

Novedades & Claves en CÁNCER de PULMÓN 2024

Introducción

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Organizado por:



Patrocinado por:



Johnson&Johnson

Disclosures of Financial Relationships

✓ Honoraria

- ✓ MSD Oncology, Pfizer, Astellas Pharma, Roche, Novartis, Janssen-Cilag, Bristol-Myers Squibb, Astra Zeneca

✓ Consulting of Advisory Role

- ✓ Janssen-Cilag, MSD Oncology, Bristol-Myers Squibb, Boehringer Ingelheim, Beigene

✓ Speaker's Bureau

- ✓ MSD Oncology, Astra Zeneca

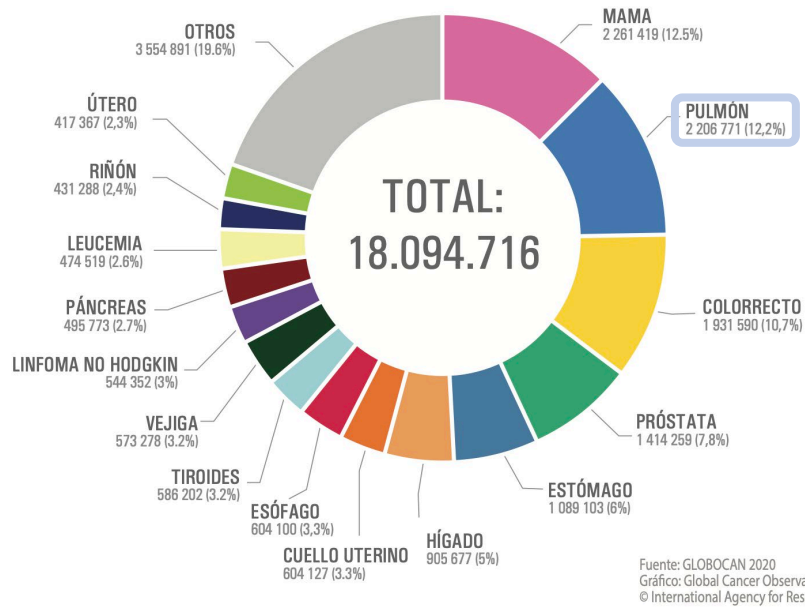
✓ Research Funding

- ✓ Miratti Therapeutics, Astra Zeneca, Bayer, OncoMed, Astellas Pharma, Janssen-Cilag, Roche, Abbvie, Boehringer-Ingelheim, Pfizer, PharmaMar, Bristol-Myers Squibb, Novartis, Celgene, Ignyta

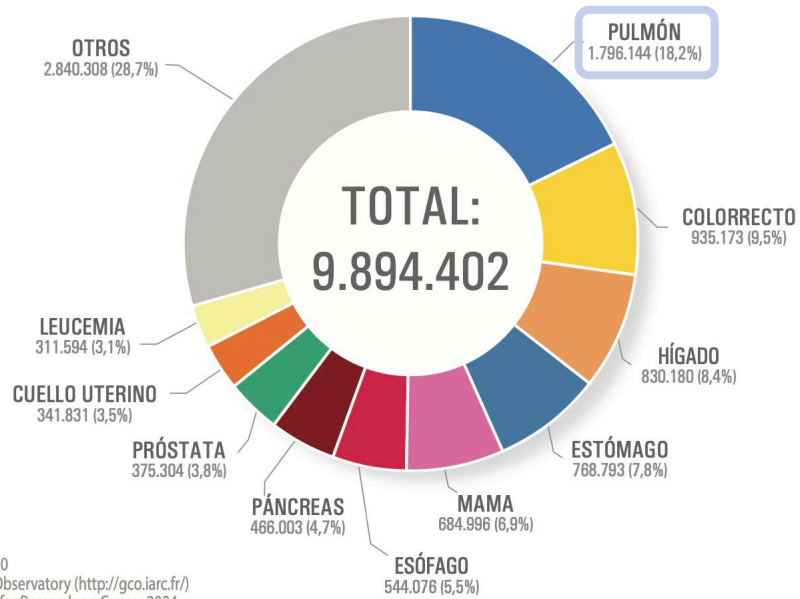
✓ Travel, Accommodations, Expenses

- ✓ Bristol-Myers Squibb, Janssen-Cilag, Takeda, Pfizer, MSD Oncology, Roche, Merck

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Fuente: GLOBOCAN 2020
Gráfico: Global Cancer Observatory (<http://gco.iarc.fr/>)
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Gráfico: Global Cancer Observatory (<http://gco.iarc.fr/>)
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Lung Cancer Is the Most Commonly Diagnosed Cancer and the Leading Cause of Cancer Death Worldwide



Estimated Age-Standardized Rates in 2020
Lung, Both Sexes, All Ages^[a]

Region	Incidence	Mortality
Northern America	32.6	19.3
Europe	29.4	22.6
Oceania	24.0	16.1
Asia	22.9	19.3
Latin American and Caribbean	12.0	10.5
Africa	6.2	5.6

In 2020, lung cancer accounted for 11.4% of total cancer cases and contributes to 18% of total cancer deaths^[b]

World Health Organization. International Agency for Research on Cancer; 2018. Accessed June 5, 2023. <https://gco.iarc.fr/>; b. Sung H, et al. CA Cancer J Clin. 2021;71:209-249.

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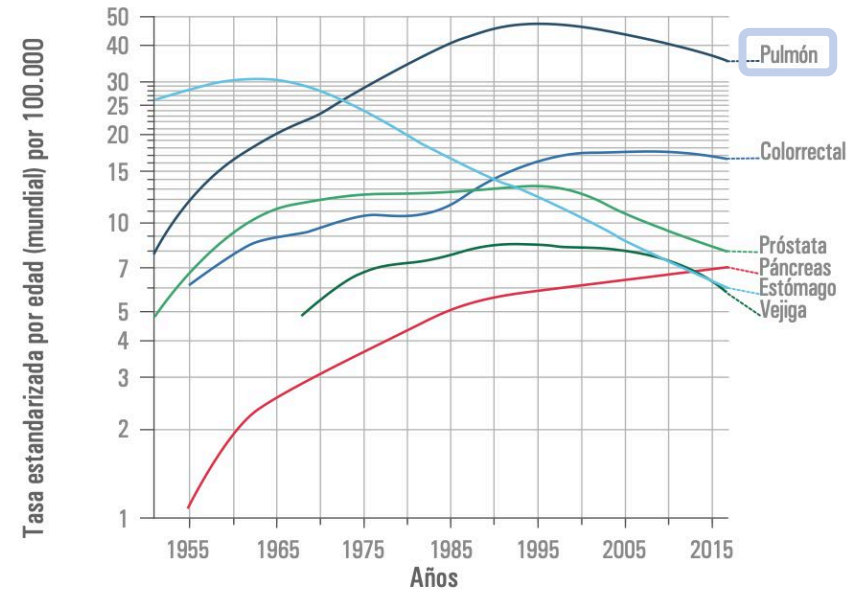
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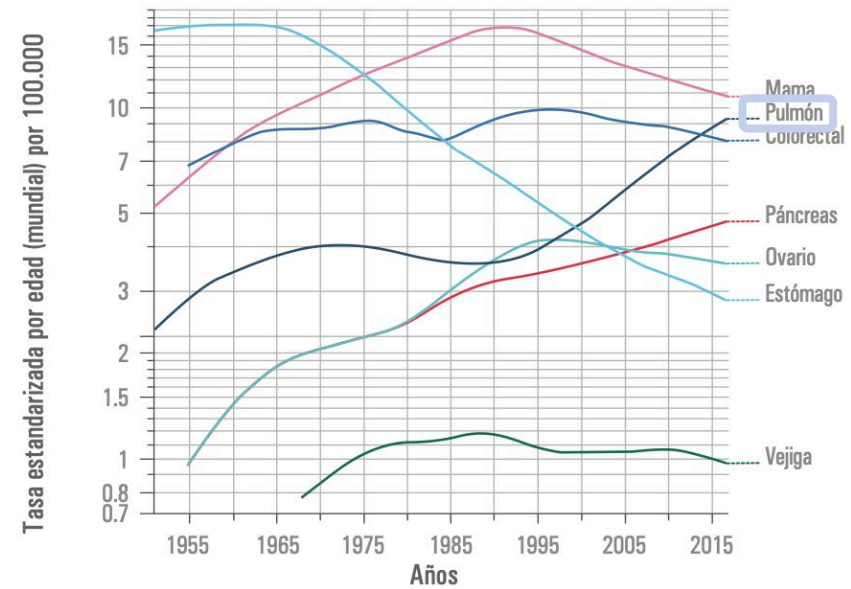
TIPO TUMORAL	N
Cavidad oral y faringe	7.603
Esófago	2.269
Estómago	6.868
Colon	29.648
Recto	14.646
Hígado	6.856
Vesícula biliar	2.358
Páncreas	9.986
Larínge	3.181
Pulmón	32.768
Melanoma de piel	7.881
Mama	36.395
Cérvix uterino	2.259
Cuerpo uterino	7.305
Ovario	3.716
Próstata	30.316
Testículo	1.549
Riñón (sin pelvis)	9.208
Vejiga urinaria	22.097
Encéfalo y sistema nervioso	4.419
Tiroides	6.345
Linfoma de Hodgkin	1.673
Linfomas no hodgkinianos	10.706
Mieloma	3.313
Leucemias	5.861
Otros	17.440
Todos excepto piel no melanoma	286.664

Fuente: Red Española de Registros de Cáncer (REDECAN).

HOMBRES



MUJERES

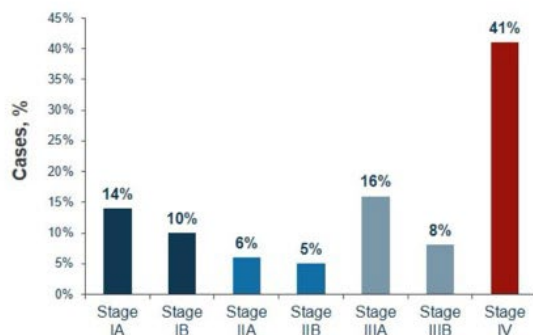


Fuente: GLOBOCAN 2020 Gráfico: Global Cancer Observatory (<http://gco.iarc.fr/>) © International Agency for Research on Cancer 2024 v 1.0

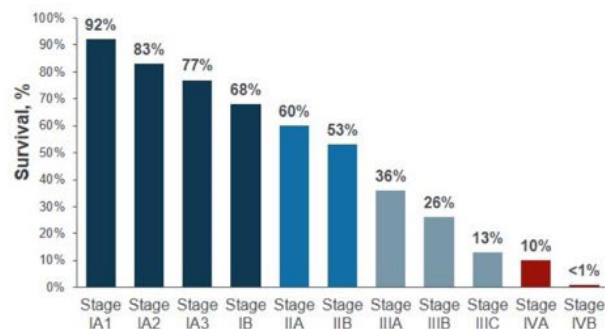
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Lung Cancer Is Commonly Diagnosed at an Advanced Stage and Is Associated With a Poor Prognosis

Diagnosed Cases of NSCLC by Stage^[a]

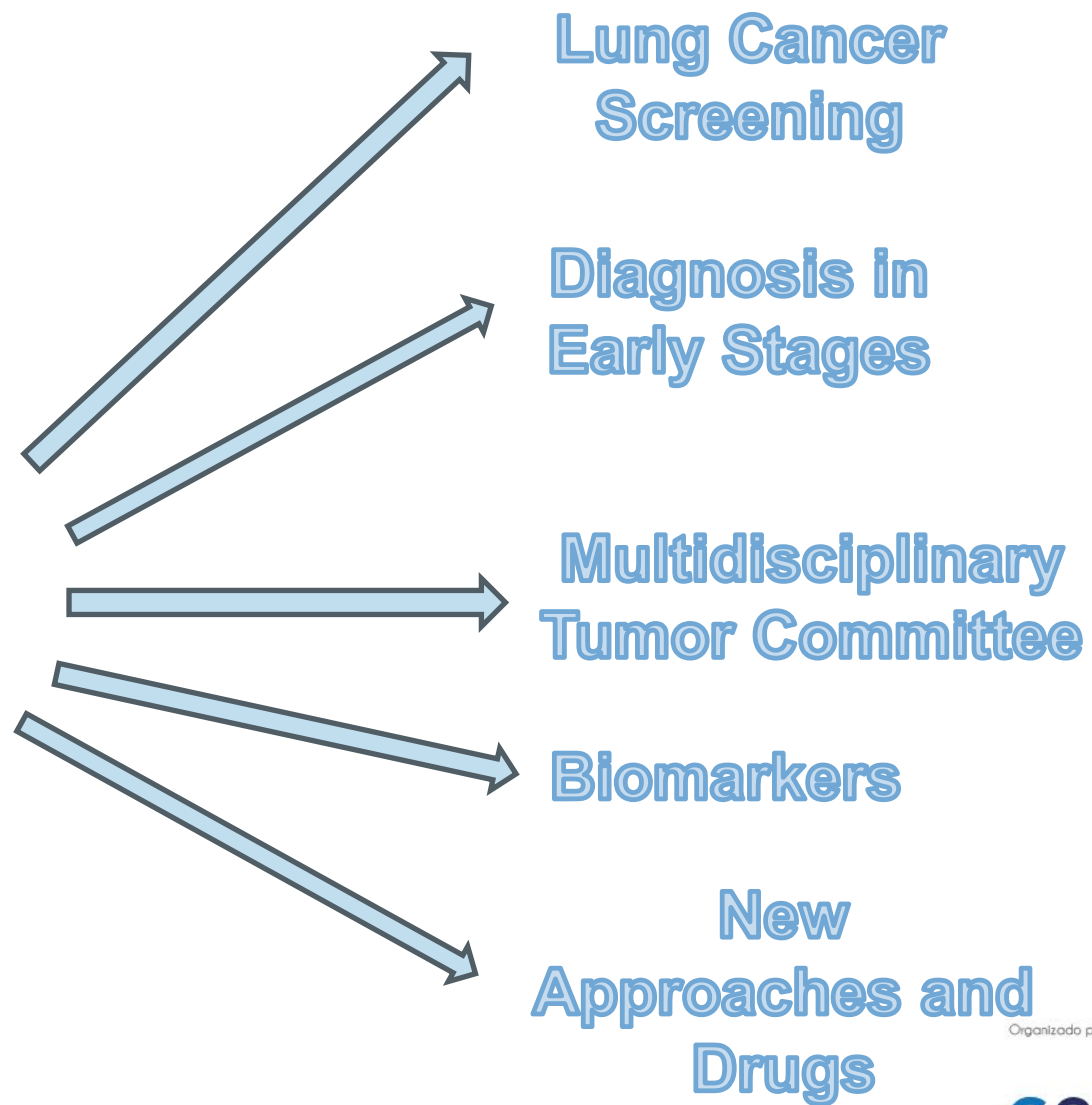


5-Year Survival for Patients with NSCLC^[b]



^aBased on the clinical staging of the 6th edition IASLC.
IASLC, International Association for the Study of Lung Cancer; NSCLC, non-small cell lung cancer.
a. Heist RS, et al. Cancer Cell. 2012;21:448.e2. b. Goldstraw P, et al. J Thorac Oncol. 2016;11:39-51.

