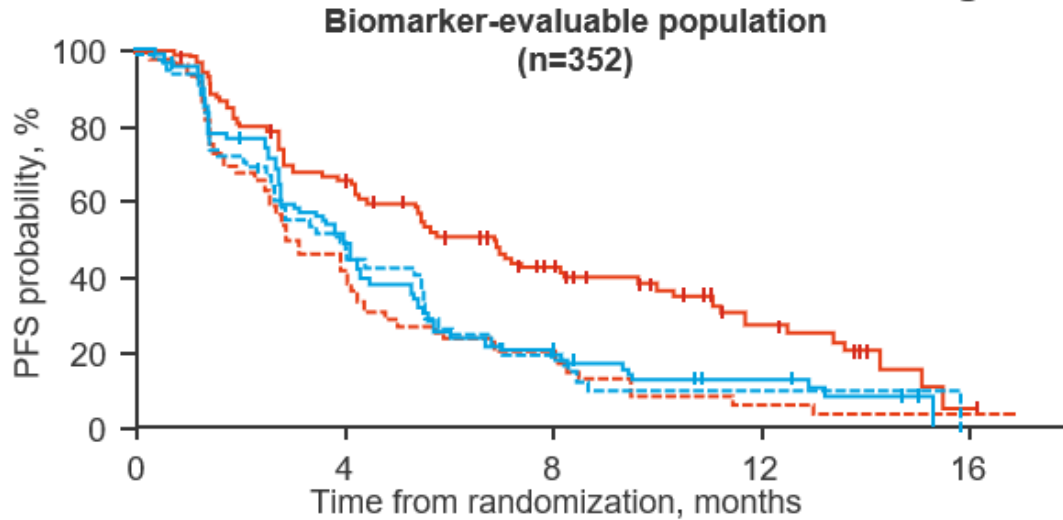
Organizado por:

Advanced NSCLC without driver alteration

TROPION-LUNG01 TRIAL

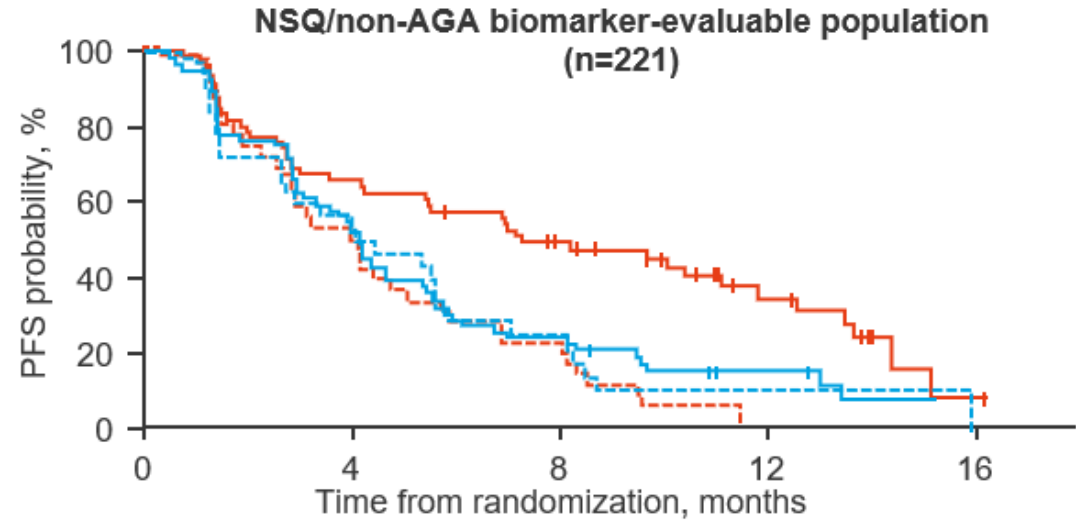
- Key results

Progression-free survival



	TROP2 QCS-NMR+		TROP2 QCS-NMR-	
	Dato-DXd (n=107)	Docetaxel (n=107)	Dato-DXd (n=65)	Docetaxel (n=73)
ORR, %	32.7	10.3	16.9	15.1
mPFS, mo	6.9	4.1	2.9	4.0
HR (95%CI)	0.57 (0.41, 0.79)		1.16 (0.79, 1.70)	

Treatment by biomarker status interaction: $p=0.0063$



	TROP2 QCS-NMR+		TROP2 QCS-NMR-	
	Dato-DXd (n=68)	Docetaxel (n=72)	Dato-DXd (n=40)	Docetaxel (n=41)
ORR, %	36.8	15.3	22.5	12.2
mPFS, mo	7.2	4.1	4.0	4.4
HR (95%CI)	0.52 (0.35, 0.78)		1.22 (0.74, 2.00)	

Treatment by biomarker status interaction: $p=0.0098$

— Dato-DXd, QCS-NMR+ - - - Dato-DXd, QCS-NMR- — Docetaxel, QCS-NMR+ - - - Docetaxel, QCS-NMR-

Advanced NSCLC without driver alteration

TROPION-LUNG01 TRIAL

Safety by TROP2 QCS-NMR status, n (%)		TROP2 QCS-NMR+		TROP2 QCS-NMR-	
		Dato-TXd (n=106)	Docetaxel (n=102)	Dato-TXd (n=65)	Docetaxel (n=71)
TRAEs	Any	92 (87)	94 (92)	56 (86)	58 (82)
	Grade \geq 3	31 (29)	47 (46)	14 (22)	19 (27)
AESIs					
Stomatitis	All grades	57 (54)	23 (23)	29 (45)	10 (14)
	Grade \geq 3	7 (7)	3 (3)	2 (3)	-
Ocular surface events	All grades	27 (25)	6 (6)	7 (11)	6 (8)
	Grade \geq 3	3 (3)	-	1 (2)	-
Adjudicated ILD	All grades	8 (8)	3 (3)	4 (6)	1 (1)
	Grade \geq 3	3 (3)	1 (1)	1 (2)	1

**TROP2 QCS-NMR es predictivo de la eficacia de Dato-Dxt
Su valor se está evaluando en otros estudios en 1L**

Organizado por:



Agenda

Advanced NSCLC

Without driver alteration

1L setting

- *Interim Analysis of NVALT trial*
- *Primary Analysis of Phase III trial HARMONi-2*

2L setting

- *Primary results from the phase 3 EVOKE-01 study*
- *Final OS from TROPION-Lung01 trial*
- *New Biomarker predictive of outcome in TROPION-Lung 01 trial*

With driver alterations

EGFR

- *Primary results from PALOMA-3 trial*
- *A secondary analysis from the phase 3 MARIPOSA study*
- *Results from CHRYSALIS-2 trial*

ALK

- *5-year progression-free survival and safety from the CROWN study*
- *Phase 1/2 ALKOVE-1 study*

KRAS G12C

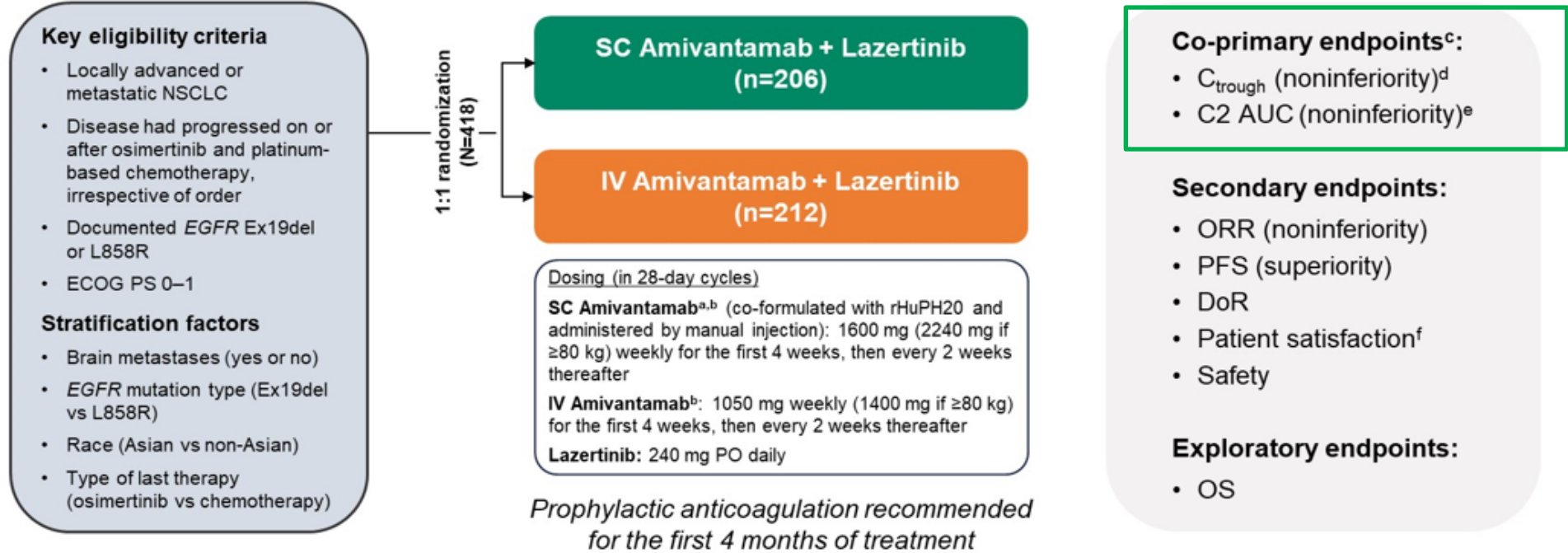
- *Primary results from KRYSTAL-12 trial*

Organizado por:

Advanced NSCLC with driver alteration

LBA8505: Subcutaneous amivantamab vs intravenous amivantamab, both in combination with lazertinib, in refractory EGFR-mutated, advanced non-small cell lung cancer (NSCLC): Primary results, including overall survival (OS), from the global, phase 3, randomized controlled PALOMA-3 trial

PALOMA-3: Phase 3 Study Design



Advanced NSCLC with driver alteration

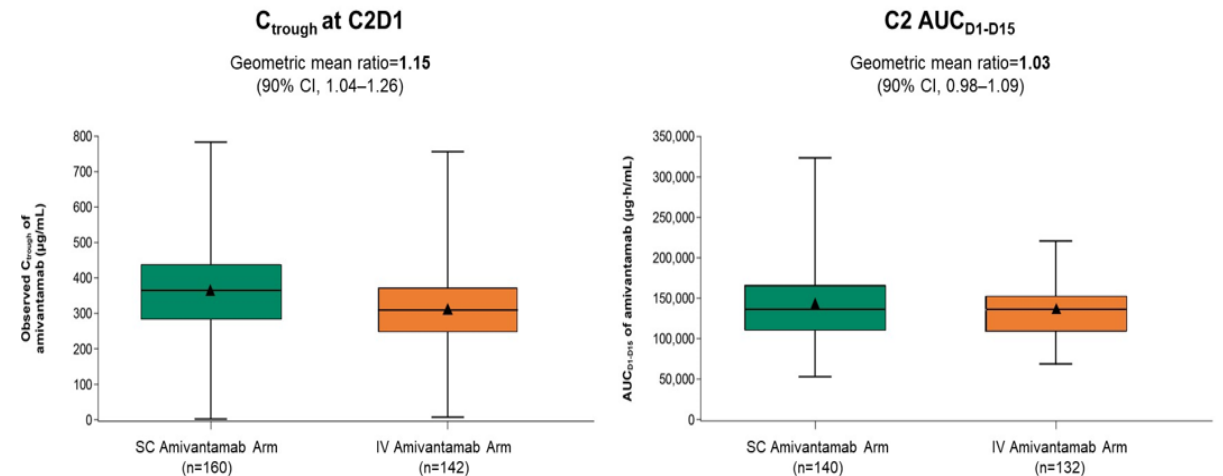
Paloma-3 Trial

Baseline Demographics

Demographics and baseline disease characteristics were well balanced between treatment groups

Characteristic, n (%)	SC Amivantamab Arm (n=206)	IV Amivantamab Arm (n=212)
Median age, years (range)	61 (35–82)	62 (29–81)
Male/female	68 (33) / 138 (67)	71 (33) / 141 (67)
Body weight: <80 kg/≥80 kg	184 (89) / 22 (11)	184 (87) / 28 (13)
Race		
Asian	126 (61)	129 (61)
White	78 (38)	77 (36)
Other ^a	2 (1)	6 (3)
Median prior lines of therapy (range)	2 (1–5)	2 (1–4)
ECOG PS		
0	58 (28)	61 (29)
1	148 (72)	151 (71)
EGFR mutation type at randomization		
Ex19del	135 (66)	138 (65)
L858R	71 (34)	74 (35)
History of brain metastases	70 (34)	72 (34)
History of smoking	65 (32)	67 (32)
Last therapy before randomization		
Osimertinib	91 (44)	96 (45)
Chemotherapy	115 (56)	116 (55)
Adenocarcinoma histology	204 (99)	207 (98)