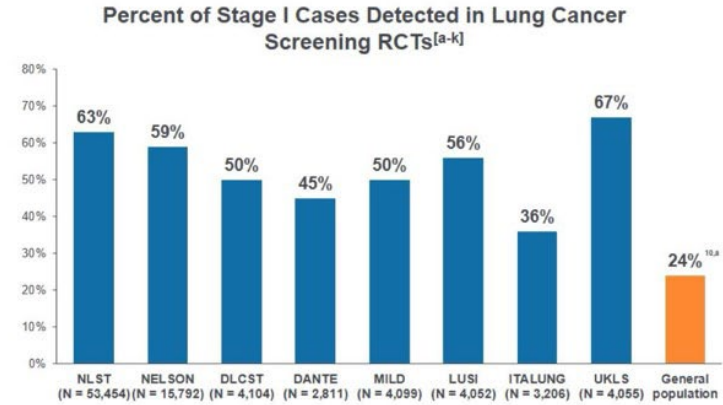
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Impact of Lung Cancer Screening on staging and mortality

Low-Dose CT Screening Stage Shift

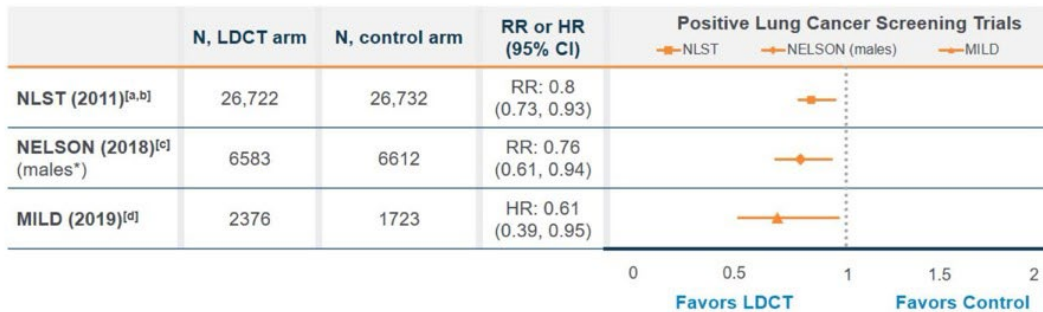


- The majority of cases detected through LDCT screening are stage I where curative resection is likely^[a-i,k]
- Among patients in the International ELCAP study (N = 31,567), 73% with stage I disease who underwent surgical resection within 1 month after diagnosis had an estimated 10-year survival rate of 92%^[k]

^{*}Includes Stages IA and IB, estimated from SEER validation set of proposed 7th edition IASLC staging.
 CT, computed tomography; ELCAP, Early Lung Cancer Action Program; LDCT, low-dose computed tomography; RCT, randomized clinical trial.
 a. National Lung Screening Trial Research Team. N Engl J Med. 2011;365:395-409; b. de Koning HJ, et al. N Engl J Med. 2020;382:503-513; c. Wille MM, et al. Am J Respir Crit Care Med. 2016;193:542-551; d. Infante M, et al. Am J Respir Crit Care Med. 2015;191:1166-1175; e. Pastorino U, et al. Ann Oncol. 2019;30:1162-1169; f. Becker N, et al. Int J Cancer. 2020;146:1503-1513; g. Lopes Pegna A, et al. J Thorac Oncol. 2013;8:866-875; h. Paci E, et al. Thorax. 2017;72:825-831; i. Field JK, et al. Health Technol Assess. 2016;20:1-146; j. Heist RS, et al. Cancer Cell. 2012;21:448 e2; k. Henschke CI, et al. N Engl J Med. 2006;355:1763-1771.

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Lung Cancer Screening Significantly Reduces Lung Cancer Mortality 3 Large Randomized Trials



^{*}Among male participants. Among female participants, RR = 0.67 (95% CI: 0.38, 1.14).
 HR, hazard ratio; MILD, Multicentric Italian Lung Detection Trial; NELSON, Dutch-Belgian Randomized Lung Cancer Screening Trial; NLST, National Lung Screening Trial; RR, rate ratio.
 a. The National Lung Screening Trial Research Team. N Engl J Med. 2011;365:395-409; b. National Lung Screening Trial Research Team. J Thorac Oncol. 2019;14:1732-1742; c. de Koning HJ, et al. N Engl J Med. 2020;382:503-513; d. Pastorino U, et al. Ann Oncol. 2019;30:1162-1169.

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Molecular Biomarkers

Biomarkers with a recommended first-line targeted treatment option:	Biomarkers with targeted options for second-line or later:	Emerging biomarkers
<ul style="list-style-type: none"> • <i>EGFR</i> exon 19 del, L858R, S768I, L861Q, G719X, Exon 20 insertion • <i>ALK</i> rearrangement • <i>ROS1</i> rearrangement • <i>BRAF</i> V600E • <i>NTRK</i> rearrangement • <i>MET</i> exon 14 skipping • <i>RET</i> rearrangement • PD-L1 positive (negative for other actionable molecular biomarkers) 	<ul style="list-style-type: none"> • <i>KRAS</i> G12C • <i>ERBB2</i> 	<ul style="list-style-type: none"> • High-level <i>MET</i> amplification <ul style="list-style-type: none"> □ Definition of high-level amplification is still evolving <ul style="list-style-type: none"> ○ NGS assays will give a value dependent on bioinformatics and enrichment of starting material (blood or tissue) ○ Cellular assays (ie, FISH) have different workflow but may be more consistent □ Capmatinib, crizotinib, or tepotinib may be used (not FDA approved for this indication in NSCLC) • Many other predictive biomarkers (eg, <i>NRG1</i>, <i>RIT1</i>, <i>NF1</i>, <i>PIK3CA</i>) are currently under evaluation in clinical trials for treatment of advanced/metastatic NSCLC

Gene or protein	Alteration	NCCN preferred therapy	Other recommended therapies
EGFR^a	Exon 19 del or L858R	Osimertinib*	Osimertinib + pemetrexed + (cisplatin or carboplatin) (for nonsquamous)*, erlotinib*, afatinib*, gefitinib*, dacomitinib*, erlotinib + ramucirumab, or erlotinib + bevacizumab
	S768I, L861Q, G719X	Afatinib or osimertinib	Erlotinib, gefitinib, or dacomitinib
	Exon 20 insertion	Amivantamab + carboplatin + pemetrexed (non-squamous)* or systemic therapy	
KRAS	G12C	Systemic therapy based on PD-L1	
ALK	Rearrangement	Alectinib*, brigatinib*, or lorlatinib*	Ceritinib* In certain circumstances: crizotinib*
ROS1	Rearrangement	Entrectinib, crizotinib, or reprotrectinib	Ceritinib
BRAF	V600E	Dabrafenib + trametinib or encorafenib + binimetinib	In certain circumstances: vemurafenib or dabrafenib Or systemic therapy
NTRK1/2/3	Rearrangement	Larotrectinib or entrectinib	In certain circumstances: systemic therapy
MET	Exon 14 skipping	Capmatinib or tepotinib	In certain circumstances: crizotinib or systemic therapy
RET	Rearrangement	Selpercatinib or pralsetinib	In certain circumstances: cabozantinib or systemic therapy
ERBB2 (HER2)	Mutation	Systemic therapy	
PD-L1	≥ 50% and negative for actionable molecular biomarkers ^b	Systemic therapy, please see NCCN guidelines for the most up to date list	
	≥ 1%–49% and negative for actionable molecular biomarkers ^b		
	< 1% and negative for actionable molecular biomarkers ^b		

*NCCN Category 1 recommendation; ^athe most common resistance mutation to first- and second-generation EGFR TKIs is EGFR T790M; ^bsee NCCN NSCLC guidelines for recommended therapies for patients with contraindications to PD-1 or PD-L1 inhibitors

Organizado por:

TASA DE ANALISIS DE MARCADORES (%)

EL 81,2% DE LOS PACIENTES DE LA COHORTE TIENEN ANALIZADO AL MENOS 1 MARCADOR

RTT –
36.000 pts



81% pts
have at
least one

gcep ATLAS PROJECT
lung cancer research
RATIONALE

Testing Situation in Spain:

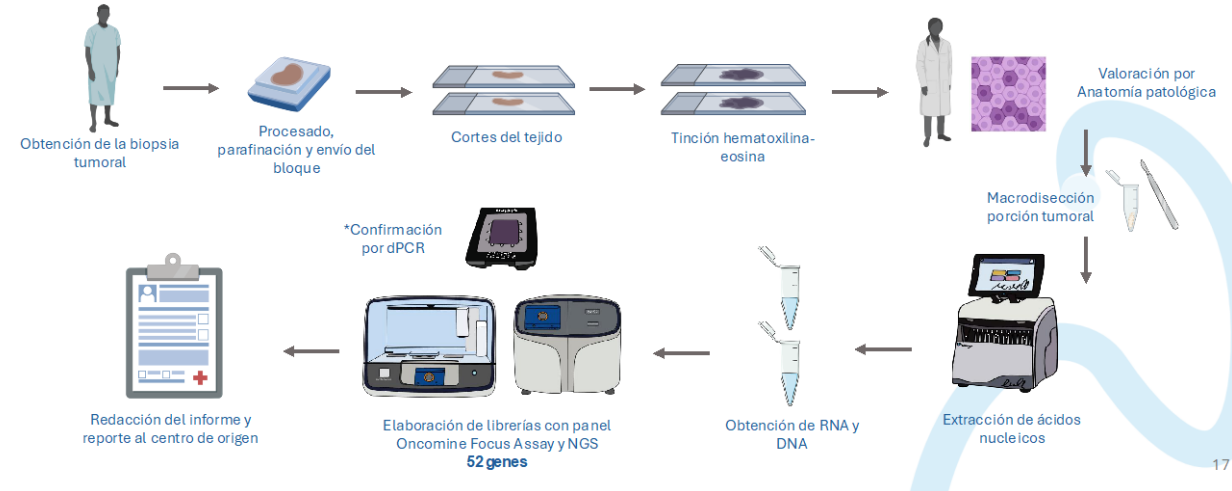
- No national plan exists for molecular biomarker analysis in Spain
- TTR showed some differences across spanish regions.
- Molecular testing is not accesible for all centers.
- An increase in the number of markers is expected in the next years
- Cost effectiveness of decentralized testing?

A centralized network with a technical ability and a competitive attitude is needed to support the weight of precision medicine.

→ **ATLAS Project** ←

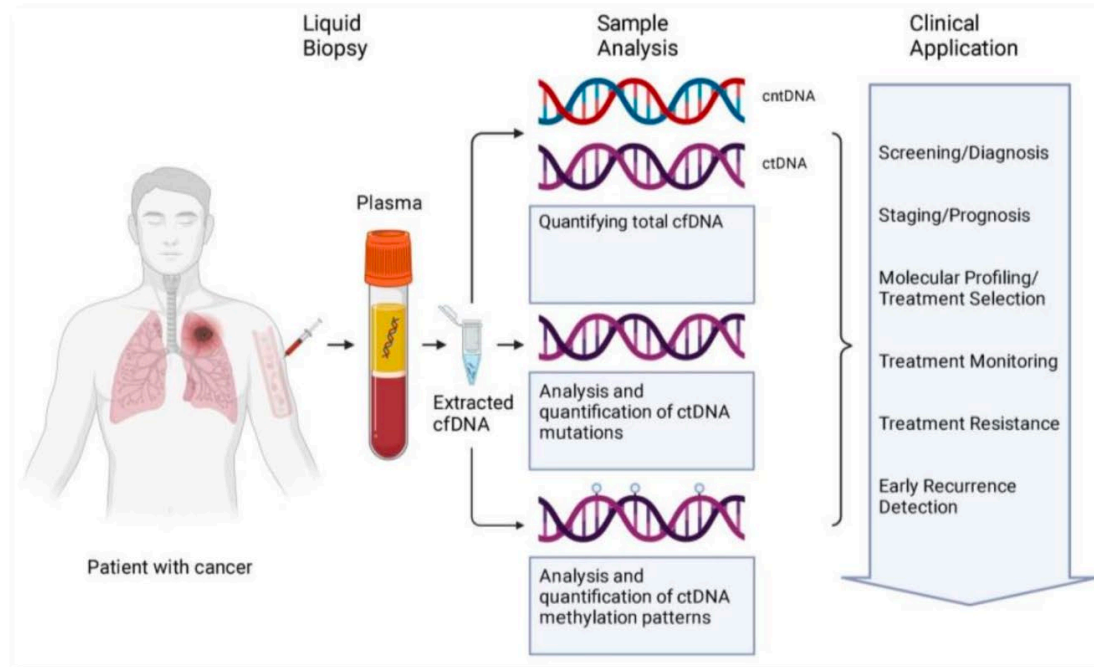


Proyecto ATLAS: procesamiento de muestras



We hope for rapid integration into daily clinical practice

ctDNA Analysis & Clinical Applications



Dao et al. 2023 Int J Mol Sci

- Early detection/screening
- Identification actionable genomic alterations
- Disease monitoring (e.g. MRD)
- Acquired resistance variants

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Importance of the MDT in Patient-Centered Care



MDT, multidisciplinary team.