Co-primary PK Endpoints Met Noninferiority Criteria

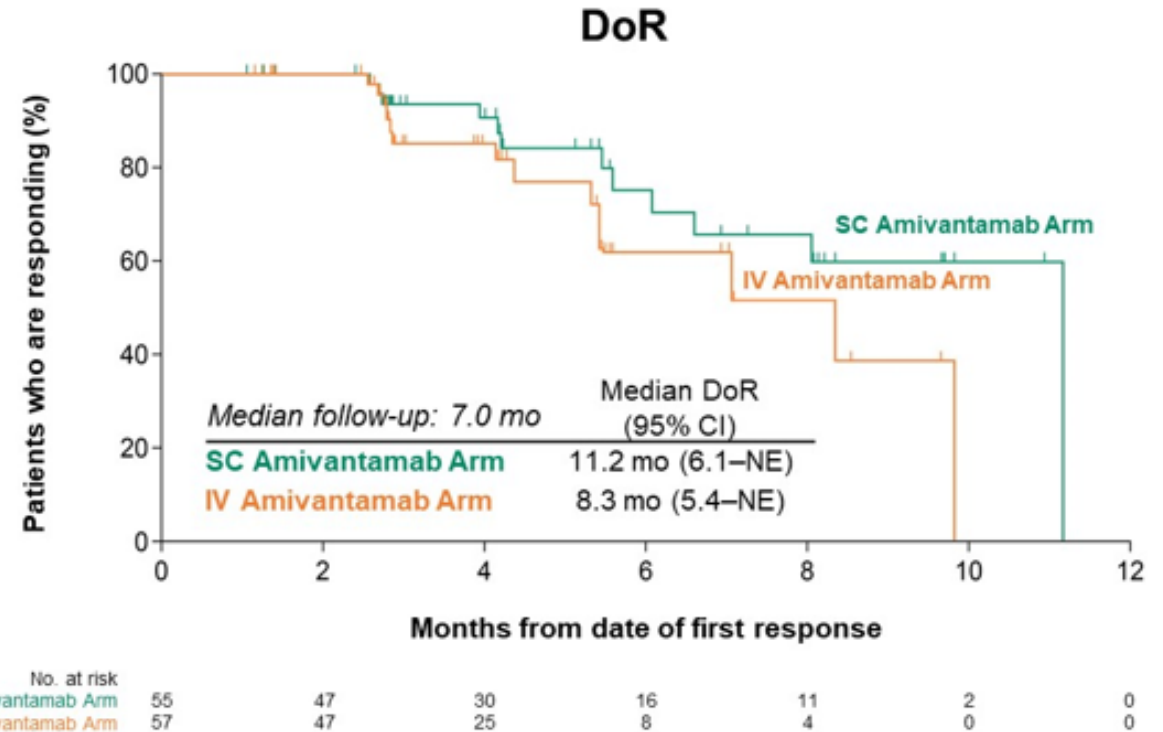


- Geometric mean ratio for C_{trough} at steady state (C4D1) was 1.43 (90% CI, 1.27–1.61)

Pharmacokinetic samples were available from 414 patients

ORR and DoR

	SC Amivantamab Arm (n=206)	IV Amivantamab Arm (n=212)
ORR, % (95% CI)^a		
All responders	30 (24–37)	33 (26–39)
	Relative risk, 0.92 (95% CI, 0.70–1.23); <i>P</i> =0.001	
Confirmed responders	27 (21–33)	27 (21–33)
	Relative risk, 0.99 (95% CI, 0.72–1.36); <i>P</i> <0.001	
Best response, n (%)		
CR	1 (0.5)	1 (0.5)
PR	61 (30)	68 (32)
SD	93 (45)	81 (38)
PD	37 (18)	42 (20)
Not evaluable	14 (7)	20 (9)
DCR, % (95% CI)^b	75 (69–81)	71 (64–77)
Median time to response (range), mo	1.5 (1.2–6.9)	1.5 (1.2–9.9)

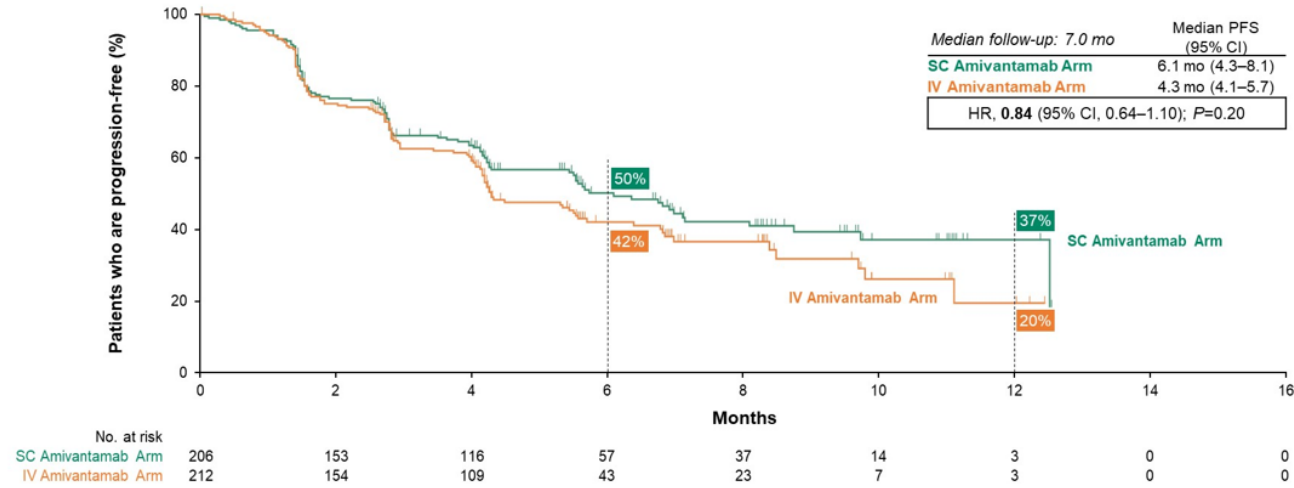


Advanced NSCLC with driver alteration

Paloma-3 Trial

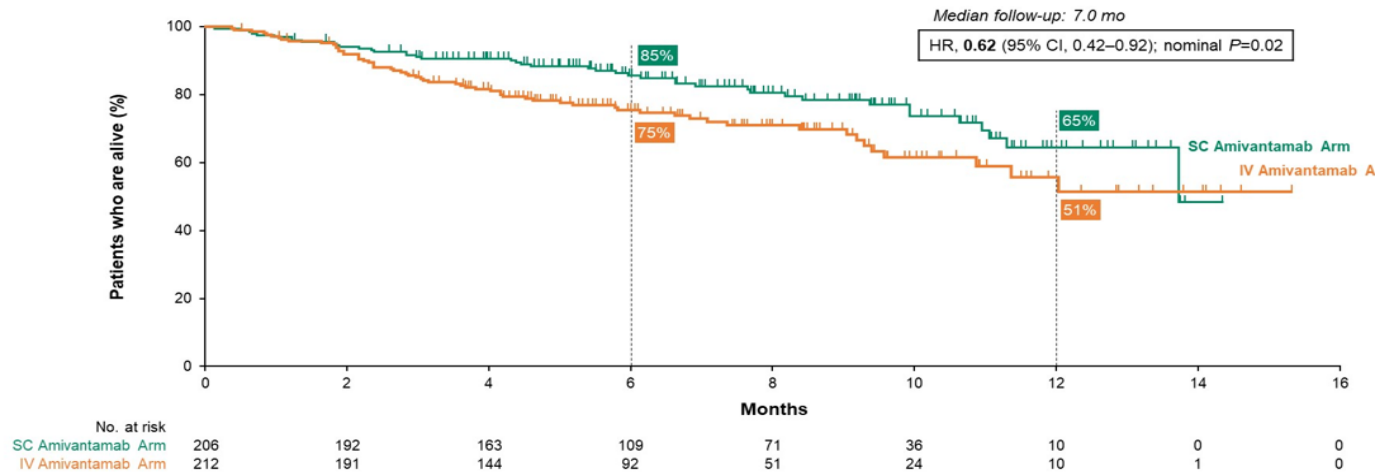
Progression-free Survival

PFS was numerically longer with SC vs IV amivantamab, with an HR of 0.84



Overall Survival

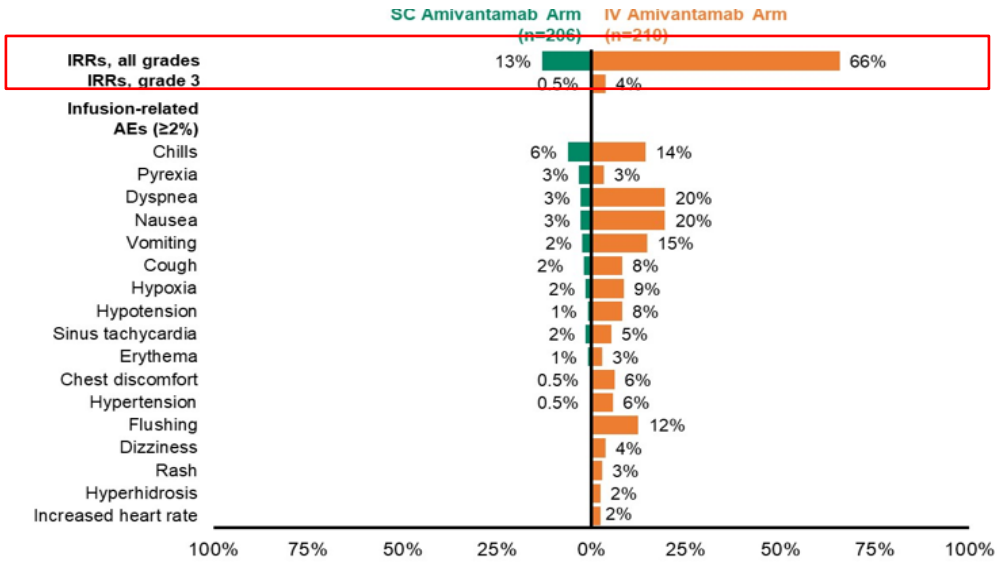
There was an OS benefit associated with SC amivantamab, with an HR of 0.62 compared to the IV amivantamab arm^a



Advanced NSCLC with driver alteration

Paloma-3 Trial

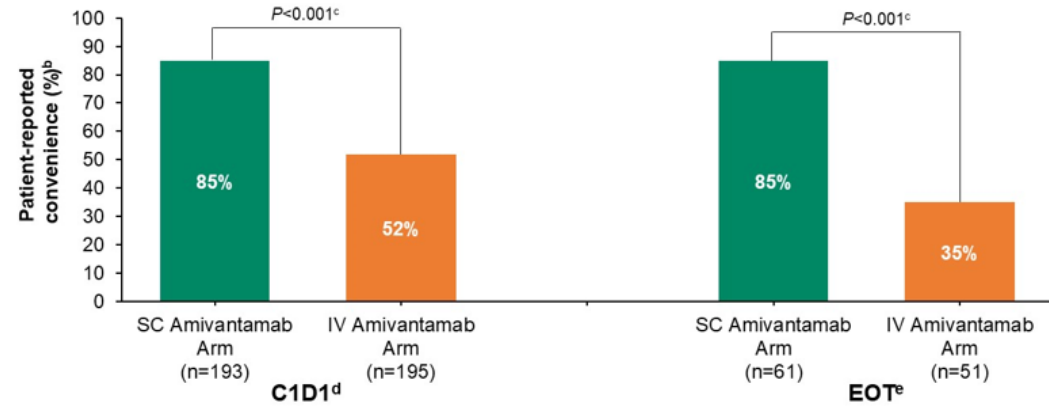
Incidence of IRR-related Symptoms



Treatment Administration Time and Convenience

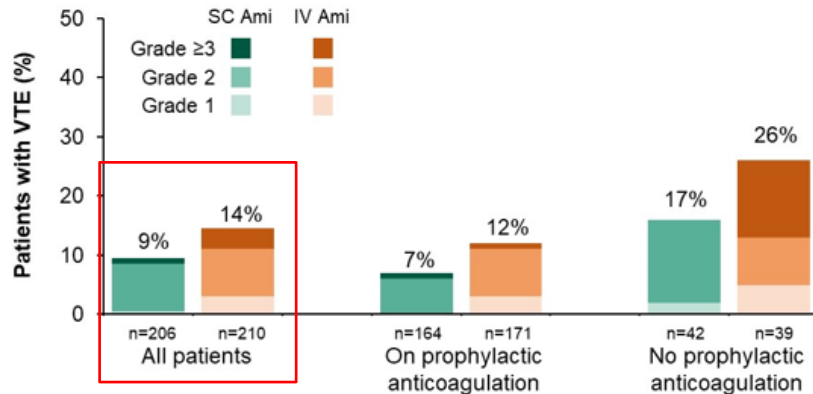
- Treatment administration time was reduced to less than 5 minutes for SC amivantamab from 5 hours for the first infusion (2 hours for subsequent infusions) for IV amivantamab

Frequency of Patient-reported Convenience per Modified TASQ^a



Adverse Event of Special Interest: VTE^a

Rates of VTE by Treatment Arm and Prophylaxis Status



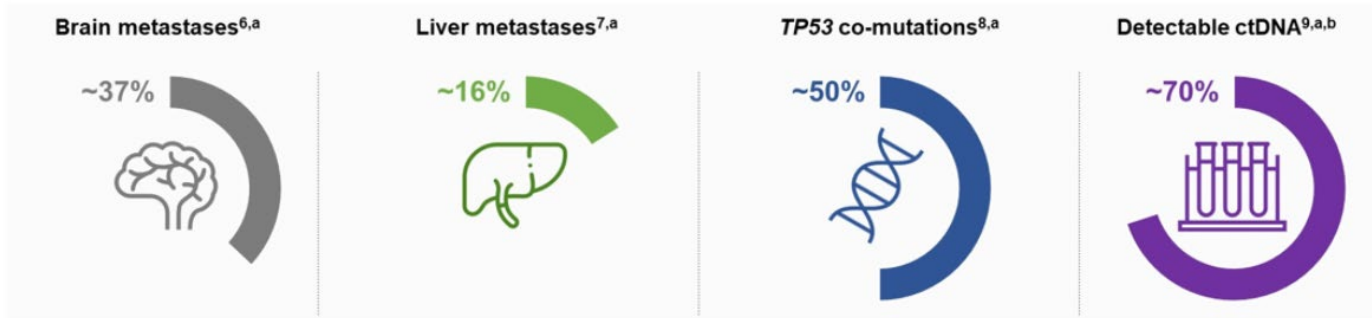
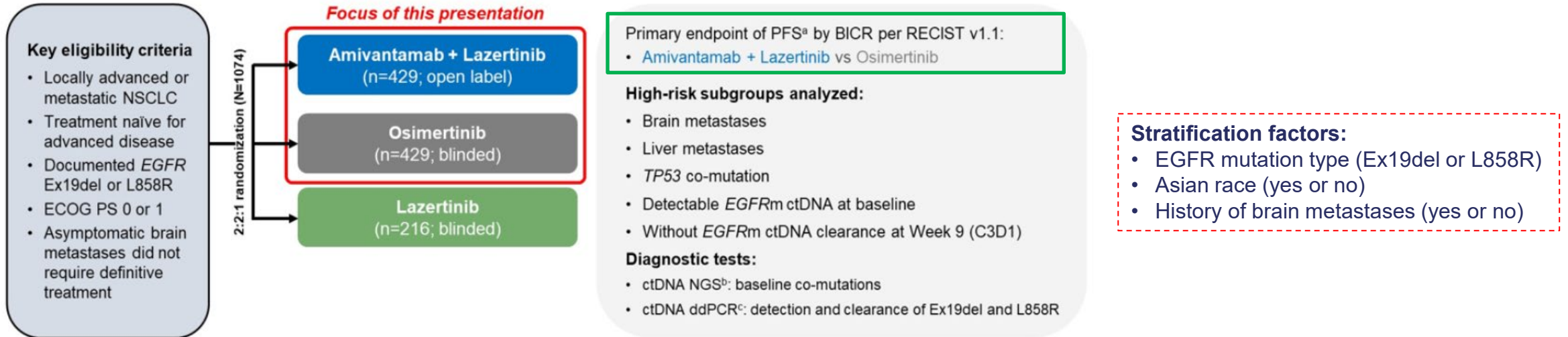
Estudio que demuestra la no inferioridad de amivantamab sc vs iv
 Muy relevante la reducción en la prevalencia de IRRs (19% vs 66%) y VTE (9% vs 14%)
 Más pacientes consideraron amivantamab sc más cómodo

Advanced NSCLC with driver alteration

8504: Amivantamab plus lazertinib vs osimertinib in first-line EGFR-mutant advanced non-small cell lung cancer (NSCLC) with biomarkers of high-risk disease: A secondary analysis from the phase 3 MARIPOSA study

MARIPOSA Study Design and Methods

- Amivantamab is an EGFR-MET bispecific antibody with immune cell-directing activity¹⁻³
- Lazertinib is a CNS-penetrant, 3rd-generation EGFR TKI^{4,5}



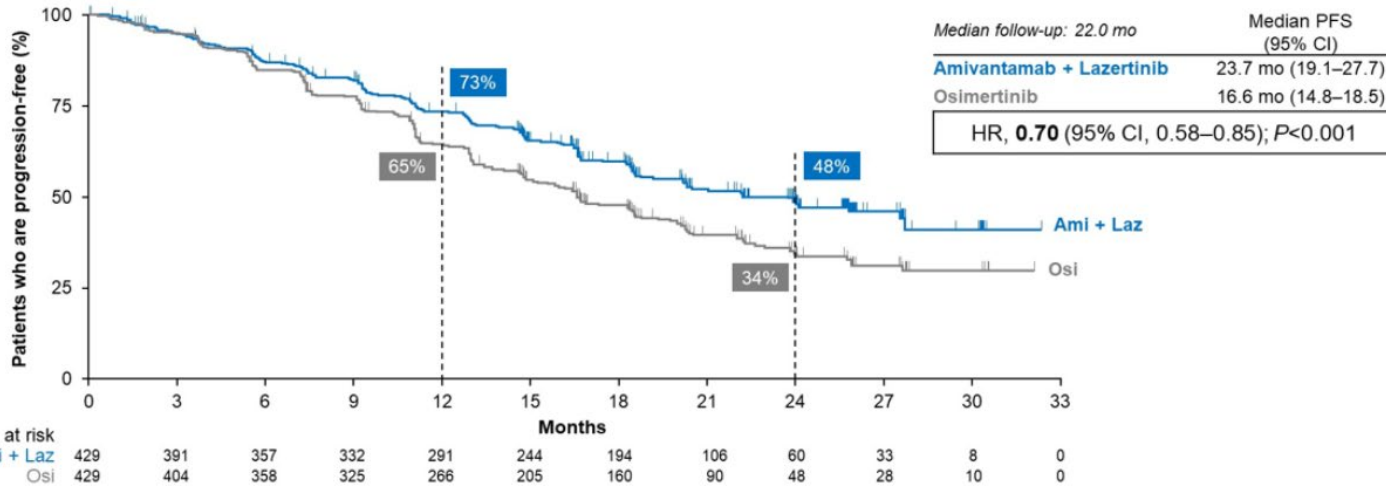
Advanced NSCLC without driver alteration

MARIPOSA TRIAL

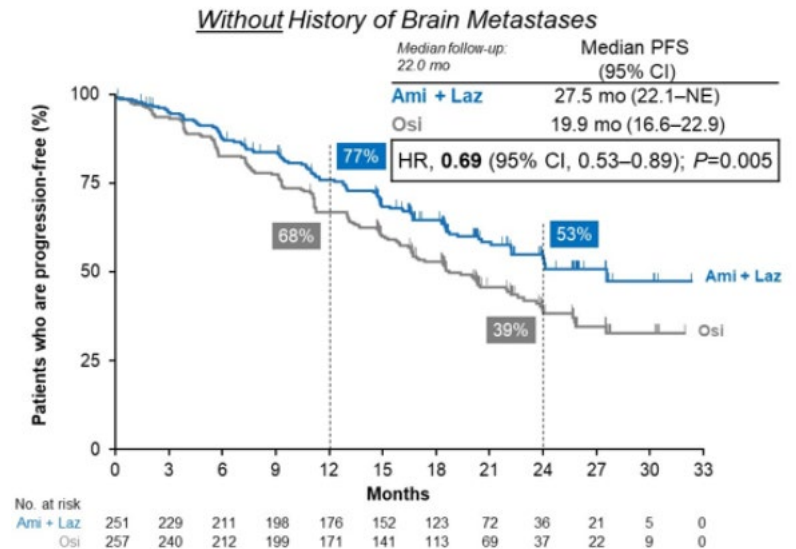
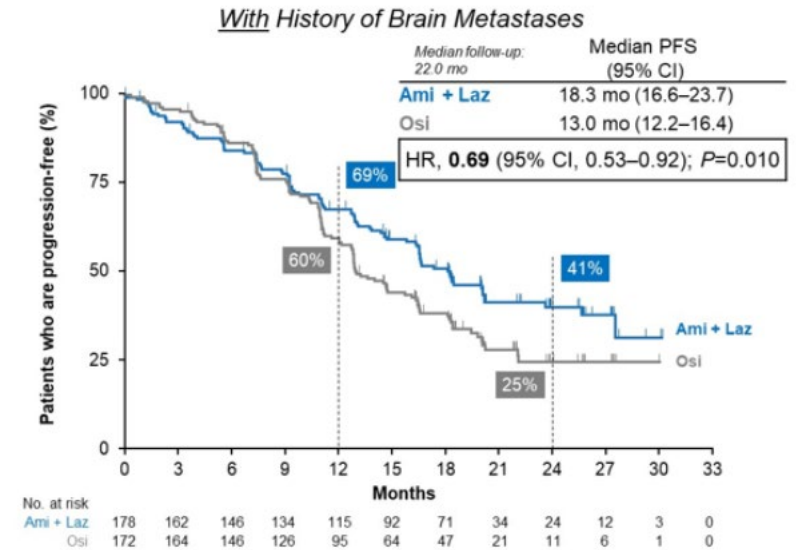
- In the amivantamab + lazertinib arm, 41% of patients had a history of brain metastases vs 40% in the osimertinib arm

Primary Endpoint: PFS by BICR

Amivantamab + lazertinib reduced the risk of progression or death by 30% and improved median PFS by 7.1 months