Organizado por:

Incidental Nodules

CLINICAL PRESENTATION

RISK ASSESSMENT^b

Incidental finding of nodule suspicious for lung cancer

- Multidisciplinary evaluation^a
- Smoking cessation counseling

Patient factors

- Age
- Smoking history
- Previous cancer history
- Family history
- Occupational exposures
- Other lung disease (chronic obstructive pulmonary disease [COPD], pulmonary fibrosis)
- Exposure to infectious agents (eg, endemic areas of fungal infections, tuberculosis) or risk factors or history suggestive of infection (eg, immune suppression, aspiration, infectious respiratory symptoms)

Radiologic factors^{c,d}

- Size, shape, and density of the pulmonary nodule
- Associated parenchymal abnormalities (eg, scarring or suspicion of inflammatory changes)
- Fluorodeoxyglucose (FDG) avidity on FDG-PET/CT imaging

Solid nodules
[Follow-up \(DIAG-2\)](#)

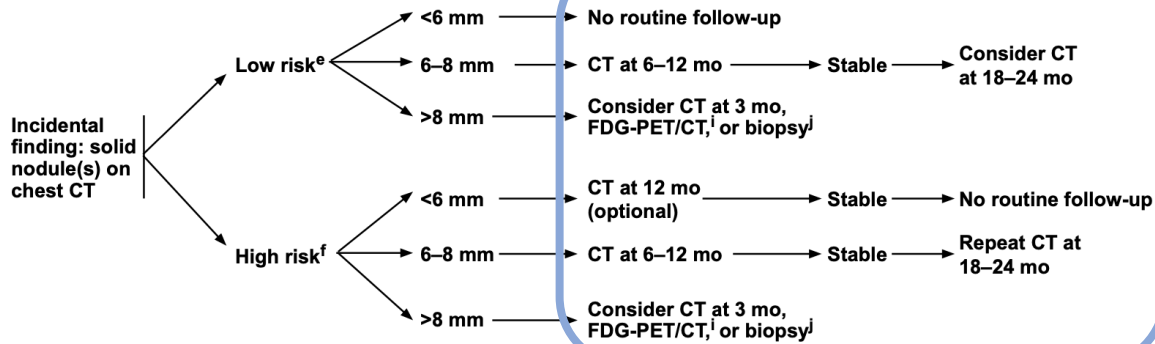
Subsolid nodules
[Follow-up \(DIAG-3\)](#)

Lung nodules in asymptomatic patients at high-risk detected during lung cancer screening with LDCT

[NCCN Guidelines for Lung Cancer Screening](#)

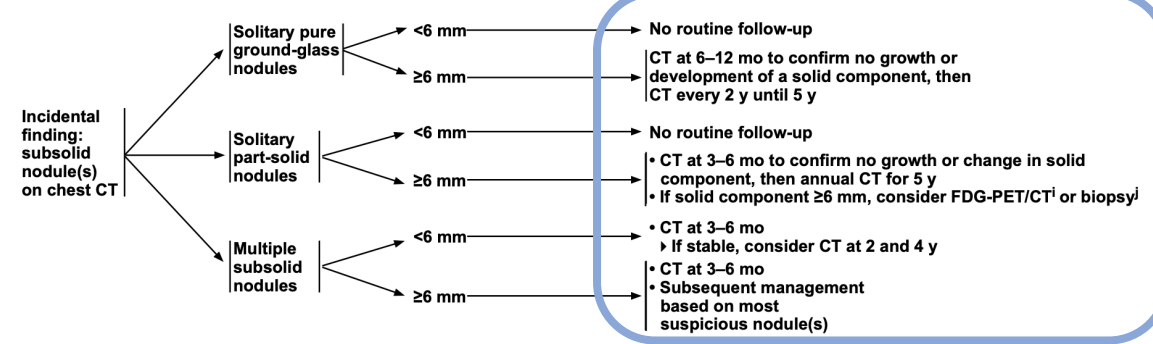
FINDINGS

FOLLOW-UP^{c,d,g,h}



FINDINGS

FOLLOW-UP^{c,d,g,h}

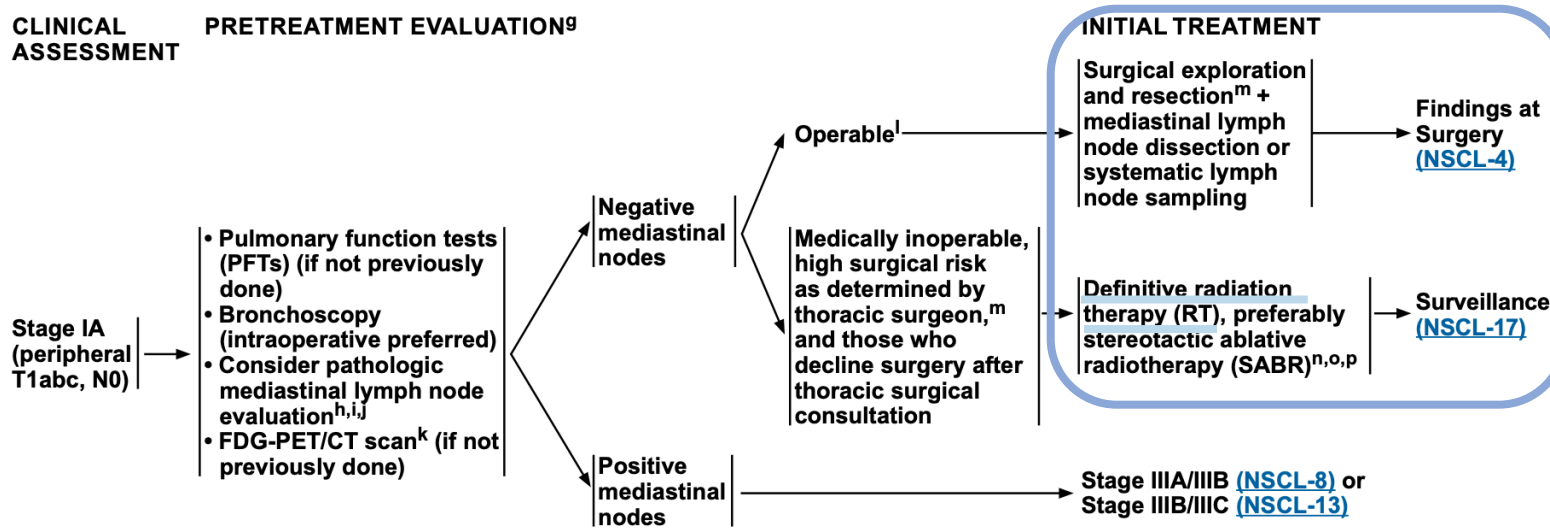


Organizado por:

Early Stages NSCLC

CLINICAL ASSESSMENT

PRETREATMENT EVALUATION⁹



OPERABILIDAD

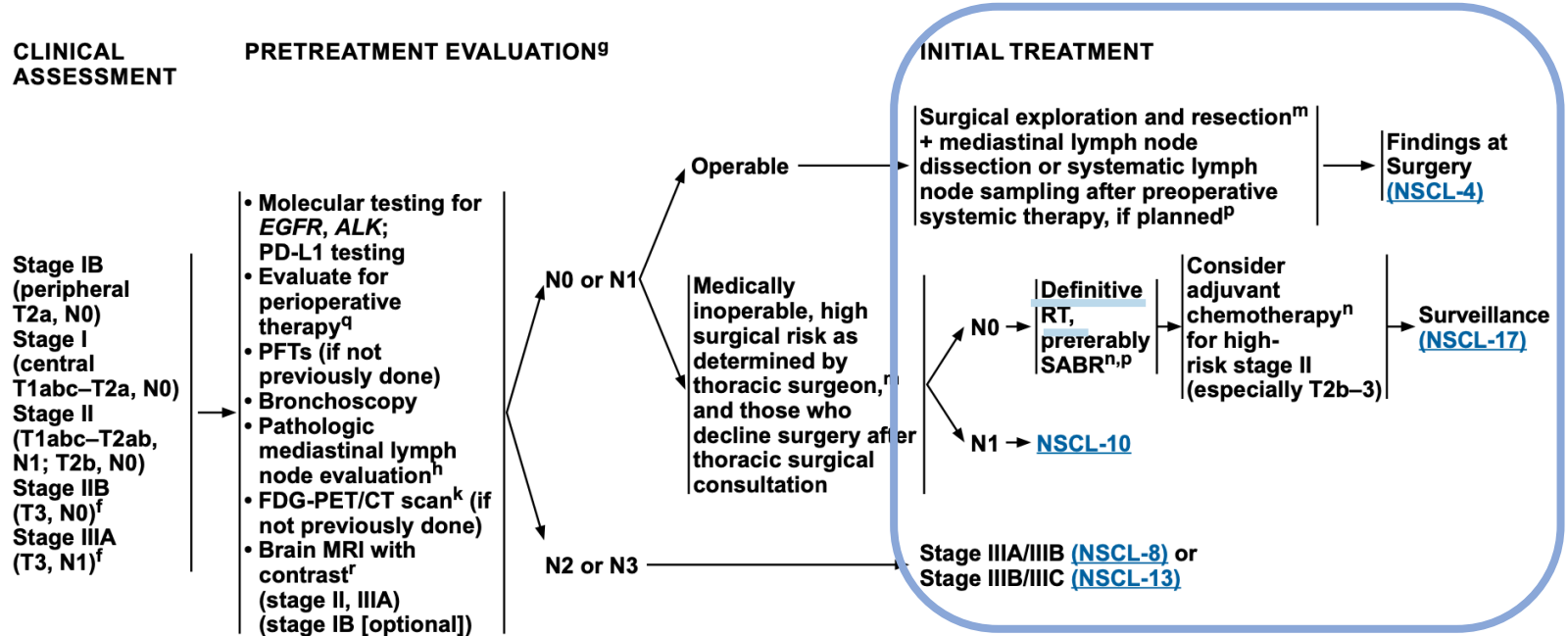


RESECABILIDAD



CLINICAL ASSESSMENT



PRETREATMENT EVALUATION⁹



Organizado por:

Adjuvant Treatment

ADJUVANT IMMUNOTHERAPY TRIALS

Study	Registry No.	Stage	No. of Patients	Experimental Arm	Control Arm	Prior Adjuvant Therapy	Primary Endpoint
ANVIL	NCT02595944	IB (> 4 cm), II, IIIA (AJCC 7th edition)	903	Nivolumab (1 y)	Observation	CT and/or RT allowed	DFS, OS in ITT DFS, OS in PD-L1 \geq 1%
 PEARLS/KEYNOTE-091⁴⁹	NCT02504372	IB (> 4 cm), II, IIIA (AJCC 7th edition)	1,177	Pembrolizumab (1 y)	Placebo	CT allowed; No RT allowed	DFS
 IMpower010⁴⁸	NCT02486718	IB (> 4 cm), II, IIIA (AJCC 7th edition)	1,280	Atezolizumab (16 cycles)	Observation (BSC)	CT required (CDDP)	DFS in PD-L1 TC \geq 1% stage II-III DFS in all stage II-III DFS in ITT
BR-31 (IFCT1401)	NCT02273375	IB (> 4 cm), II, IIIA (AJCC 7th edition)	1,360	Durvalumab (1 y)	Placebo	CT recommended; RT allowed (N2 disease)	DFS in PD-L1 \geq 25% and in all randomly assigned
CANOPY-A	NCT03447769	II-III B (N2) (AJCC 8th edition)	1,500	Canakinumab	Placebo	CT required; RT allowed	DFS
MERMAID-1	NCT04385368	II-III (AJCC 8th edition)	332	Durvalumab + CT	Placebo + CT	—	DFS in MRD+
MERMAID-2	NCT04642469	II-III (AJCC 8th edition)	284 (MRD+)	Durvalumab	Placebo	CT and/or RT allowed	DFS in PD-L1 \geq 1%
NADIM ADJUVANT	NCT04564157	IB (> 4 cm), II, IIIA (AJCC 8th edition)	210	Nivolumab + CT	CT	Not allowed	DFS

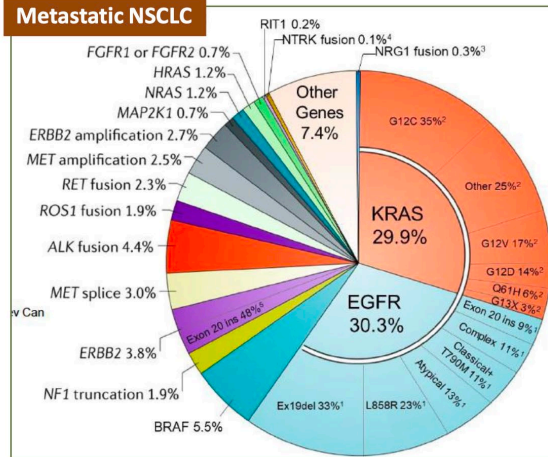
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Adjuvant Treatment

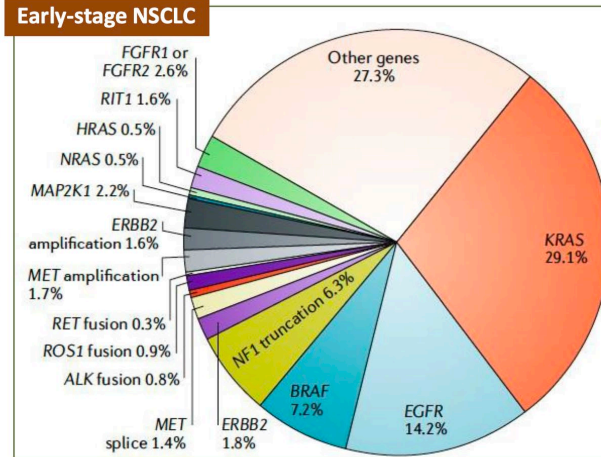
ADJUVANT TKIs

- TKIs in NSCLC with actionable genomic alterations (AGA) have improved the outcome in metastatic setting
- These strategies have also been tested in patients with resectable early-stage NSCLC

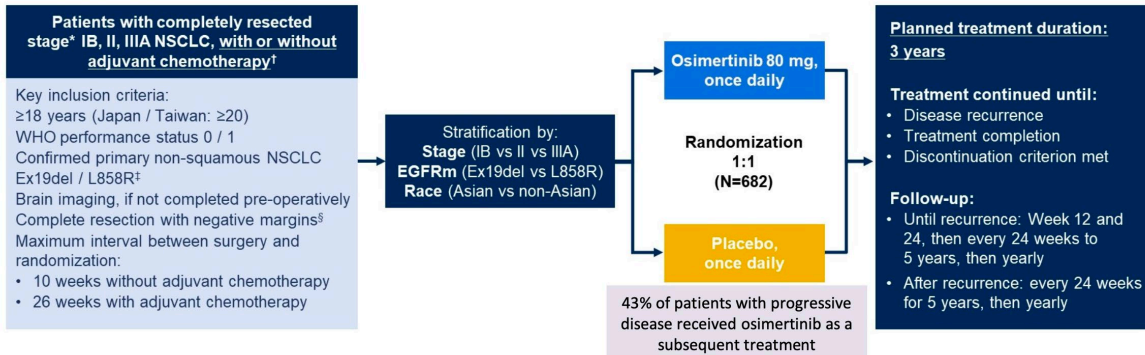
Metastatic NSCLC



Early-stage NSCLC



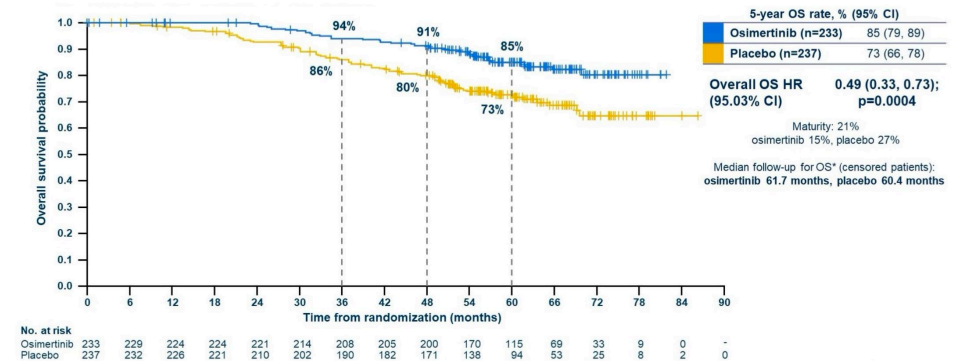
ADAURA: study design



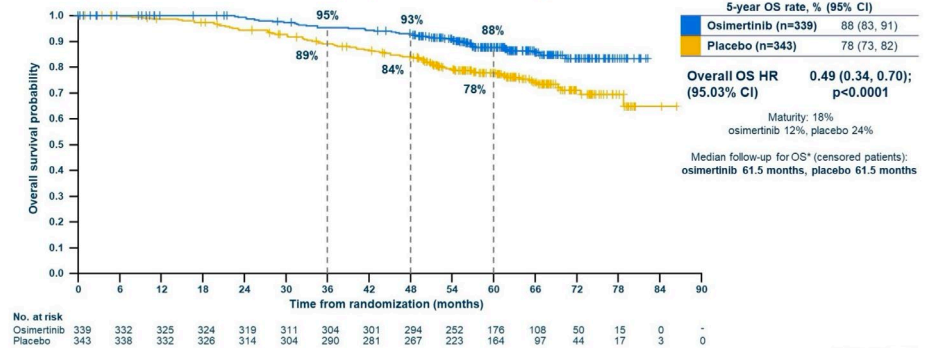
Endpoints

- **Primary endpoint:** DFS by investigator assessment in stage II-IIIa patients
- **Key secondary endpoints:** DFS in the overall population (stage IB-IIIa), landmark DFS rates, OS, safety, health-related quality of life

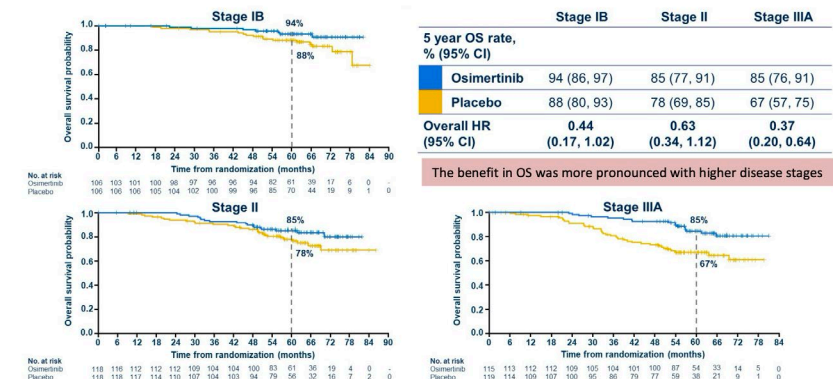
ADAURA: adjuvant osimertinib has demonstrated significant improvement in OS vs placebo in the primary population of stage II-IIIa disease



ADAURA: adjuvant osimertinib has demonstrated significant improvement in OS vs placebo in the overall population of stage IB-IIIa disease



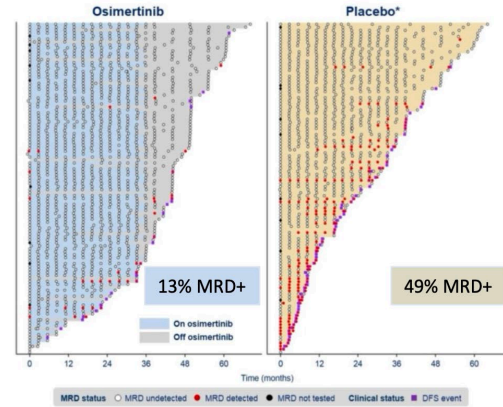
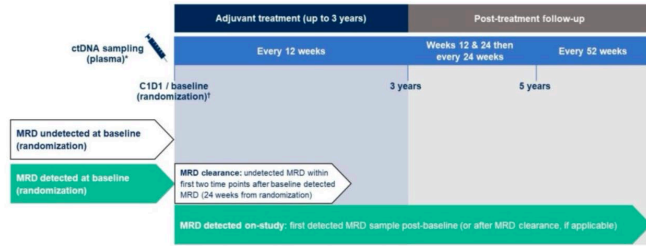
ADAURA: overall survival by disease stage



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Adjuvant Treatment

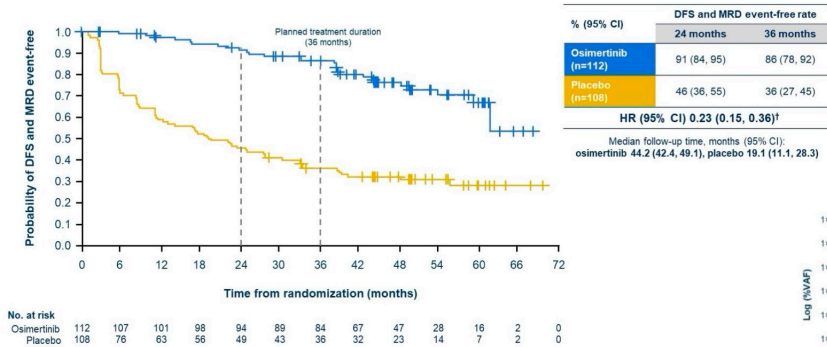
ADAURA: molecular residual disease (MRD)



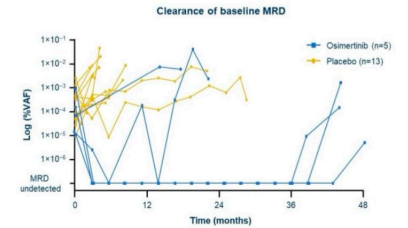
MRD events were detected more frequently with placebo vs osimertinib

John T, ASCO 2024

ADAURA: molecular residual disease (MRD)



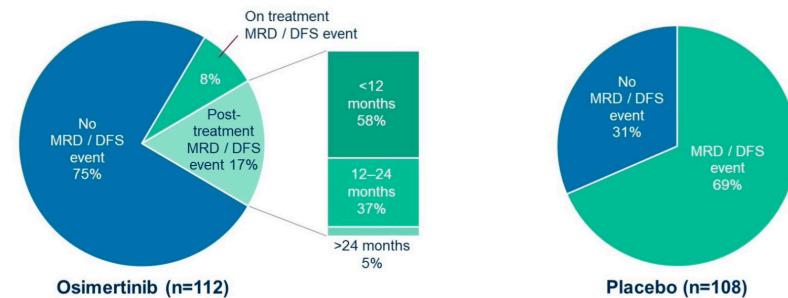
- Detected MRD at baseline was associated with poor outcomes
- Patients receiving osimertinib were more likely to be DFS and MRD event free vs placebo



- Of 18 patients with detected MRD at baseline
 - 4 / 5 patients receiving osimertinib cleared MRD
 - 0 / 13 patients receiving placebo cleared MRD

John T, ASCO 2024

ADAURA: molecular residual disease (MRD)



- DFS and MRD event-free status was maintained for most patients during osimertinib treatment
- At 24 months post-osimertinib treatment, the DFS and MRD event-free rate was 66%

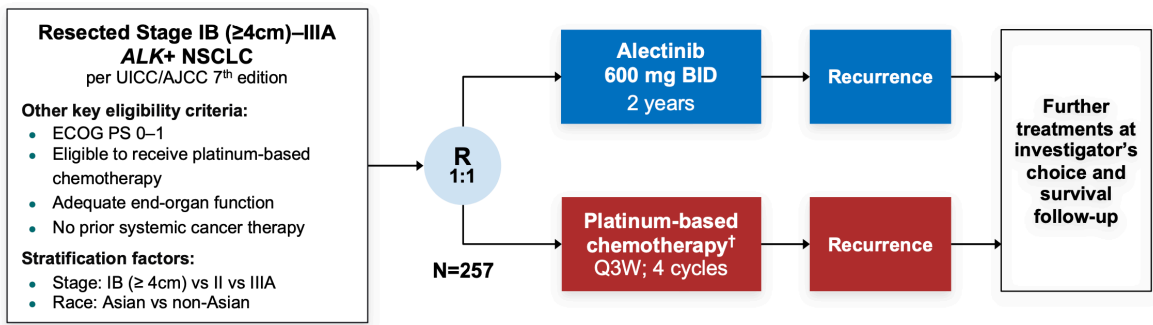
% (95% CI)	DFS and MRD event-free rate in the post-treatment follow-up period	
	12 months post-osimertinib discontinuation	24 months post-osimertinib discontinuation
Osimertinib (n=112)	80 (71, 87)	66 (53, 77)

John T, ASCO 2024

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Adjuvant Treatment

ALINA: study design



Primary endpoint

- DFS per investigator, † tested hierarchically:
 - Stage II–IIIA → ITT (Stage IB–IIIA)

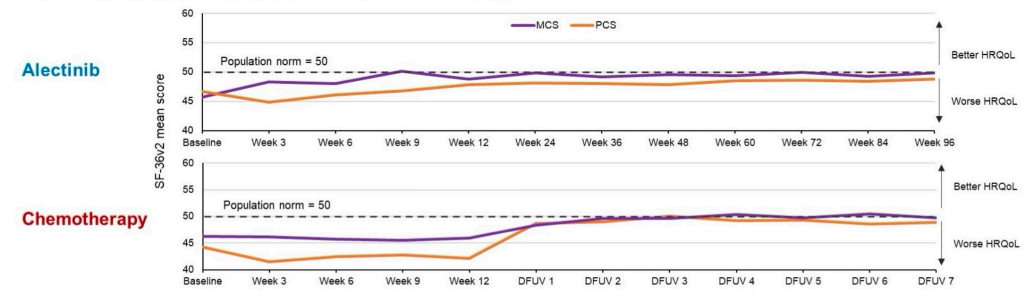
Other endpoints

- CNS disease-free survival
- OS
- Safety

Solomon BJ, et al. ESMO 2023; Wu YL, et al. N Engl J Med 2024;390(14):1265-76.