PFS by Baseline Brain Metastases



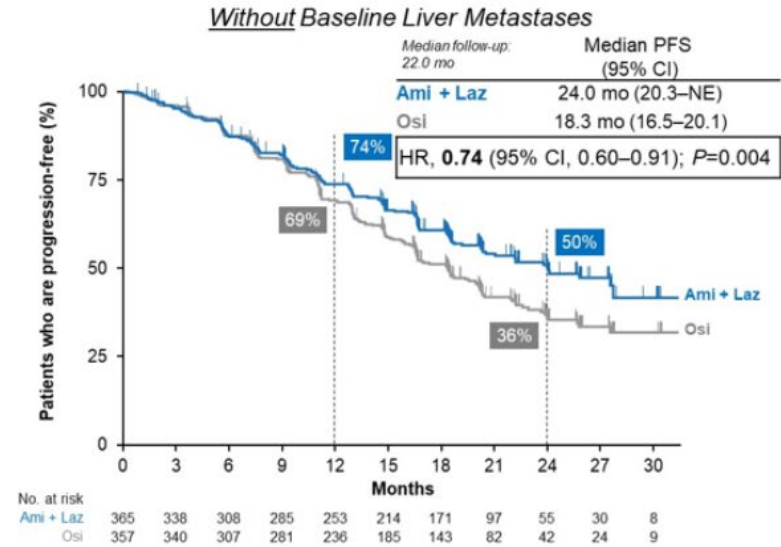
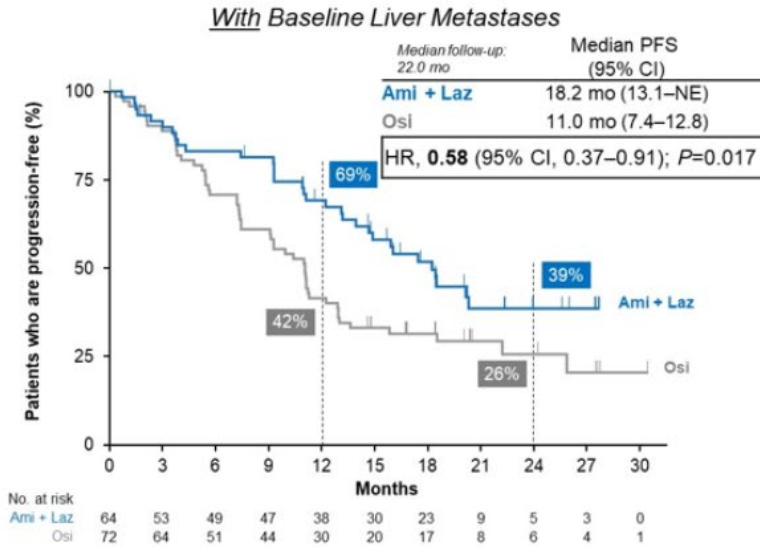
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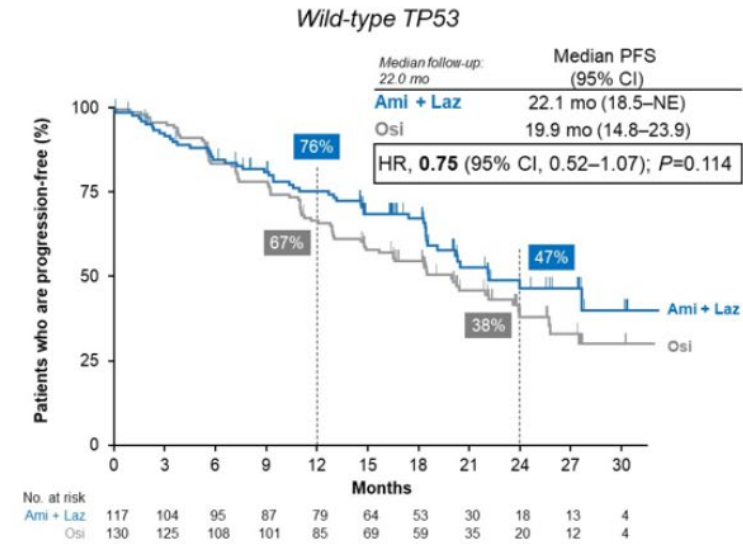
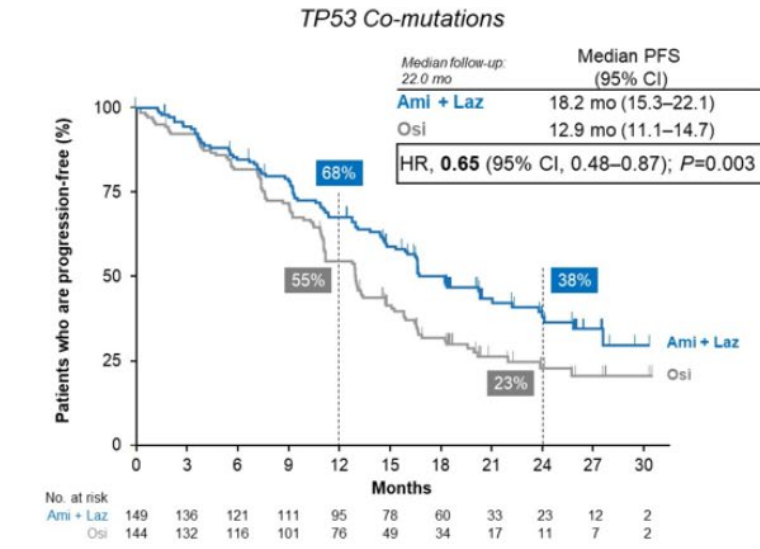
Advanced NSCLC without driver alteration

MARIPOSA TRIAL

Liver Metastases



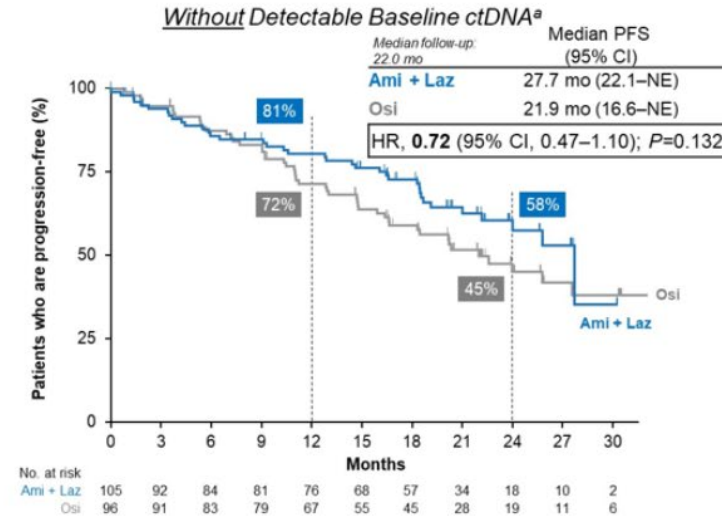
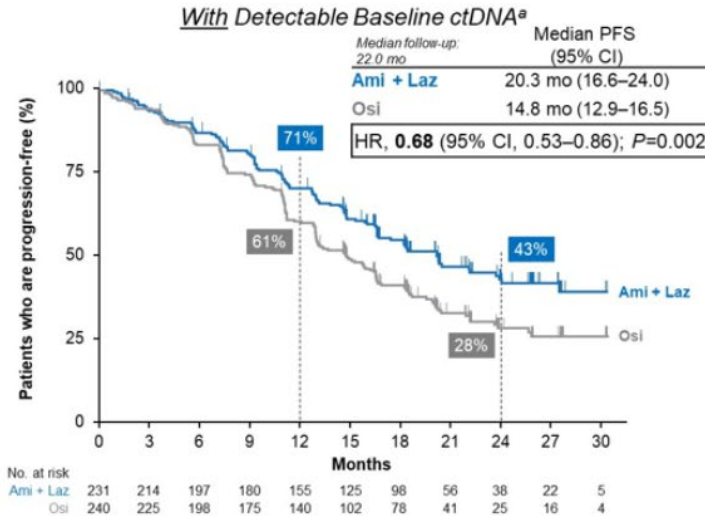
TP53 mutation



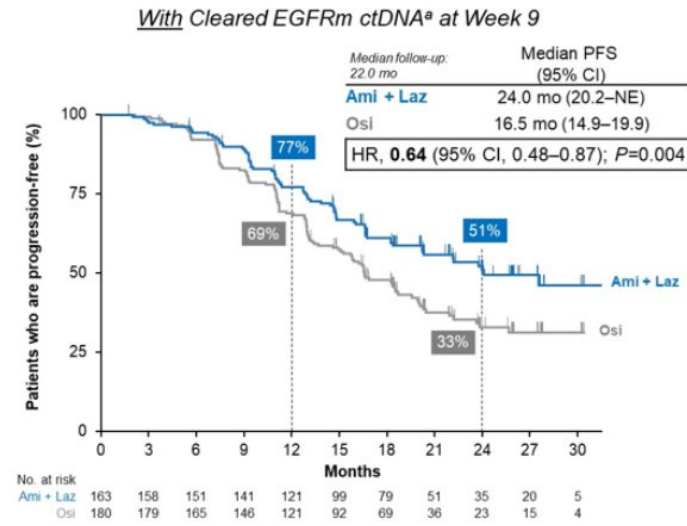
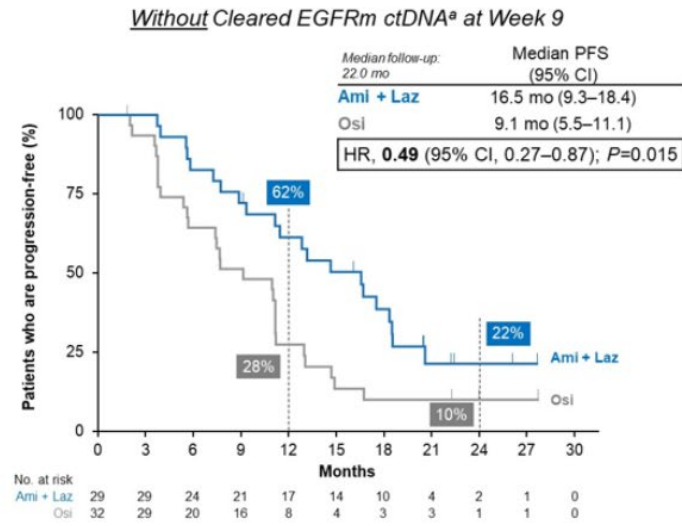
Advanced NSCLC without driver alteration

MARIPOSA TRIAL

Detectable EGFRm ctDNA baseline



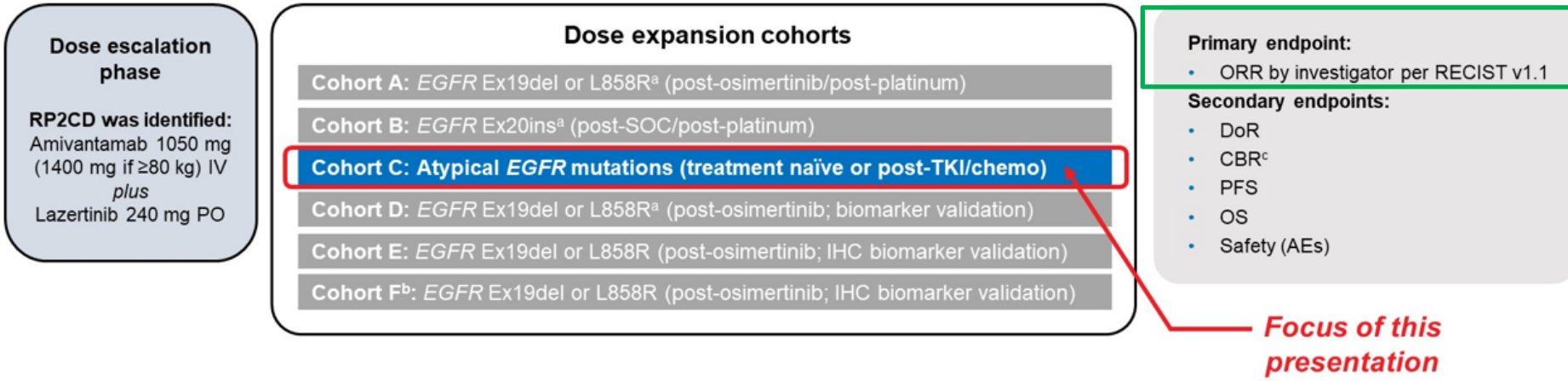
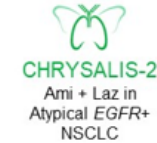
Without EGFRm ctDNA at week 9



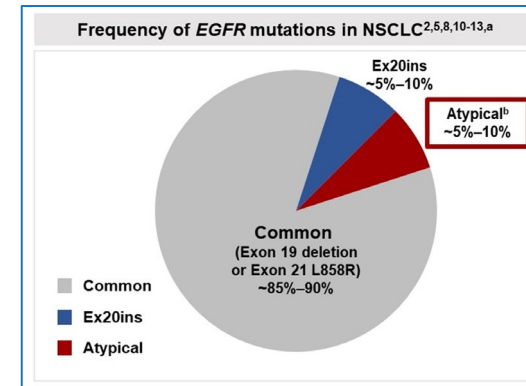
Todos los subgrupos de pacientes de mal pronóstico analizados se benefician de la combinación

8516: Amivantamab plus lazertinib in atypical EGFR-mutated advanced non-small cell lung cancer (NSCLC): Results from CHRYSALIS-2

CHRYSALIS-2 Study Design



- Cohort C included patients with atypical EGFR mutations who were treatment naïve or had ≤ 2 prior lines (excluding 3rd-gen EGFR TKIs)
- Patients with Ex20ins and Ex19del/L858R co-mutations were excluded
- Baseline ctDNA NGS analyses were performed using Guardant Health G360^d



Advanced NSCLC with driver alteration

Chrysalis-2 Trial

Demographic and Baseline Disease Characteristics



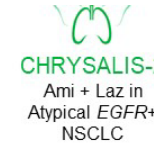
- As of January 12, 2024, 105 patients received amivantamab + lazertinib, with a median follow-up of 16.1 months (range, 0.1–31.5)

Characteristic, n (%)	Cohort C (n=105)	Characteristic, n (%)	Cohort C (n=105)
Median age, years (range)	64 (30–85)	ECOG PS	
Male / female	53 (50) / 52 (50)	0	33 (31)
Race		1	72 (69)
White	31 (30)	Type of EGFR mutation ^b	
Asian	71 (68)	Exon 18 G719X	60 (57) ^c
Black or African American	1 (1)	Exon 21 L861X	27 (26) ^d
Not reported	2 (2)	Exon 20 S768X	25 (24) ^e
Brain metastases at baseline	33 (31)	Exon 18 E709K	2 (2)
Prior therapies in metastatic setting		Exon 20 E709A	2 (2)
Treatment naïve	49 (47)	L833V	2 (2)
Prior afatinib	34 (32)	R776C	2 (2)
Prior 1st-/2nd-gen EGFR TKI (other than afatinib) ^a	9 (9)	R776H	1 (1)
Prior platinum chemotherapy	7 (7)	R831H	1 (1)
Prior afatinib + prior platinum chemotherapy	6 (6)	V744M	1 (1)
		V769L	1 (1)
		V774M	1 (1)
		Other	10 (10)

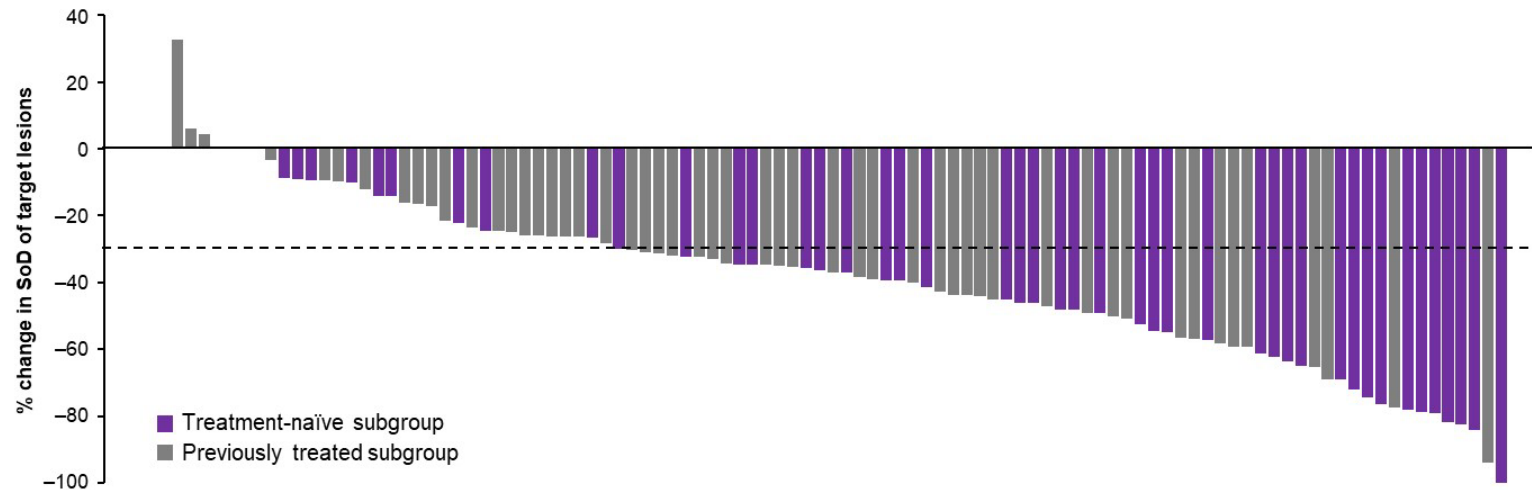
^a1st-/2nd-generation EGFR TKIs other than afatinib included gefitinib, dacomitinib, erlotinib, and icotinib. ^bPatients may be counted in ≥1 category. ^cG719X included G719A, G719S, and G719C. ^dL861X included L861Q, L861R, and L861G. ^eS768X included S768I and S768L. ECOG PS, Eastern Cooperative Oncology Group performance status; EGFR, epidermal growth factor receptor; gen, generation; TKI, tyrosine kinase inhibitor.



Efficacy Outcomes of Amivantamab + Lazertinib Among All Patients in Cohort C



Investigator-assessed response (n=105)	
Median follow-up	16.1 mo (range, 0.1–31.5)
ORR	52% (95% CI, 42–62)
Median DoR	14.1 mo (95% CI, 9.5–26.2)
DoR ≥6 mo, n (%) ^a	38 (69)
Best response, n (%)	
CR	0
PR	55 (52)
SD	37 (35)
PD	8 (8)
Not evaluable/UNK	5 (5)
CBR ^b	79% (95% CI, 70–86)
Median PFS	11.1 mo (95% CI, 7.8–17.8)
Median OS	NE (95% CI, 22.8–NE)



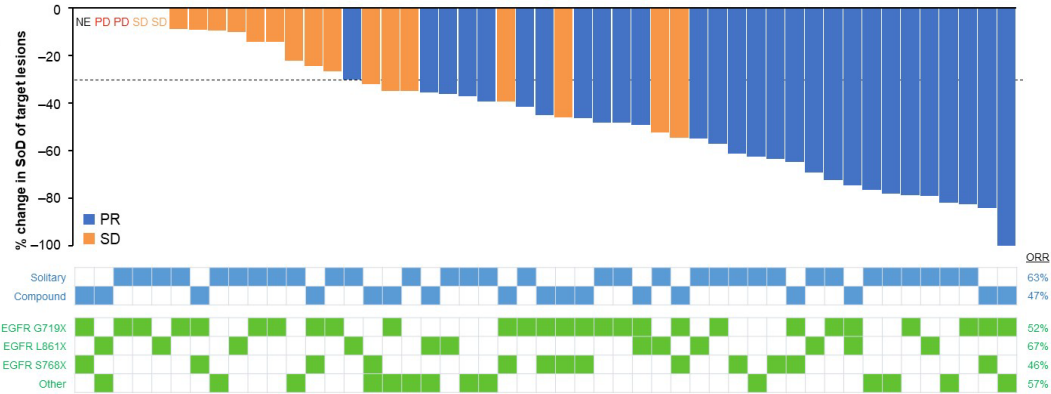
- In a heterogeneous population, the **median PFS was 11.1 months** and **median OS was NE**

Advanced NSCLC with driver alteration

Chrysalis-2 Trial

1st LINE

Investigator-assessed response (n=49)	
Median follow-up	17.3 mo (range, 0.1–31.5)
ORR	57% (95% CI, 42–71)
Median DoR	20.7 mo (95% CI, 9.9–NE)
DoR ≥6 mo, n (%) ^a	21 (75)
CBR ^b	84% (95% CI, 70–93)
Median PFS	19.5 mo (95% CI, 11.2–NE)
Median OS	NE (95% CI, 26.3–NE)

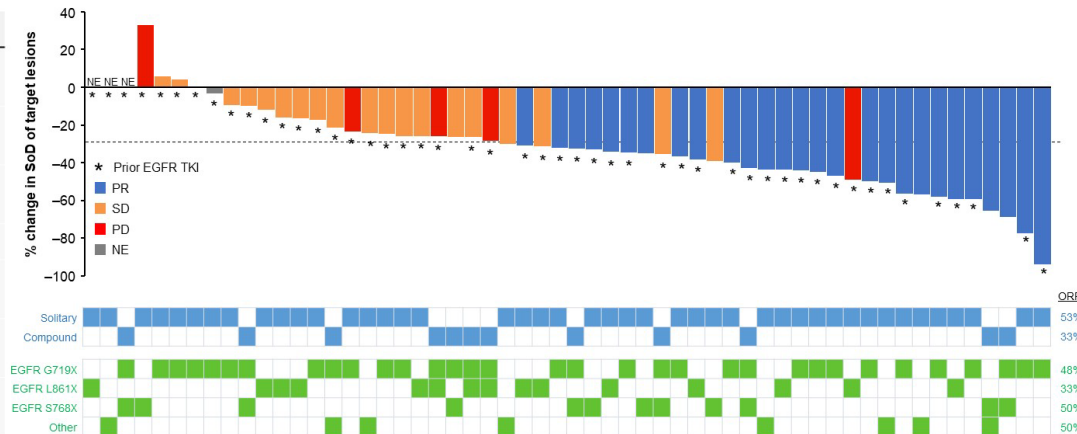


- The presence of *TP53* co-mutation and other pathogenic alterations were not associated with a lower response rate
- At a median follow-up of 17.3 months, the **median PFS was 19.5 months** and **median OS was NE**

Resultados clínicamente muy relevantes de la combinación en pacientes con mutaciones atípicas de EGFR

2nd/3rd LINE

Investigator-assessed response (n=56)	
Median follow-up	15.4 mo (range, 0.3–30.8)
ORR	48% (95% CI, 35–62)
Median DoR	11.0 mo (95% CI, 4.5–NE)
DoR ≥6 mo, n (%) ^a	17 (63)
CBR ^b	75% (95% CI, 62–86)
Median PFS	7.8 mo (95% CI, 5.4–11.1)
Median OS	22.8 mo (95% CI, 16.9–NE)



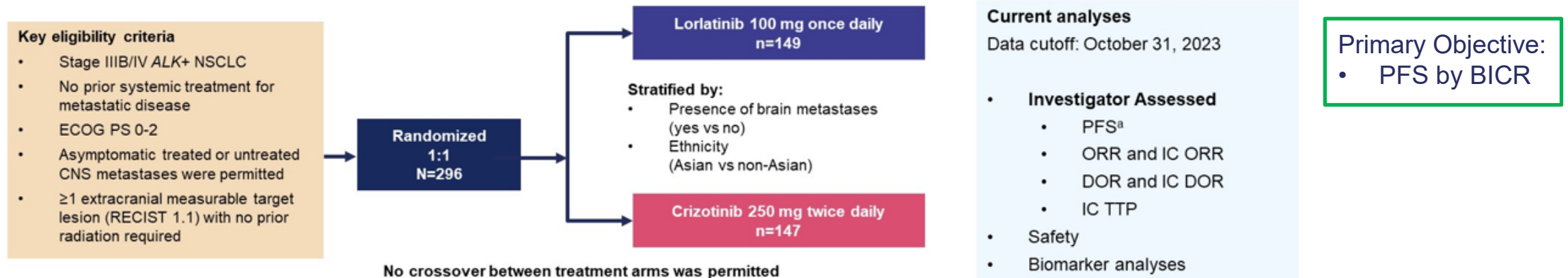
- 88% of patients received a prior EGFR TKI
- The presence of *TP53* co-mutation and other pathogenic alterations were not associated with a lower response rate
- At a median follow-up of 15.4 months, the **median PFS was 7.8 months** and **median OS was 22.8 months**

Advanced NSCLC with driver alteration

LBA8503: Lorlatinib vs crizotinib in treatment-naïve patients with advanced ALK+ non-small cell lung cancer: 5-year progression-free survival and safety from the CROWN study

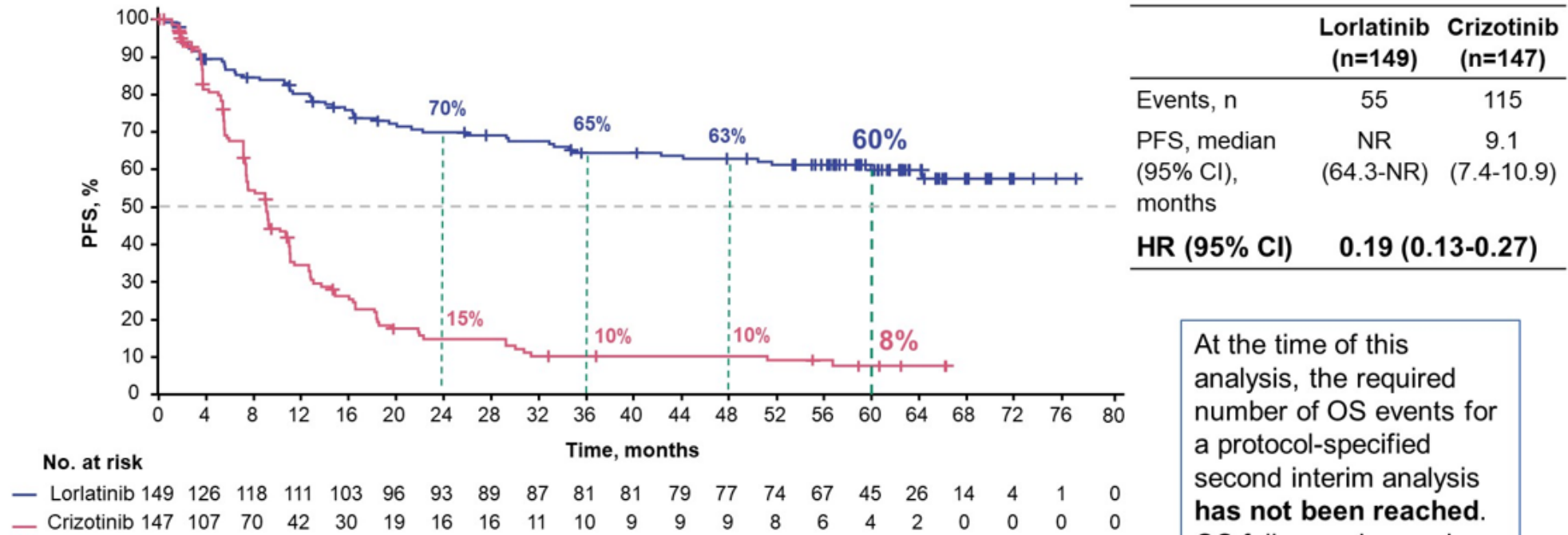
Current Post Hoc Analyses at 5 Years

Endpoint evaluation by BICR stopped after the 3-year analysis



- The median duration of follow-up for PFS was 60.2 months (95% CI, 57.4-61.6) in the lorlatinib arm and 55.1 months (95% CI, 36.8-62.5) in the crizotinib arm