ALINA: long-term HRQoL outcomes

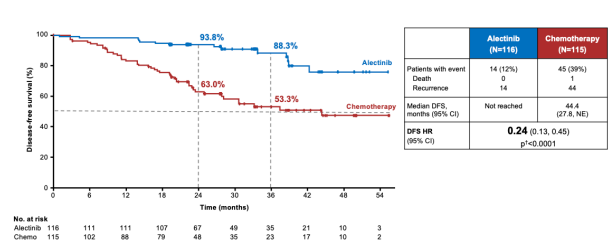
- During active treatment with alectinib, MCS (mental component summary) and PCS (physical component summary) generally improved through to week 96 and were similar to the general population
- With CT, MCS and PCS improved after treatment was completed
- Similar trends were observed across health domains



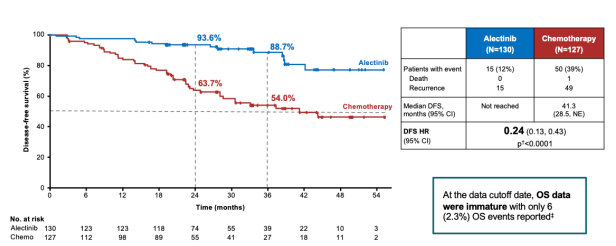
Nishio M, et al. ASCO 2024

ALINA: disease-free survival (DFS)

DFS stage II-IIIa



DFS ITT stage IB-IIIa

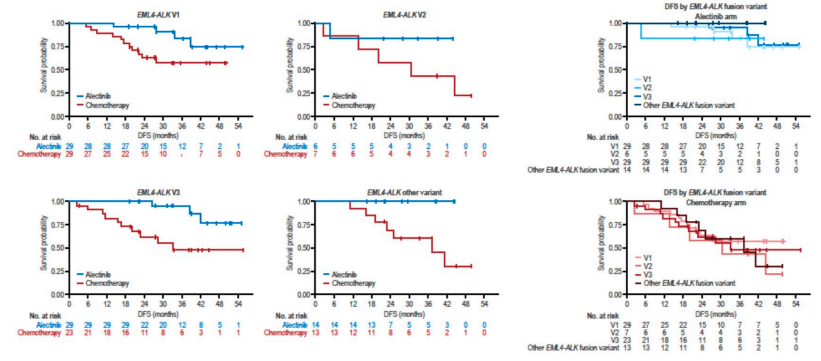


DFS stage II-IIIa NSCLC: HR 0.24 (95% CI 0.13-0.45; p<0.001)
2-year DFS of 93.8% (alectinib) and 63.0% (CT)

DFS stage II-IIIa NSCLC: HR 0.24 (95% CI 0.13-0.43; p<0.001)
2-year DFS of 93.6% (alectinib) and 63.7% (CT)

Solomon BJ, et al. ESMO 2023; Wu YL, et al. N Engl J Med 2024;390(14):1265-76.

ALINA: DFS by EML4-ALK fusion variant

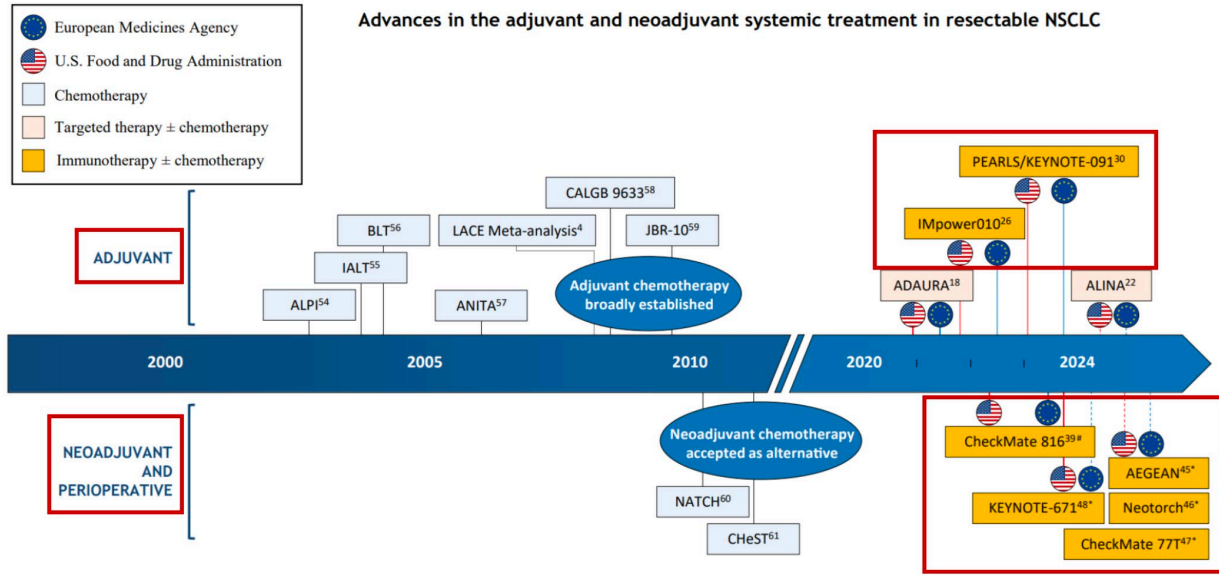


- Alectinib showed DFS benefit vs chemotherapy regardless of EML4-ALK fusion variant
- Alectinib and chemotherapy showed comparable DFS in all EML4-ALK fusion variants

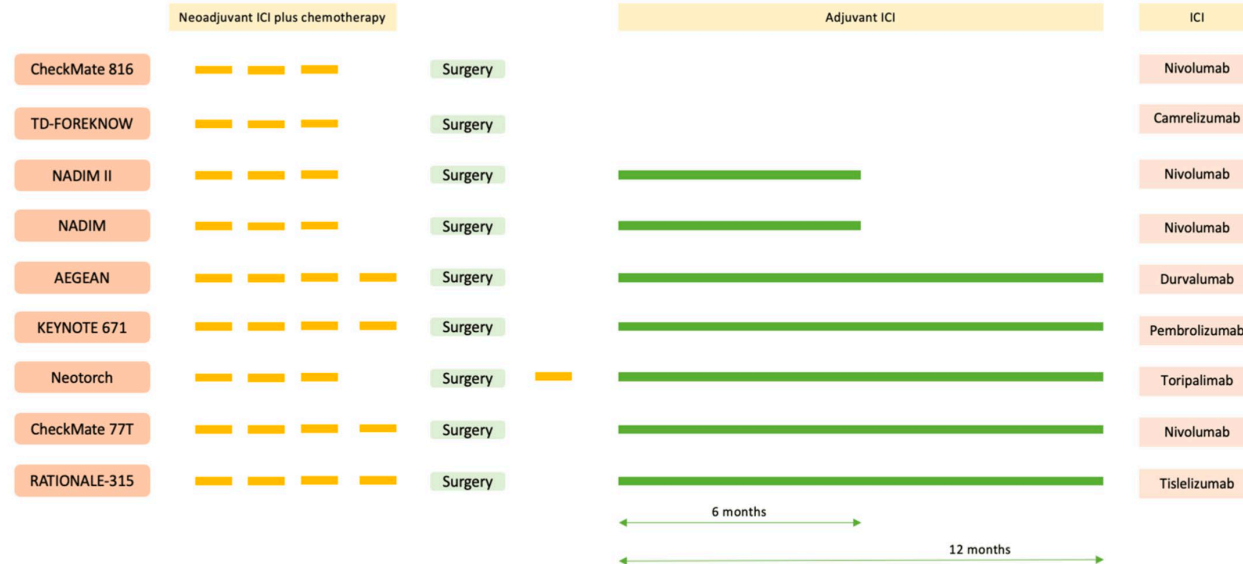
Solomon BJ, et al. ESMO 2024



Locally Advanced NSCLC



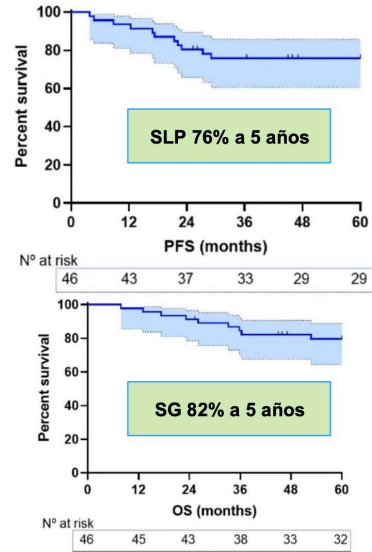
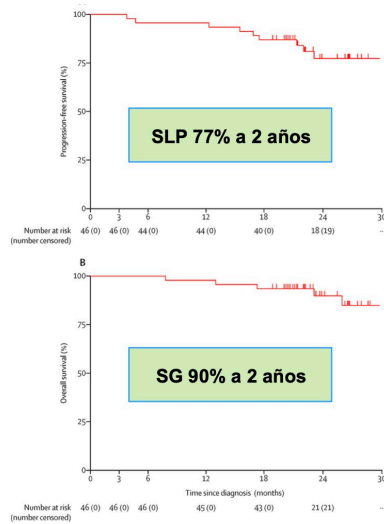
Houda et al. The Lancet Regional Health – Europe 2024



Verma et al. Cancers, 2024

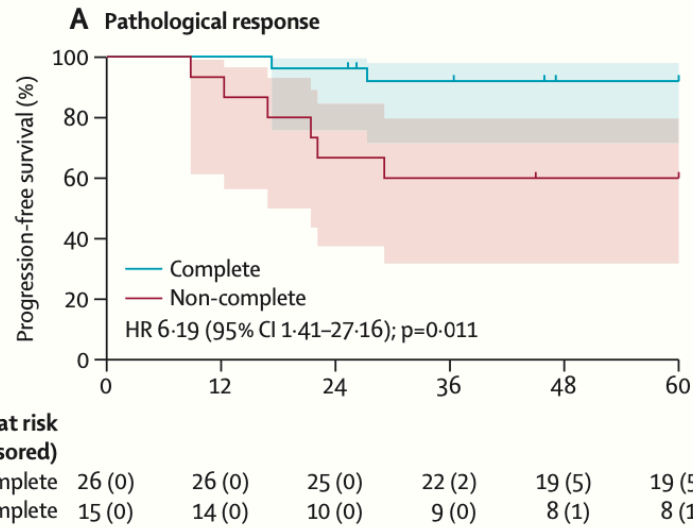
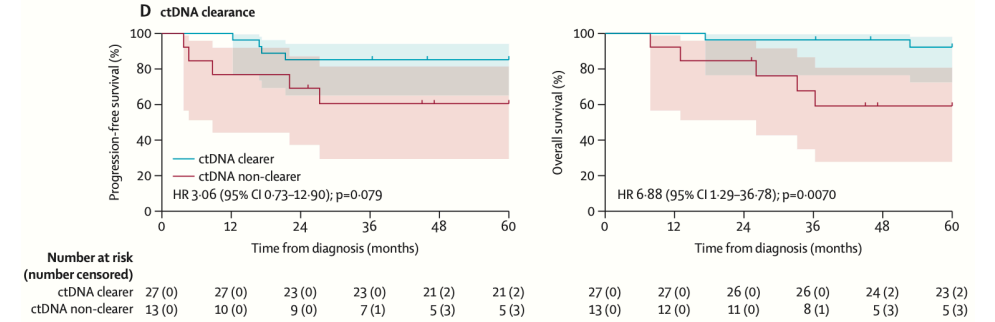
Locally Advanced NSCLC

Patient baseline characteristics	N=46 (ITT)
Age (median, range)	63(41-77)
Male, N (%)	34 (74 %)
ECOG PS	
0 N (%)	25 (54%)
1 N (%)	21 (46%)
Smoking status, N (%)	
Former/current	46 (100%)
Adenocarcinoma, N (%)	28 (61)
Co-morbidities, N (%)	43 (93.5)
N2	33 (89.2)
Multiple station	25 (75.8)

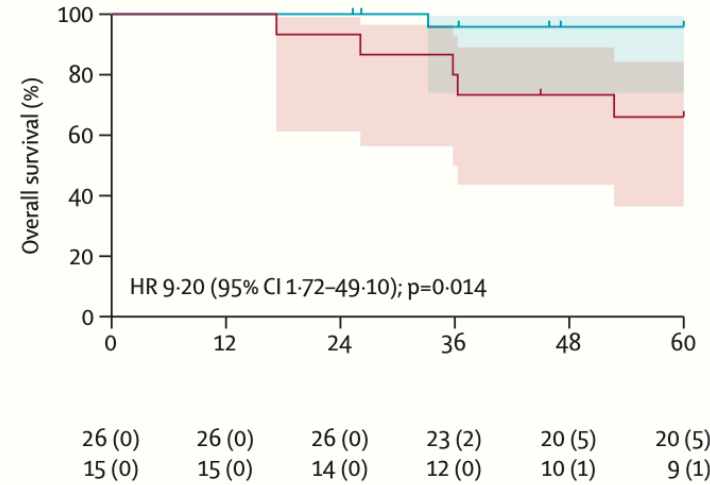


Provencio et al. Lancet Oncol, 2020; Provencio et al. WCLC 2024

Perioperative chemotherapy and nivolumab in non-small-cell lung cancer (NADIM): 5-year clinical outcomes from a multicentre, single-arm, phase 2 trial



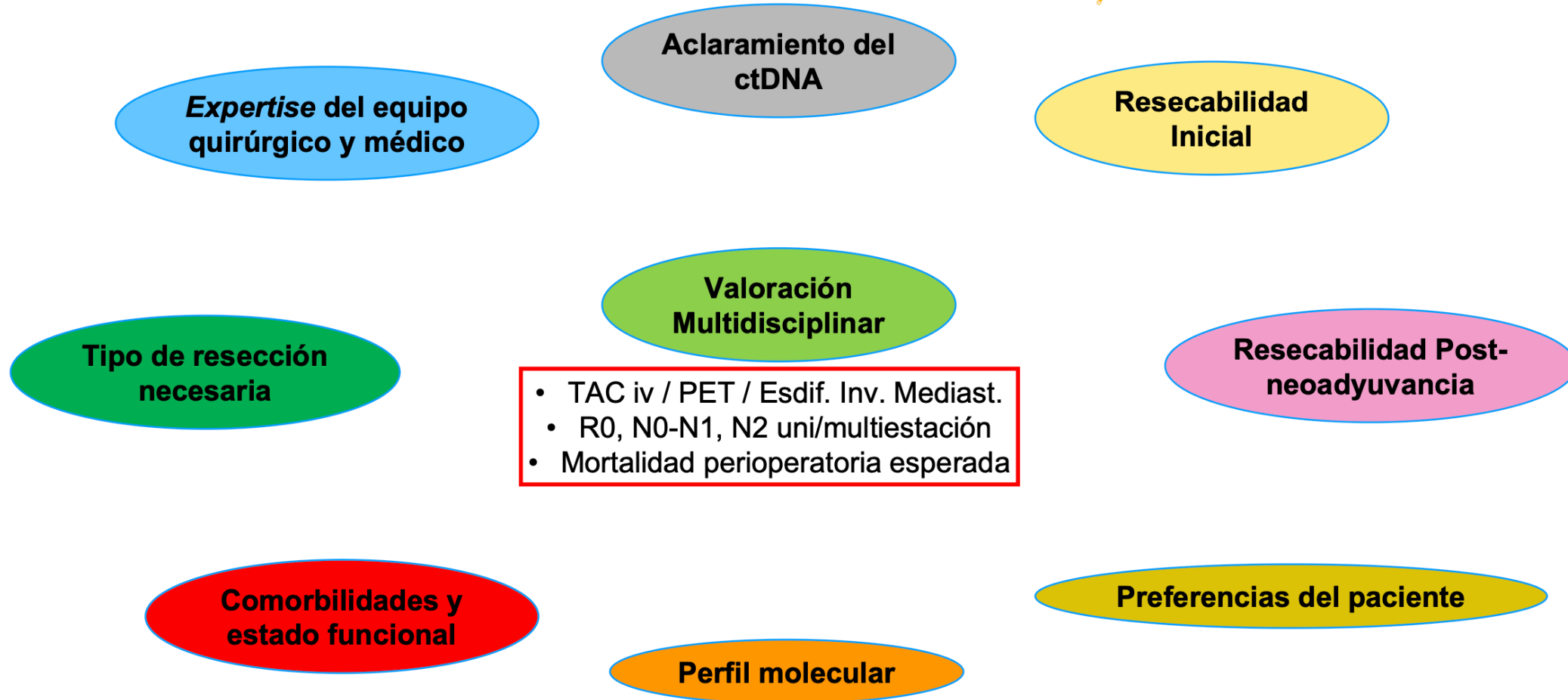
Number at risk (number censored)	0	12	24	36	48	60
Complete	26 (0)	26 (0)	25 (0)	22 (2)	19 (5)	19 (5)
Non-complete	15 (0)	14 (0)	10 (0)	9 (0)	8 (1)	8 (1)



Number at risk (number censored)	0	12	24	36	48	60
ctDNA clearer	27 (0)	27 (0)	26 (0)	23 (2)	20 (5)	20 (5)
ctDNA non-clearer	13 (0)	10 (0)	14 (0)	12 (0)	10 (1)	9 (1)

Organizado por:

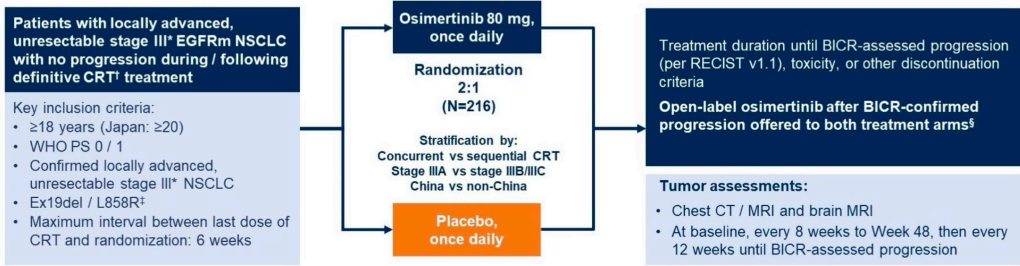
Locally Advanced NSCLC



Organizado por:

Unresectable NSCLC

LAURA

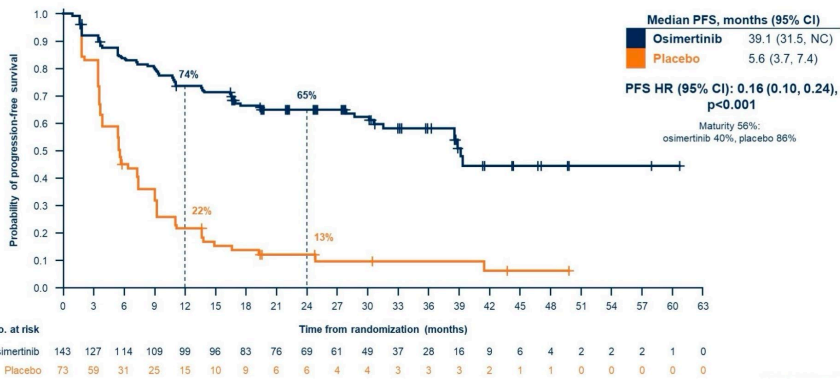


Endpoints

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

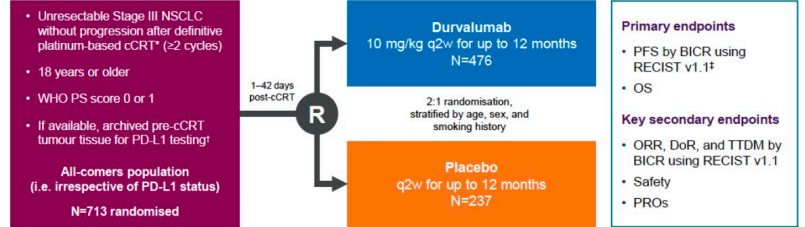
LAURA

Progression-free survival by BICR



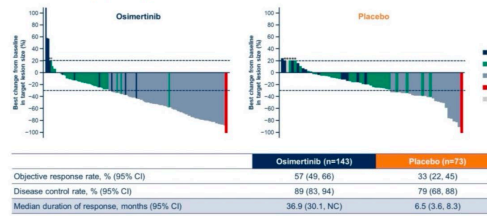
Ramalingam SS, et al. ASCO 2024; Lu S, et al. N Engl J Med 2024;391(7):585-97

PACIFIC

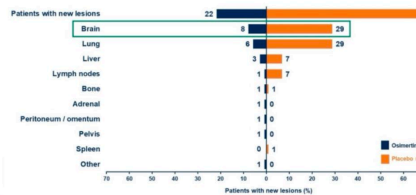


LAURA

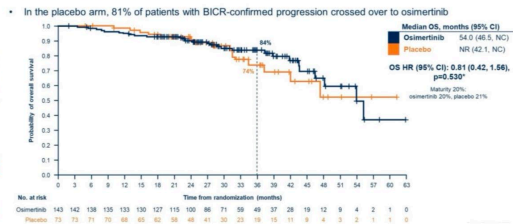
Tumor response by BICR



Sites of new lesions by BICR



Interim analysis of overall survival



- ORR 57% vs 33%; DCR 89% vs 79%; mDoR 36.9 vs 6.5m
- Patients with new brain lesions: 8% vs 29%
- Interim data OS showed a positive trend in favor of osimertinib, despite a high proportion of patients crossing over to osimertinib in the placebo arm (81%)

Ramalingam SS, et al. ASCO 2024; Lu S, et al. N Engl J Med 2024;391(7):585-97

Organizado por:

Advanced Non-targeted NSCLC

State of the art in 2024

Treatment-naïve NSCLC

IO
monotherapy

IO + QT or IO+IO
Any expression PDL1

Non-Squamous

NGS-EGFR, ALK, ROS1, BRAF, RET, MET, NTRK, others

Targeted therapy

Squamous

No driving alterations

PD-L1 <50%

PD-L1 ≥50%

Pembrolizumab [I, A; MCBS 5^e]
Atezolizumab (also for ICs ≥10%) [I, A; MCBS 5^e]
Cemiplimab [I, A; MCBS 4^e]
(for PS 2 for all drugs: [III, B])

PD-L1 <50%

PD-L1 ≥50%

Pembrolizumab [I, A; MCBS 5^e]
Atezolizumab (also for ICs ≥10%) [I, A; MCBS 5^e]
Cemiplimab [I, A; MCBS 4^e]
(for PS 2 for all drugs: [III, B])

Pembrolizumab-platinum-pemetrexed (4 cycles) followed by pembrolizumab-pemetrexed [I, A; MCBS 4^e]
Atezolizumab-carboplatin-nab-paclitaxel (4-6 cycles) followed by atezolizumab [I, A; MCBS 3^e]
Atezolizumab-bevacizumab-carboplatin-paclitaxel (4-6 cycles) followed by atezolizumab-bevacizumab [I, A; MCBS 3^e]
Nivolumab-ipilimumab + 2 cycles of platinum-doublet ChT followed by nivolumab-ipilimumab [I, A; MCBS 4^e]
Cemiplimab-platinum-doublet ChT (4 cycles) followed by cemiplimab + pemetrexed maintenance^a [I, A]
Durvalumab-tremelimumab-platinum-doublet ChT (4 cycles) followed by durvalumab-tremelimumab (tremelimumab one additional dose) + pemetrexed maintenance^a [I, A; MCBS 4^e]
Nivolumab-ipilimumab (only for PD-L1 ≥1%) [I, A; MCBS 4^e]

Pembrolizumab-carboplatin-(nab)-paclitaxel (4 cycles) followed by pembrolizumab [I, A; MCBS 4^e]
Nivolumab-ipilimumab + 2 cycles of platinum-doublet ChT followed by nivolumab-ipilimumab [I, A; MCBS 4^e]
Cemiplimab-platinum-doublet ChT (4 cycles) followed by cemiplimab^a [I, A]
Durvalumab-tremelimumab-platinum-doublet ChT (4 cycles) followed by durvalumab-tremelimumab (tremelimumab one additional dose)^a [I, A; MCBS 4^e]
Nivolumab-ipilimumab (only for PD-L1 ≥1%) [I, A; MCBS 4^e]

Hendriks. Ann Oncol 2023

News combinations

News CkP¹

ADC

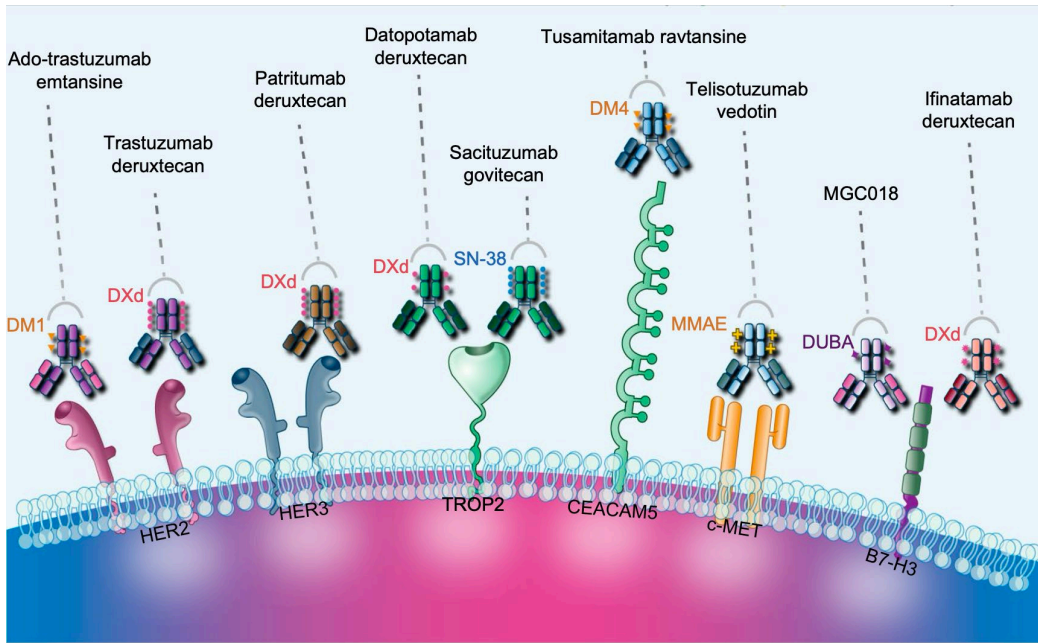
Bispecific drugs

First line

Other lines

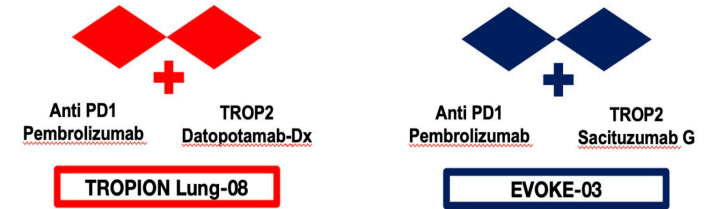
Organizado por:

Advanced Non-targeted NSCLC



Trials with TROP2 in 1L and PDL1>50%

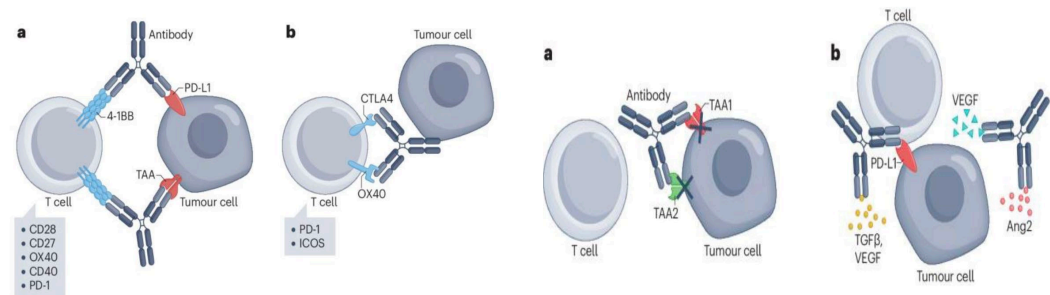
Anti Trop2



Trials with TROP2 combinations in 1L all comers

Trial	Phase	Combination	Population	NCT ID
TROPION-Lung02	IB	Dato-DXd + pembro + platinum	1L/2L	NCT04526691
TROPION-Lung04	IB	Dato-DXd + durva + platinum	1L/2L	NCT04612751
TROPION-Lung07	III	Dato-DXd + pembro + platinum Pembro + pemetrexed + platinum	1L PDL1 < 50%	NCT05555732
TROPION-Lung08	III	Dato-DXd + pembro	1L PDL1 ≥ 50%	NCT05215340
AVANZAR	III	Dato-DXd + durva + carboplatin Pembro + histology-specific platinum doublet	1L	NCT05687266
EVOKE-03	III	Sacituzumab + pembro	1L PDL1 ≥ 50%	NCT05609968
EVOKE-02	II	Sacituzumab + pembro + platinum	1L	NCT05186974

Bispecific and multispecific antibody



Bring immune cells close to tumor cells

Blocking multiple signals

Advanced targeted NSCLC

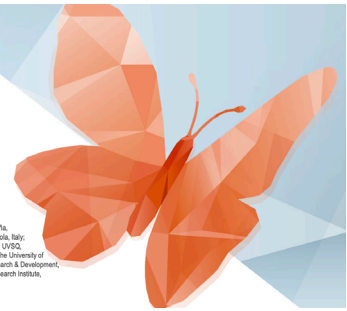
Contextualizing the Data: Amivantamab (IV) Indications and Clinical Trials in Advanced NSCLC

Clinical Trial	Amivantamab Regimen	Phase	Patient Population	Status
CHRYSALIS NCT02609776	Amivantamab	I	Cohorts for EGFR and MET	FDA, EMA, NICE approval for EGFR ex20ins, post-platinum
PAPILLON NCT04538664	Amivantamab + Carboplatin/pemetrexed	III	EGFR ex20ins, 1L	FDA approval
MARIPOSA NCT04487080	Amivantamab + Lazertinib	III	EGFR ex19del/L858R, 1L	Under FDA review
MARIPOSA-2 NCT04988295	Amivantamab + Carboplatin/pemetrexed +/- Lazertinib	III	EGFR ex19del/L858R, 2L	Under FDA review
CHRYSALIS-2 NCT04077463	Amivantamab + Lazertinib	I/II	EGFR ex19del/L858R, 2L	Clinical trial ongoing
METalmark NCT05488314	Amivantamab + Capmatinib	I/II	MET ex14 skipping, MET amplified	Clinical trial ongoing
PolyDamas NCT05908734	Amivantamab + Cetrelimab	I/II	No genotype restriction	Clinical trial ongoing

Amivantamab Plus Chemotherapy vs Chemotherapy as First-Line Treatment in EGFR Exon 20 Insertion-mutated Advanced NSCLC: Analysis of Post-Progression Endpoints From PAPILLON

Enriqueta Felip,¹ Catherine Shu,² Andres Aguilar,³ Ke-Jing Tang,⁴ Maria Del Rosario Garcia Campelo,⁵ Kang-yeon Lee,⁶ Angelo Delmonico,⁷ Joshua K. Sabari,⁸ Nicolas Girard,⁹ Aaron S. Mansfield,¹⁰ Keunchil Park,^{11,12} Caicun Zhou,¹³ Karen Xia,¹⁴ Archan Bhattacharya,¹⁵ Mark Wade,¹⁶ Mahadi Baig,¹⁶ Trishala Agrawal,¹⁴ Parthiv Mahadevia,¹⁶ Roland E. Knoblauch,¹⁴ Rachel E. Sanborn¹⁷

¹Vall d'Hebron University Hospital and Vall d'Hebron Institute of Oncology, Barcelona, Spain; ²Columbia University Medical Center, New York, NY, USA; ³Hospital Universitario Quiron-Oseus, Barcelona, Spain; ⁴The First Affiliated Hospital, Sun Yat-sen University, Guangzhou, China; ⁵Hospital Universitario A Coruña, Coruña, Spain; ⁶Taipei Medical University Shuang Ho Hospital, Taipei, Taiwan; ⁷IPCC Istituto Romagnolo per lo Studio dei Tumori "Dino Amadori" (IRST), Meldola, Italy; ⁸Kangene Health at NYU School of Medicine, New York, NY, USA; ⁹Insitut Curie, Institut de Thorax Curie-Montsouris, Paris, France, and Paris-Saclay University, UVSQ, Versailles, France; ¹⁰Mayo Clinic, Rochester, MN, USA; ¹¹Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; ¹²The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ¹³Shanghai Pulmonary Hospital, Tongji University School of Medicine, Shanghai, China; ¹⁴Janssen Research & Development, Spring House, PA, USA; ¹⁵Janssen Research & Development, High Wycombe, UK; ¹⁶Janssen Research & Development, Raritan, NJ, USA; ¹⁷Earle A. Childs Research Institute, Providence Cancer Institute of Oregon, Portland, OR, USA.



Amivantamab Plus Chemotherapy vs Chemotherapy in EGFR-mutant Advanced NSCLC After Progression on Osimertinib: A Post-progression Analysis of MARIPOSA-2

Ryan D. Gentzler,¹ Alexander I. Spira,² Barbara Melosky,³ Scott Owen,⁴ Timothy F. Burns,⁵ Ermilia Massarelli,⁶ Misako Nagesaka,⁷ Bruno Fang,⁸ Rachel E. Sanborn,⁹ Oscar Arrieta,¹⁰ Cynthia Card,¹¹ Federico Cappuzzo,¹² Karen Xia,¹³ Pei-Ling Chu,¹⁴ Sujay Shah,¹⁵ Brooke Diorio,¹⁵ Angela Girvin,¹⁵ Parthiv Mahadevia,¹⁴ Joshua M. Baum,¹³ Karen L. Reckamp¹⁶

¹Hematology/Oncology, University of Virginia Cancer Center, Charlottesville, VA, USA; ²Virginia Cancer Specialists, Fairfax, VA, USA; ³British Columbia Cancer Agency, Vancouver, British Columbia, Canada; ⁴McGill University Health Centre (MUHC), Montreal, Quebec, Canada; ⁵NUPAC Hillman Cancer Center, Pittsburgh, PA, USA; ⁶City of Hope Comprehensive Cancer Center, Duarte, CA, USA; ⁷University of California Irvine School of Medicine, Orange, CA, USA; ⁸Astera Cancer Care, East Brunswick, NJ, USA; ⁹Earle A. Childs Research Institute, Providence Cancer Institute of Oregon, Portland, OR, USA; ¹⁰Instituto Nacional de Cancerología, Mexico City, Mexico; ¹¹Aenes Charbonneau Cancer Institute, Calgary, Alberta, Canada; ¹²IRCCS Regina Elena National Cancer Institute, Rome, Italy; ¹³Janssen Research & Development, Spring House, PA, USA; ¹⁴Janssen Research & Development, Raritan, NJ, USA; ¹⁵Janssen Research & Development, Titusville, NJ, USA; ¹⁶Cedars Sinai Medical Center, Los Angeles, CA, USA.



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

Byoung Chul Cho,¹ Yongsheng Wang,² Enriqueta Felip,³ Jiawei Cui,⁴ Alexander I Spira,⁵ Joel W Neal,⁶ Christina Baik,⁷ Melina E Marmarelis,⁸ Eiki Ichihara,⁹ Jong-Seok Lee,¹⁰ Se-Hoon Lee,¹¹ James Chih-Hsin Yang,¹² Sebastian Michels,¹³ Zacharias Anastasiou,¹⁴ Joshua C Curtin,¹⁵ Xuesong Lyu,¹⁶ Levon Demirdjian,¹⁷ Isabelle Leconte,¹⁸ Leonardo Trani,¹⁵ Mahadi Baig,¹⁹ Joshua M Baum,¹⁵, Pascale Tomasini²⁰

¹Division of Medical Oncology, Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, Republic of Korea; ²Department of Oncology, West China Hospital, Sichuan University, Chengdu, China; ³Medical Oncology Service, Vall d'Hebron Institute of Oncology (IHO), Vall d'Hebron Barcelona Hospital Campus, Universitat Autònoma de Barcelona, Barcelona, Spain; ⁴The First Hospital of Jilin University, Changchun, China; ⁵Virginia Cancer Specialists, Fairfax, VA, USA; ⁶Stanford Cancer Institute, Stanford University, Stanford, CA, USA; ⁷University of Washington Fred Hutchinson Cancer Center, Seattle, WA, USA; ⁸Division of Hematology and Oncology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA; ⁹Okayama University Hospital, Okayama, Japan; ¹⁰Seoul National University Bundang Hospital, Seongnam, Republic of Korea; ¹¹Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; ¹²Department of Medical Oncology, National Taiwan University Cancer Center, Taipei, Taiwan; ¹³University of Cologne, Faculty of Medicine, and University Hospital Cologne, Cologne, Germany; ¹⁴Janssen-Cilag Pharmaceutical, Peñíscola, Greece; ¹⁵Janssen Research & Development, Spring House, PA, USA; ¹⁶Janssen Research & Development, Shanghai, China; ¹⁷Janssen Research & Development, San Diego, CA, USA; ¹⁸Janssen Research & Development, Allschwil, Switzerland; ¹⁹Janssen Research & Development, Raritan, NJ, USA; ²⁰Multidisciplinary Oncology & Therapeutic Innovations Department, Assistance Publique - Hôpitaux de Marseille, Aix-Marseille University, CNRS, INSERM, CRCM, APHM, Marseille, France.

PALOMA-3: Phase III Noninferiority Trial of SC Amivantamab vs IV Amivantamab Each With Lazertinib in Progressive Advanced EGFR-Mutated NSCLC

CCO Independent Conference Coverage* of the 2024 American Society of Clinical Oncology Annual Meeting, May 31 - June 4, 2024

*CCO is an independent medical education company that provides state-of-the-art medical information to healthcare professionals through conference coverage and other educational programs.

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

Enriqueta Felip,¹ Byoung Chul Cho,² Vanesa Gutiérrez,³ Adinda Alip,⁴ Benjamin Besse,⁵ Shun Lu,⁶ Alexander I Spira,⁷ Nicolas Girard,⁸ Raffaele Califano,⁹ Shirish M Gadgil,¹⁰ James Chih-Hsin Yang,¹¹ Naoyuki Nogami,¹² Koichi Azuma,¹³ Joshua C Curtin,¹⁴ Jiarui Zhang,¹⁴ Anesh Panchal,¹⁵ Mariah Ennis,¹⁴ Seema Sethi,¹⁴ Joshua M Baum,¹⁴, Se-Hoon Lee¹⁶

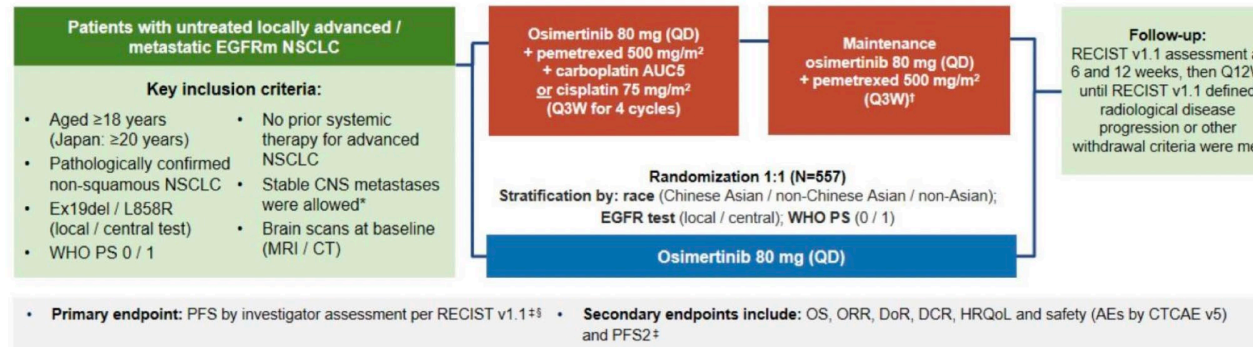
¹Medical Oncology Service, Vall d'Hebron Institute of Oncology (IHO), Vall d'Hebron Barcelona Hospital Campus, Universitat Autònoma de Barcelona, Barcelona, Spain; ²Division of Medical Oncology, Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, South Korea; ³Medical Oncology Department, Hospital Regional Universitario de Málaga y Virgen de la Victoria, IBMA, Málaga, Spain; ⁴Clinical Oncology Unit, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; ⁵Paris-Saclay University, Gustave Roussy, Villejuif, France; ⁶Shanghai Lung Cancer Center, Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China; ⁷Virginia Cancer Specialists, Fairfax, VA, USA; ⁸Institut du Thorax Curie-Montsouris, Paris, France, and Paris-Saclay University, Université de Versailles Saint-Quentin-en-Yvelines, Versailles, France; ⁹Department of Medical Oncology, The Christie NHS Foundation Trust and Division of Cancer Sciences, The University of Manchester, Manchester, UK; ¹⁰Department of Internal Medicine, Henry Ford Cancer Institute, Detroit, MI, USA; ¹¹National Taiwan University Cancer Center and National Taiwan University Hospital, Taipei, Taiwan; ¹²Ehime University Hospital, Toon, Ehime, Japan; ¹³Kyume University School of Medicine, Kurume, Japan; ¹⁴Janssen Research & Development, Spring House, PA, USA; ¹⁵Janssen Research & Development, High Wycombe, UK; ¹⁶Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea.