At 60.2 Months of Median Follow-Up, Median PFS by Investigator Was Still Not Reached With Lorlatinib



At the time of this analysis, the required number of OS events for a protocol-specified second interim analysis **has not been reached**. OS follow up is ongoing



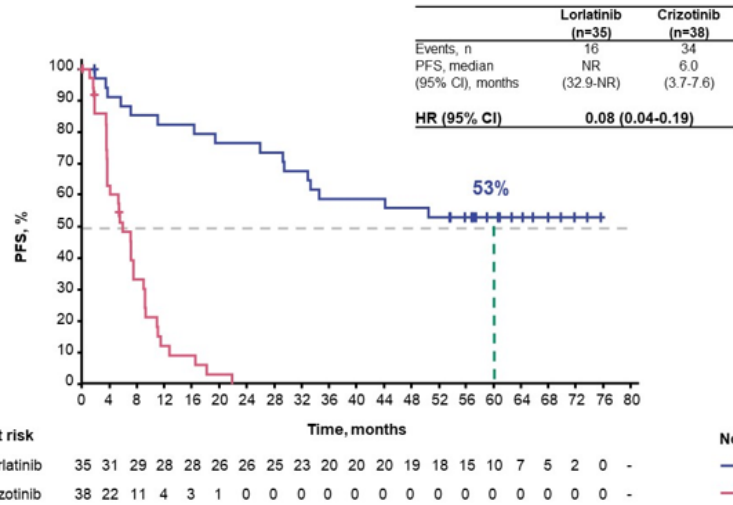
HR, hazard ratio; NR, not reached; OS, overall survival; PFS, progression-free survival.

Advanced NSCLC with driver alteration

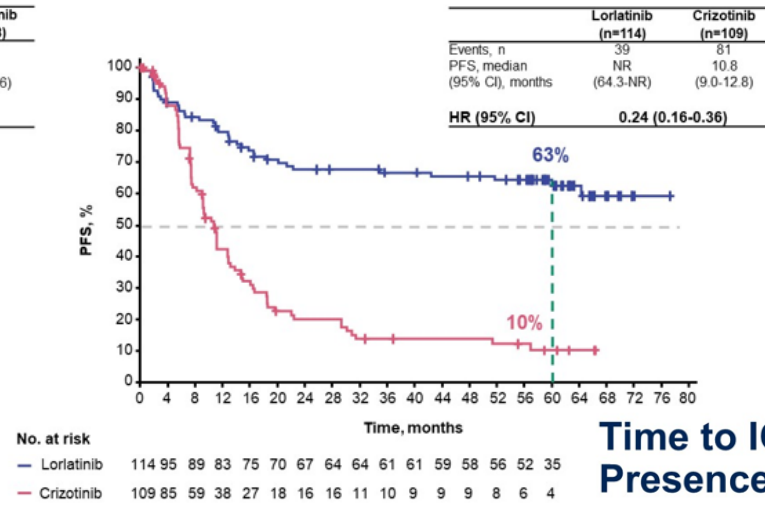
Crown Study

Lorlatinib Showed Superior PFS Benefit Irrespective of Presence or Absence of Baseline Brain Metastases

With Baseline Brain Metastases

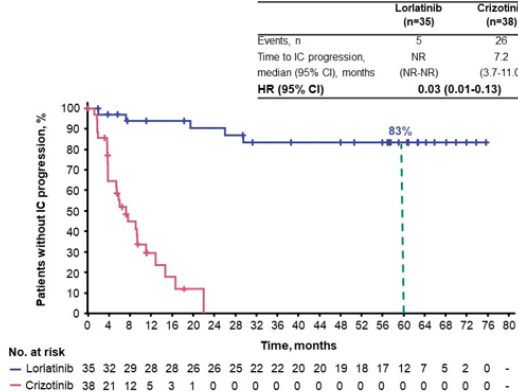


Without Baseline Brain Metastases

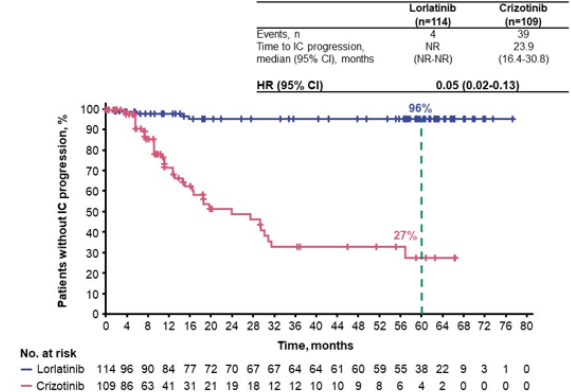


Time to IC Progression Was Longer With Lorlatinib in Presence or Absence of Baseline Brain Metastases

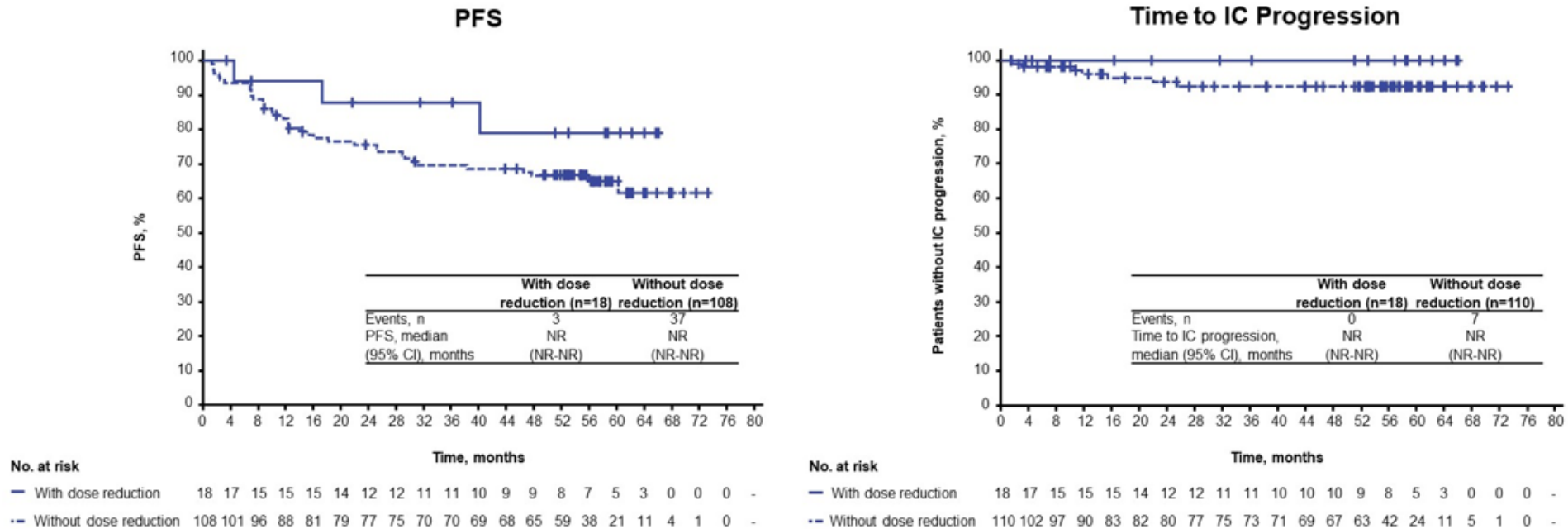
With Baseline Brain Metastases



Without Baseline Brain Metastases



Dose Reduction Did Not Impact Efficacy of Lorlatinib in Patients Who Had Dose Reduction in the First 16 Weeks



Tras 5 años de seguimiento, la SLP en la rama de lorlatinib no se alcanza pero in 60% de los pacientes están libres de progression
 Probabilidad de estar libre de PE a nivel de intracraneal 92%
 Se confirma su role como estandar de tratamiento en 1L

Advanced NSCLC with driver alteration

12530: Phase 1/2 ALKOVE-1 study of NVL-655 in ALK-positive (ALK+) solid tumors



A Global First-in-Human Phase 1/2 Clinical Trial of NVL-655 in Advanced ALK-Positive NSCLC and Other Solid Tumors (NCT05384626)

PHASE 1 DOSE-ESCALATION COMPLETED, FOLLOW-UP CONTINUES

Enrollment June 2022 to February 2024 (Data cut-off: 15 June 2024)

NVL-655 Phase 1	All Doses	15 mg QD	25 mg QD	50 mg QD	100 mg QD	RP2D 150 mg QD	200 mg QD
All-Treated Population	N = 133	3	12	12	32	52	22
NSCLC Response-Evaluable Population	N = 103	3	7	10	27	39	17

2G, 2nd generation ALK TKI (i.e., ceritinib, alectinib, or brigatinib); 3G, 3rd generation ALK TKI (i.e., lorlatinib); MTD, maximum tolerated dose; NSCLC, non-small cell lung cancer; PK, pharmacokinetics; QD, once daily; RP2D, recommended phase 2 dose; TKI, tyrosine kinase inhibitor

* Response evaluable population prospectively defined as all NSCLC patients with measurable disease, without concurrent oncogenic driver, and who undergo ≥1 post-baseline response assessment (or discontinue treatment due to clinical progression/death prior to the first response assessment). Patients unevaluable for response: no measurable disease at baseline (n = 18); tumor with alternate oncogenic driver (MET amplification [n = 4], BRAF G469A [n = 2], BRAF fusion [n = 1], NTRK fusion [n = 1]); no post-baseline scan and discontinued treatment for reasons other than progressive disease (n = 2); other solid tumor (n = 2).

PATIENT POPULATION

- Advanced solid tumors harboring an ALK fusion or activating mutation (by local testing)
- Patients with NSCLC: ≥ 1 prior 2G or 3G ALK TKI
- ≤ 2 prior chemotherapies/immunotherapies
- Excluded: concurrent oncogenic drivers (e.g., EGFR/ROS1/MET/RET/BRAF alterations) ^a
- Evaluable but non-measurable disease allowed ^a

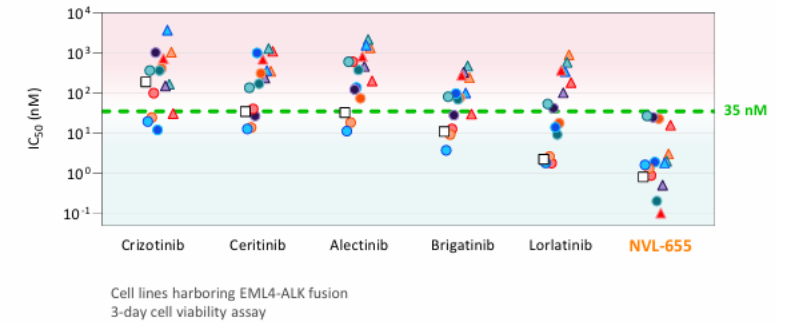
PHASE 1 OBJECTIVES

- Primary: Selection of RP2D and, if applicable, MTD
- Overall safety and tolerability
- PK characterization
- Preliminary antitumor activity
- Intracranial activity

NVL-655:

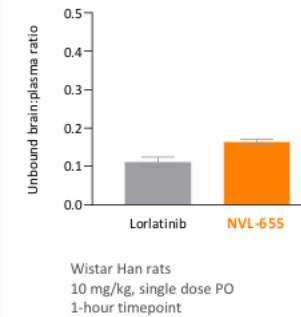
ALK Fusion and ALK Single/Compound Mutation Activity

Potent activity (IC₅₀ = 0.1 – 30 nM) against ALK-driven cell lines, including ALK single and compound mutants



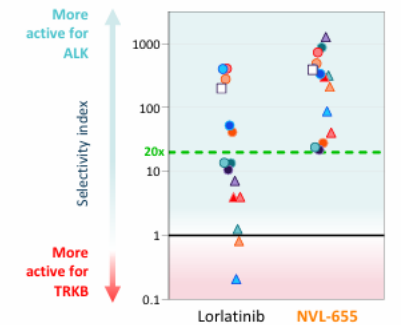
Brain Penetrance

Preclinical pharmacokinetic data similar to lorlatinib



Avoidance of TRK Inhibition

Selective inhibition of ALK and ALK mutants over TRK



$$\text{Selectivity index} = \frac{\text{IC}_{50} (\text{pTRKB})}{\text{IC}_{50} (\text{Ba/F3 EML4-ALK})}$$

Advanced NSCLC with driver alteration

Alkove phase 1 study

Patient Population: Heavily Pretreated ALK-Positive Solid Tumors

Patient Characteristic	All Treated (N = 133)	RP2D (N=52)
Age, median (range)	57 (24, 83)	59 (24, 83)
Female	84 (63%)	35 (67%)
ECOG PS		
0	60 (45%)	24 (46%)
1	73 (55%)	28 (54%)
Non-smoker	95 (71%)	36 (69%)
Tumor Type		
NSCLC	131 (98%)	52 (100%)
Pancreatic adenocarcinoma	1 (1%)	0
Atypical carcinoid, lung	1 (1%)	0
History of CNS metastases ^a	75 (56%)	31 (60%)
ALK Fusion	133 (100%)	52 (100%)
Secondary ALK mutation ^b	68 (51%)	28 (54%)
Single ALK mutation	34 (26%)	15 (29%)
Compound (i.e., ≥2) ALK mutations ^c	34 (26%)	13 (25%)
ALK G1202R (single or compound)	35 (26%)	15 (29%)

Treatment History	All Treated (N = 133)	RP2D (N=52)
Prior lines of anticancer treatment		
1	13 (10%)	4 (8%)
2	32 (24%)	13 (25%)
≥3	88 (66%)	35 (67%)
Median (range)	3 (1, 9)	4 (1, 8)
Prior treatments		
1 ALK TKI	18 (14%)	6 (12%)
2 ALK TKIs	54 (41%)	20 (39%)
≥3 ALK TKIs	61 (46%)	26 (50%)
Chemotherapy	74 (56%)	30 (58%)
ALK TKIs received ^d		
1G (crizotinib)	57 (43%)	24 (46%)
2G	127 (96%)	49 (94%)
alectinib	120 (90%)	46 (89%)
brigatinib	29 (22%)	12 (23%)
ceritinib	17 (13%)	8 (15%)
3G (lorlatinib)	111 (84%)	44 (85%)
Any 2G or lorlatinib	133 (100%)	52 (100%)
≥2 ALK TKIs, including 2G and lorlatinib	105 (79%)	41 (79%)
≥3 ALK TKIs, including 2G and lorlatinib	58 (44%)	24 (46%)

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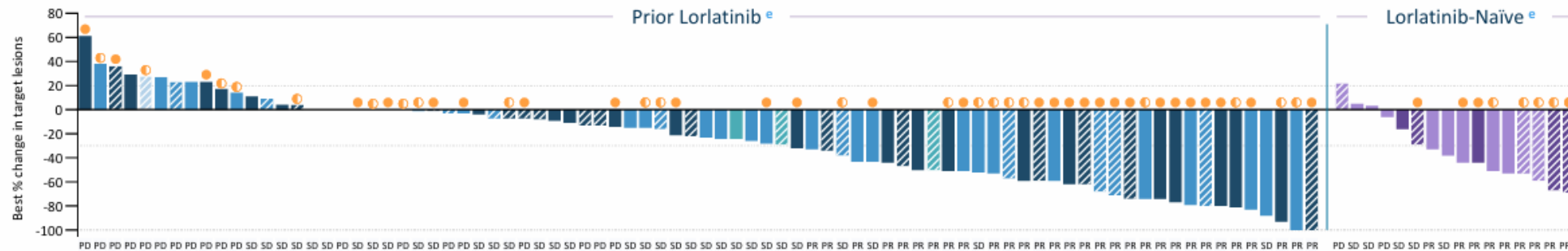


Advanced NSCLC with driver alteration

Alkove phase 1 study

Preliminary Activity: Radiographic Tumor Responses Across Previously Treated Patients with ALK+ NSCLC

RECIST 1.1 ORR, % (n/N) <i>All patients ± chemotherapy</i>	NSCLC Response-Evaluable (Any Prior ALK TKI, range 1 – 5)			Prior Lorlatinib (≥2 ALK TKIs)			Lorlatinib-naïve (≥1 2G ± 1G)	
	All	Any ALK mutation ^a	G1202R ^b	All	Any ALK mutation	Compound ALK mutation ^c	All	Any ALK mutation
All Doses	38% (39/103)	52% (30/58)	69% (22/32)^d	35% (30/85)	47% (23/49)	54% (15/28)	53% (9/17)	88% (7/8)
RP2D	38% (15/39)	55% (12/22)	71% (10/14)	35% (11/31)	50% (8/16)	64% (7/11)	57% (4/7)	80% (4/5)



Data cut-off: 15 June 2024. Response-evaluable patients with NSCLC. All responses were confirmed.

NSCLC, non-small cell lung cancer; ORR, objective response rate; PD, progressive disease; PR, partial response; RECIST 1.1, Response Evaluation Criteria in Solid Tumours version 1.1; RP2D, Recommended Phase 2 dose (150 mg QD); SD, stable disease; TKI, tyrosine kinase inhibitor.

^a Includes all patients with ≥1 identified ALK resistance mutation as per local or central testing of blood (ctDNA) or tissue. Responses observed in patients with ALK I1171N/S, V1180L, L1196Q, L1198F, D1203N, or E1210K mutations, including where multiple mutations co-occur, in addition to those with G1202R.

^b Includes patients with G1202R single and compound (≥2) mutations.

^c Cis-allelic configuration has not been confirmed for all patients with compound (≥2) ALK resistance mutations.

^d ORR = 67% (20/30) for G1202R patients with prior lorlatinib, and ORR = 100% (2/2) for lorlatinib-naïve G1202R patients.

^e Five response-evaluable patients (4 with no known ALK mutations and 1 with single ALK mutation) not shown due to incomplete or missing post-baseline tumor assessments in the setting of PD or symptomatic deterioration.

KEY: PATIENT DETAILS

Lorlatinib Pre-treated:

- ≥ 3 prior ALK TKIs
- 2 prior, 2G + lorlatinib
- 2 prior, 1G + lorlatinib
- 1 prior (lorlatinib only)

Lorlatinib-naïve:

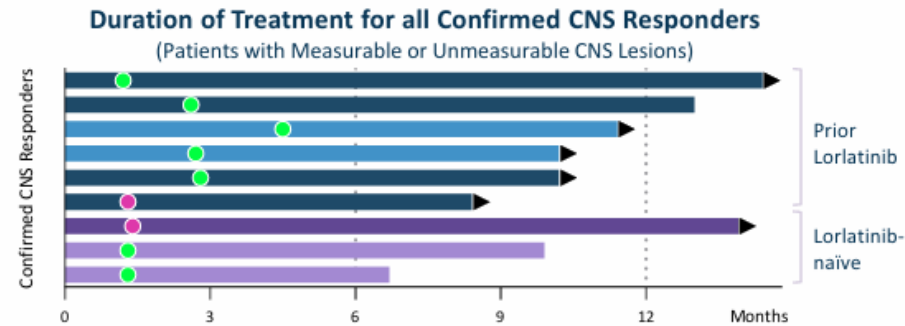
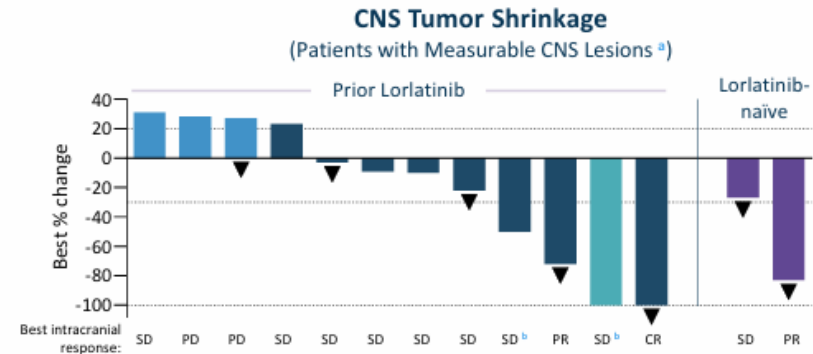
- ≥ 2 prior ALK TKIs
- 1 prior, alectinib
- ▨ Patient treated at RP2D

- ALK single resistance mutation
- ALK compound (≥2) resistance mutation



CNS Activity: Durable Intracranial Responses in Lorlatinib-naïve and Lorlatinib Pre-treated Patients with ALK+ NSCLC

- **IC-ORR** (patients with measurable CNS lesions):
 - **Lorlatinib-naïve:** 50% (1/2)
 - **Prior lorlatinib:** 15% (2/13)
 - 31% (4/13) including 2 CNS uPRs not confirmed due to discontinuation of treatment in absence of CNS progression
- **No CNS progression among confirmed CNS responders, including in patients who previously received the brain-penetrant TKI lorlatinib** (measurable or unmeasurable CNS lesions)
 - Treatment duration: 6.7 - 14.4+ months



Data cut-off: 15 June 2024.

1G, 1st generation ALK TKI (i.e., crizotinib); 2G, 2nd generation ALK TKI (i.e., ceritinib, alectinib, or brigatinib); CNS, central nervous system; CR, complete response; IC-ORR, intracranial ORR for patients with measurable CNS lesions; PD, progressive disease; PR, partial response; SD, stable disease; uPR, unconfirmed partial response.

^a Figure excludes one lorlatinib-pretreated patient with measurable CNS metastases at baseline who discontinued due to symptomatic deterioration without follow-up brain imaging.

^b Single-timepoint PR not confirmed due to discontinuation of treatment in absence of CNS PD.

KEY: PATIENT DETAILS

Lorlatinib Pre-treated:

- ≥ 3 prior ALK TKIs
- 2 prior, 2G + lorlatinib
- 2 prior, 1G + lorlatinib

Lorlatinib-naïve:

- ≥ 2 prior ALK TKIs
- 1 prior, alectinib

▶ Treatment Ongoing

- 1st CNS CR
- 1st CNS PR

Preliminary Safety Profile: Favorable and Consistent with ALK-Selective, TRK-Sparing Design of NVL-655

- Discontinuation due to TRAE: 2% (3/133) ^a
- Dose reduction due to TRAE: 15% (20/133) ^b
- Preliminary overall safety profile consistent with avoiding TRK-related neurotoxicities

Treatment-Related Adverse Events (TRAEs) in ≥ 10% of Patients
All Treated (N = 133)

Preferred Term	Grade 1 n (%)	Grade 2 n (%)	Grade 3 n (%)	Grade 4 n (%)	Any Grade n (%)
ALT increased	21 (16%)	6 (5%)	17 (13%)	1 (1%)	45 (34%)
AST increased	21 (16%)	7 (5%)	12 (9%)	-	40 (30%)
Constipation	15 (11%)	6 (5%)	-	-	21 (16%)
Dysgeusia	15 (11%)	2 (2%)	-	-	17 (13%)
Nausea	15 (11%)	1 (1%)	-	-	16 (12%)

RP2D selected
as 150 mg QD



MTD not reached
through 200 mg QD



No clear dose-toxicity relationship
through 150 mg QD dose level



150 mg QD maintained steady state plasma levels
at or above the target efficacy thresholds

(ALK fusions + ALK single/compound mutations in periphery and in the CNS)

NVL-655 fármaco muy prometedor , altas tasas de respuesta incluso en pacientes pretratados con lorlarinib
Muy interesante el perfil de toxicidad
Necesidad de más estudios para confirmar dosificación y eficacia

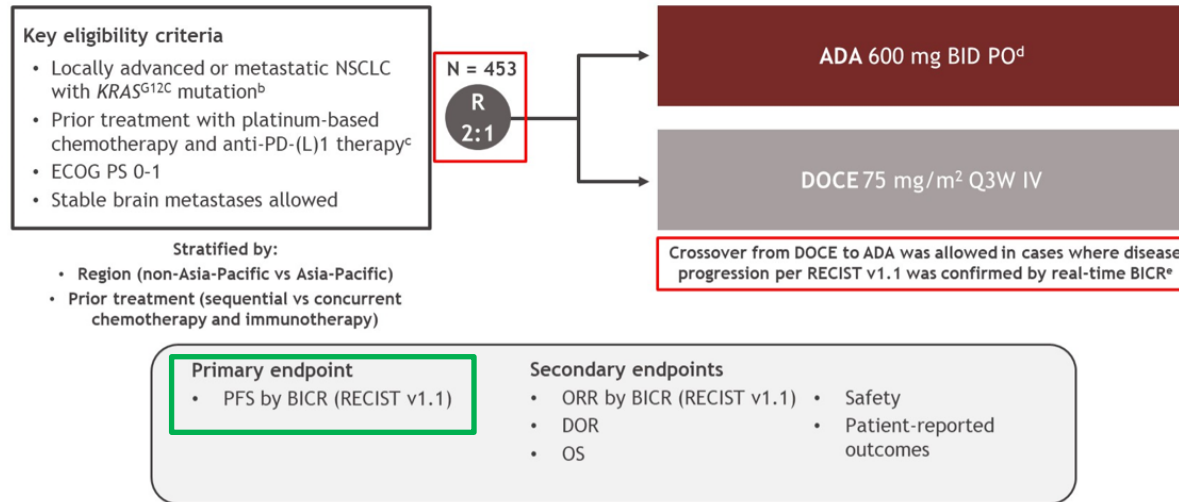
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Advanced NSCLC with driver alteration

LBA8509: KRYSTAL-12: Phase 3 study of adagrasib versus docetaxel in patients with previously treated advanced/metastatic non-small cell lung cancer (NSCLC) harboring a KRASG12C mutation

KRYSTAL-12^a study design



Baseline patient characteristics

	ADA (n = 301)	DOCE (n = 152)		ADA (n = 301)	DOCE (n = 152)
Median age, years (range)	64 (34-83)	65 (45-80)	Smoking status, % ^a		
Age category, %			Current	19	20
< 65 years	53	49	Former	76	74
≥ 65 years	47	51	Never	6	6
Male, %	64	72	Metastases at baseline, % ^c		
Region, %			Brain	17	18
Non-Asia-Pacific	74	74	Liver	15	12
Asia-Pacific	26	26	Bone	23	26
ECOG PS, % ^a			Tumor PD-L1 expression, %		
0	32	31	< 1%	20	22
1	68	68	1-49%	42	45
Disease stage, %			≥ 50%	24	19
Locally advanced	6	5	Not evaluated	14	13
Metastatic	94	95	Prior chemo-immunotherapy, %		
Histology, %			Sequential	27	27
Adenocarcinoma	94	97	Concurrent	73	73
Other ^b	6	3			

Percentages may not total 100 due to rounding. ^aData missing for 1 patient in DOCE arm. ^bOther histologies in ADA/DOCE arms, respectively, were large-cell (n = 4/n = 1), unclassified or undifferentiated (n = 6/n = 1), squamous (n = 6/n = 0) and other (n = 2/n = 3). ^cIn accordance with RECIST v1.1 per BICR.

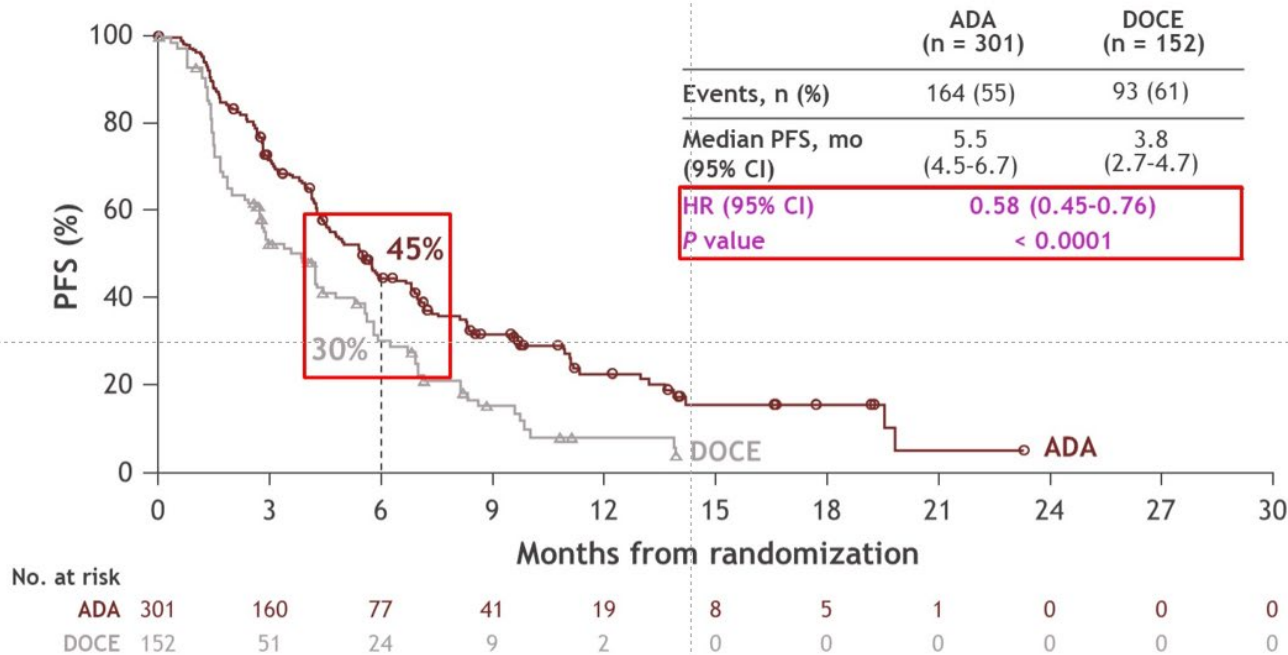
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Krystal-12

Primary endpoint: PFS^a per BICR



PFS subgroup analysis per BICR

	Median PFS, mo		Unstratified HR (95% CI)	Unstratified HR
	ADA (n = 301)	DOCE (n = 152)		
Overall (N = 453)	5.5	3.8		0.58
< 65 years (n = 234)	5.4	2.9		0.56
≥ 65 years (n = 219)	5.9	4.2		0.60
Male (n = 303)	5.4	2.9		0.55
Female (n = 150)	5.6	5.6		0.64
Non-Asia-Pacific (n = 335)	5.7	3.4		0.55
Asia-Pacific (n = 118)	5.4	3.9		0.66
ECOG PS 0 (n = 143)	11.1	5.8		0.44
ECOG PS 1 (n = 309)	4.6	2.8		0.61
Current smoker (n = 86)	4.2	4.4		0.89
Former smoker (n = 340)	5.8	3.6		0.51
Never smoker (n = 26)	5.5	6.2		0.70
Brain metastases at baseline (n = 80) ^a	4.1	4.2		0.71
No brain metastases at baseline (n = 373) ^a	5.8	3.6		0.55
Liver metastases at baseline (n = 64) ^a	4.5	1.4		0.43
No liver metastases at baseline (n = 389) ^a	5.6	4.2		0.59
Bone metastases at baseline (n = 107) ^a	4.4	2.8		0.56
No bone metastases at baseline (n = 346) ^a	5.8	4.2		0.58
PD-L1 < 1% (n = 95)	5.8	2.8		0.44
PD-L1 1-49% (n = 195)	5.9	3.6		0.56
PD-L1 ≥ 50% (n = 100)	5.0	3.9		0.62
Sequential chemo-immunotherapy (n = 121)	5.8	2.9		0.53
Concurrent chemo-immunotherapy (n = 332)	5.4	3.9		0.60

Median follow-up: 7.2 months.

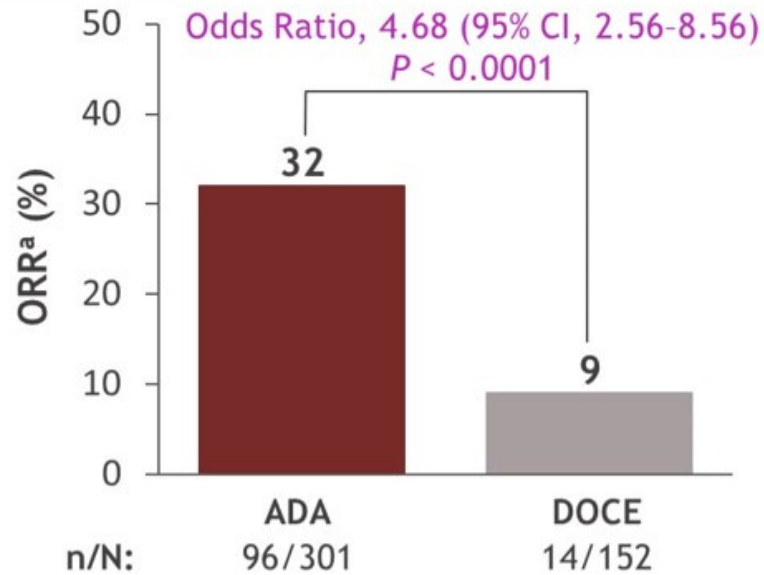
^aTime from randomization to the date of disease progression per BICR or death due to any cause, whichever occurs first. For patients who started a subsequent anticancer therapy prior to disease progression or death, PFS was censored at the date of the last tumor assessment prior to the start of the new therapy.

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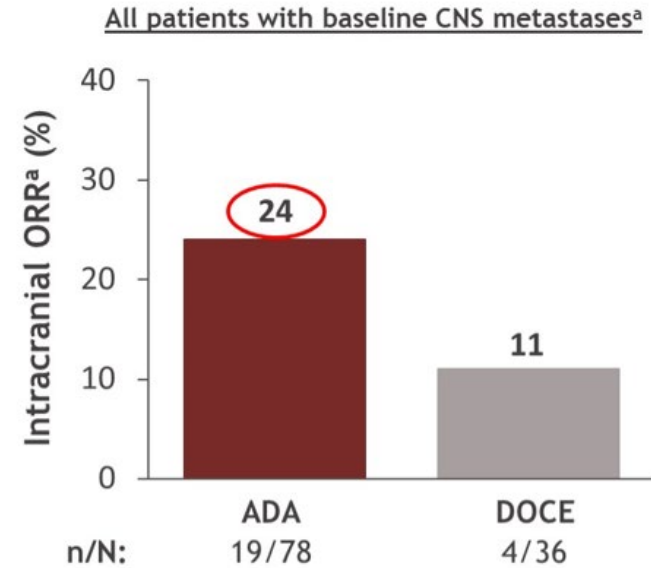
Advanced NSCLC with driver alteration
 Krystal-12

Tumor response per BICR



Tumor response	ADA (n = 301)	DOCE (n = 152)
DCR, ^b n (%)	236 (78)	89 (59)
Median DOR, ^c mo (95% CI)	8.3 (6.1-10.4)	5.4 (2.9-8.5)
Remaining in response at 6 mo, %	64	39

Intracranial response per BICR^a



Intracranial response ^a	ADA (n = 78)	DOCE (n = 36)
Intracranial DCR, n (%)	64 (82)	20 (56)

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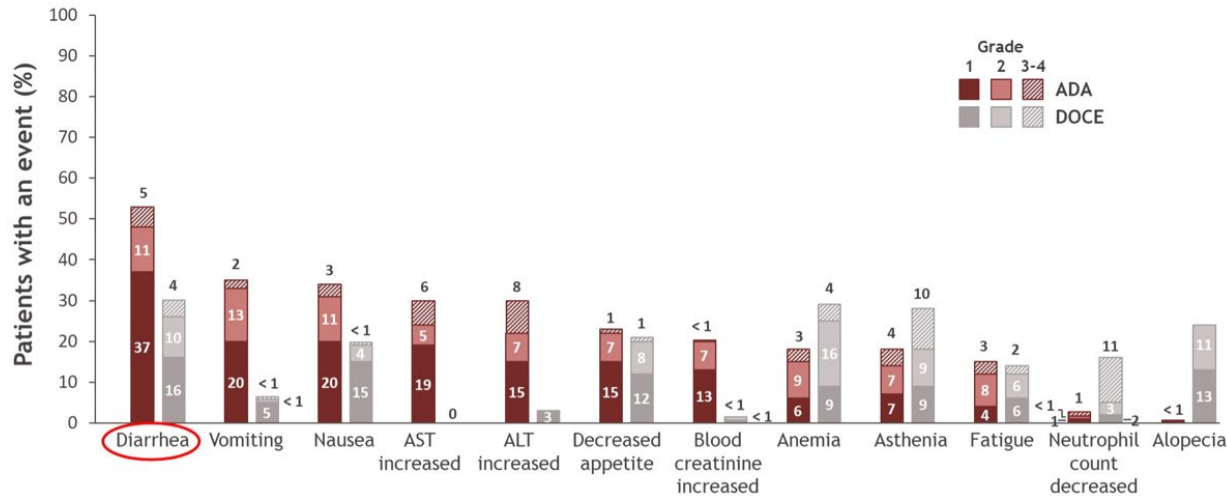
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Safety summary^a

Patients, %	ADA (n = 298)	DOCE (n = 140)
TRAEs	94	86
Grade ≥ 3 TRAEs	47	46
TRAEs leading to discontinuation ^b	8	14
TRAEs leading to dose reduction	48	24
TRAEs leading to dose interruption	59	19
Treatment-related SAEs	21	16
Treatment-related deaths ^c	1	< 1

Estudio positivo en el que se confirma la mejora en SLP, ORR y mejor perfil de seguridad de adagrasib frente a docetaxel

Most frequent TRAEs (> 15% in either treatment arm^a)





Muchas gracias

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