Organizado por:

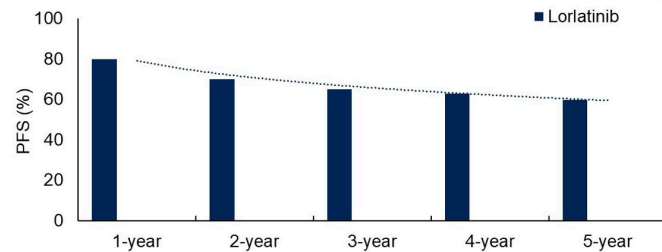


Advanced targeted NSCLC

FLAURA2 Phase III study design (NCT04035486)



Evaluating CROWN in the Context of ALK Treatment Landscape: Systemic Efficacy

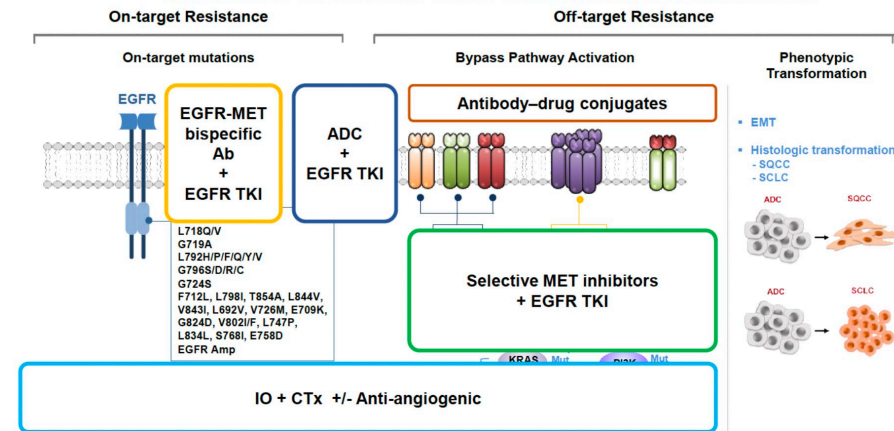


Median PFS	1-year PFS (%)	2-year PFS (%)	3-year PFS (%)	4-year PFS (%)	5-year PFS (%)
Lorlatinib ¹⁻³	Not reached at 60.2 mos	80	70	63	60

1. Shaw AT et al., N Engl J Med 2020;383:2018-29
 2. Solomon BJ et al., Lancet Respir Med 2023;11(4):354-66
 3. Solomon BJ et al., ASCO 2024

Beyond Osi Progression

TREATMENT STRATEGIES based on the resistance mechanism



Organizado por:

Advanced targeted NSCLC

KRAS G12C

RET

MET ex14

ROS 1

NTRK1,2,3

HER 2, 3

BRAF

Selpercatinib

Encorafenib

Capmatinib

Repotrectinib

Sotorasib

Tepotinib

Savolitinib

Adagrasib

Velbretinib

Dabrafenib

Pralsetinib

Divarasinib

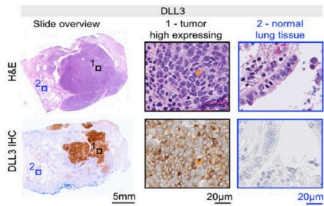
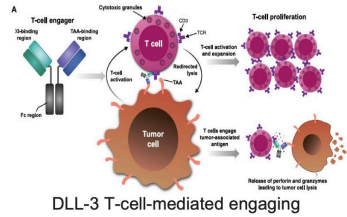
Taletrectinib

.....

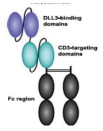
Organizado por:

Other thoracic tumors

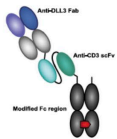
SCLC



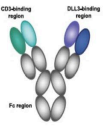
Tarlatamab
Bispecific mAb
 Amgen
 (Phase 2-3)



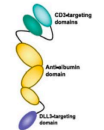
QLS31904
Bispecific mAb
 Qilu Pharmaceuticals
 (Phase 1)



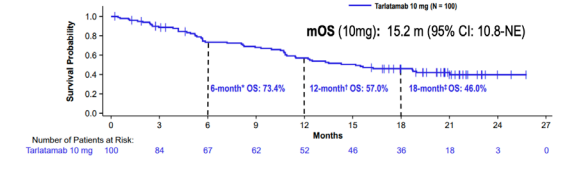
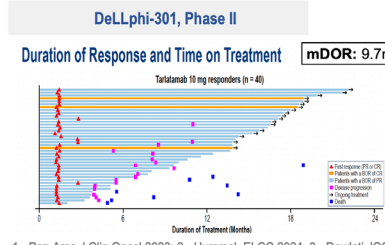
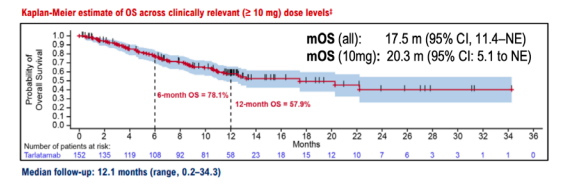
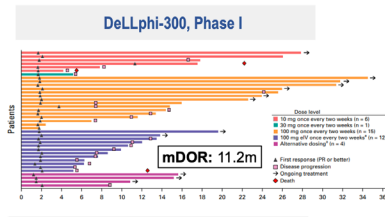
Obixtamab
 (BI 764532)
Bispecific mAb
 Boehringer Ingelheim
 (Phase 1-2)



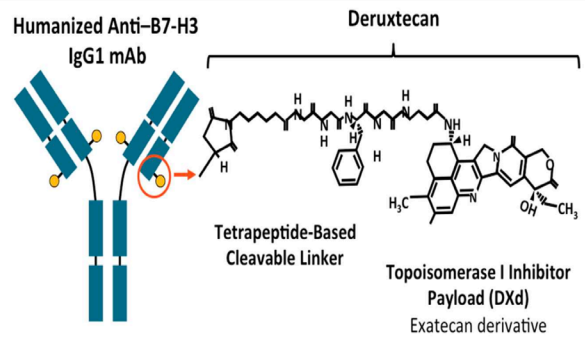
HPN328 or MK-6070
Trispecific mAb
 Daiichi/ Merck/Harpoon
 (Phase 1/2)



• Others: RO7616789 (Roche/Chugai)



1.- Paz-Ares J Clin Oncol 2023; 2.- Hummel, ELCC 2024, 3.- Dowlati JCO 2024, 4.- Ahn MJ, NEJM 2023, 5.-Sands J. WCLC 2024



- ✓ High potency, membrane payload with short systemic half-life
- ✓ Optimized DAR 4:1
- ✓ Stability of the linker payload
- ✓ Tumor-selectable cleavable linker
- ✓ Bystander killing effect

IFINATAMAB DERUXTECAN

Transcriptional Subtypes of SCLC

SCLC-N	SCLC-A	SCLC-P	SCLC-I
↑ <i>NEUROD1</i> , NE-Genes	↑ <i>ASCL1</i> , NE-Genes	↑ <i>POU2F3</i> , Immune Genes	↑ Immune Genes
↓ <i>ASCL1</i> , <i>POU2F3</i> , Immune Genes	↓ <i>POU2F3</i> , <i>NEUROD1</i> , Immune Genes	↓ <i>ASCL1</i> , <i>NEUROD1</i> , NE-Genes	↓ <i>ASCL1</i> , <i>POU2F3</i> , <i>NEUROD1</i> , NE-Genes

EMT, IFN Signaling, and Immune Cell Infiltrate

Other thoracic tumors

Mesothelioma

Primer estudio randomizado que compara QT frente a **inmunoterapia**

No mejoría en PFS ni ORR, sí en SG

Estudio positivo, aprobado por **FDA y EMA**

Key Eligibility Criteria

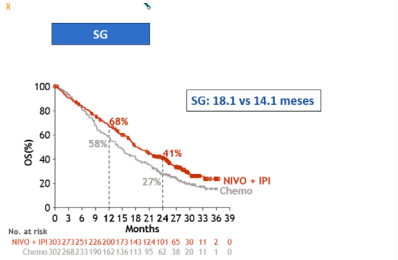
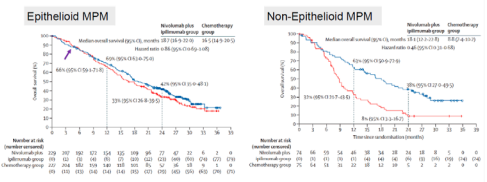
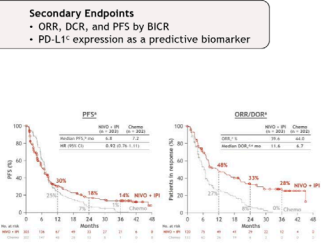
- Unresectable pleural mesothelioma
- No prior systemic therapy
- ECOG performance status 0-1

Stratified by: histology (epithelioid vs non-epithelioid) and gender

Primary Endpoint: OS

Secondary Endpoints: ORR, DCR, and PFS by BICR; PD-L1 expression as a predictive biomarker

	NIVO + IPI (n = 303)	Chemo (n = 302)
Age, median (range), years	69 (65-75)	69 (62-75)
Male, %	77	77
ECOG performance status		
0, %	38	42
1, %	62	57
Smoking status		
Never, %	42	40
Current / former, %	57	57
Histology, %		
Epithelioid	76	75
Non-epithelioid	24	25
Prior radiotherapy, %	10	9
PD-L1 quantifiable at baseline, n	289	297
≥ 1, n	20	26
< 1, n	80	74

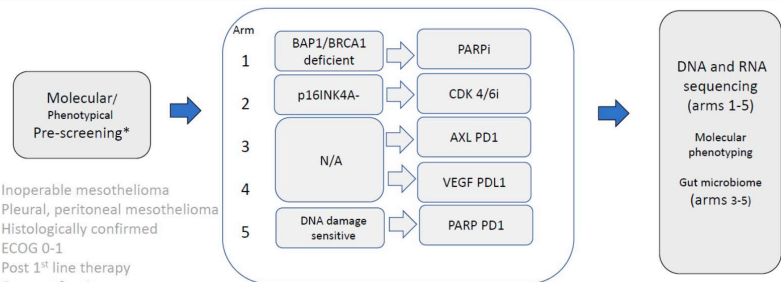


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Mesothelioma Stratified Therapy (MIST) study design

Trials.gov ID NCT03654833

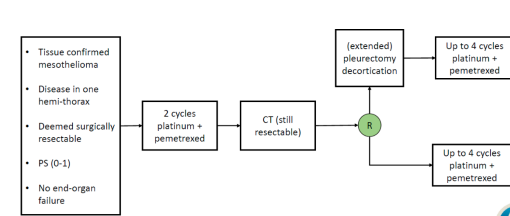
Stage 1 Molecular Pre-Screening Stage 2 Treatment Stratification Stage 3 Genomic interrogation



- Inoperable mesothelioma
- Pleural, peritoneal mesothelioma
- Histologically confirmed
- ECOG 0-1
- Post 1st line therapy
- Consent for tissue

- Primary endpoint response
- Secondary endpoint DCR
- Rebiopsy, responders

MARS 2



Objetivo primario supervivencia:

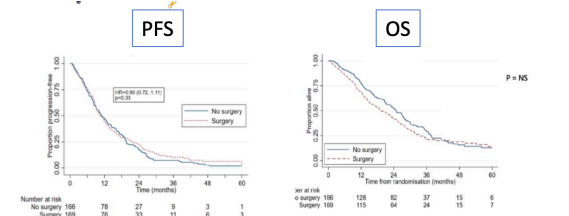
19.3 m cirugía

24.8 m quimioterapia

4.5% de los pacientes no recibieron el tto asignado y 7.5% se retiraron después de randomización

Incluyó 12% de pacientes con tumores no-epitelioides

Estadaje por TAC



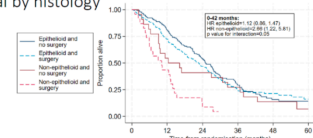
Completeness of resection

R0 (no residual tumour)	5/157 (3.2%)
R1 (microscopic residual tumour)	127/157 (80.9%)
R2 (macroscopic residual tumour)	25/157 (15.9%)

Length of hospital stay (days) &

In-hospital mortality	6/157 (3.8%)
30 day mortality	6/157 (3.8%)
90 day mortality	14/157 (8.9%)

Survival by histology



Novedades & Claves en CÁNCER de PULMÓN 2024

Añade esta fecha
a tu calendario 

21 Enero 2025
16:00h-18:00h

FORMATO **VIRTUAL**

ACCEDER

Programa científico

- 16:00 - 16:10 **Introducción**
Dr. Jose Luís González Larriba
Hospital Clínico San Carlos, Madrid
- 16:10 - 16:30 **Biomarcadores pronósticos**
Dra. Ana Cardeña
Hospital Univ. Nuestra Señora de Candelaria, Santa Cruz de Tenerife
- 16:30 - 16:50 **Estadios iniciales y enfermedad localmente avanzada**
Dr. Eider Akcona
Hospital Univ. de Cruces, Baracaldo, Vizcaya
- 16:50 - 17:10 **Enfermedad metastática (incluyendo inmunoterapia)**
Dra. Noelia Vilarriño
ICO, Hospital Duran i Reynals, L'Hospitalet de Llobregat, Barcelona
- 17:10 - 17:30 **Cáncer de pulmón microcítico y otros tumores**
Dr. Juan Luis Martí
Hospital General Univ. Dr. Balmis, Alicante
- 17:30 - 17:45 **Debate**
- 17:45 - 18:00 **Conclusiones**
Dr. Jose Luís González Larriba
Hospital Clínico San Carlos, Madrid

Organizado por:



Patrocinado por:

