



Enfermedad avanzada con mutaciones

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Mutacion KRAS G12C - Sotorasib

Estudio CodeBreak 200



CodeBreak 200

Sotorasib versus Docetaxel for Previously Treated Non-Small Cell Lung Cancer with *KRAS* G12C Mutation: CodeBreak 200 Phase 3 Study

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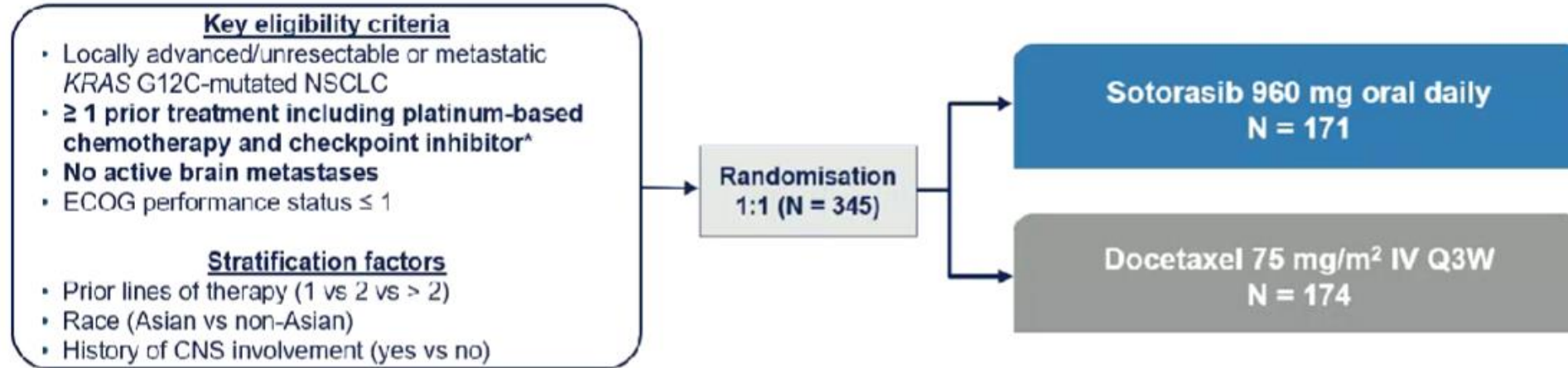
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Mutacion KRAS G12C - Sotorasib

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CodeBreak 200 Phase 3 Study Design



Primary Endpoint: PFS by BICR

Secondary Endpoints: Efficacy (OS[†], ORR, DOR, TTR, DCR), safety/tolerability, PRO

ITT population analysis included all randomised patients

Per regulatory guidance, protocol was amended to reduce planned enrolment from 650 to ~330 patients, and crossover from docetaxel to sotorasib was permitted.

Enrollment period: June 4, 2020 to April 26, 2021; protocol amendment: February 15, 2021; data cutoff: August 2, 2022.

NCT04303780; EudraCT: 2019-003582-18.

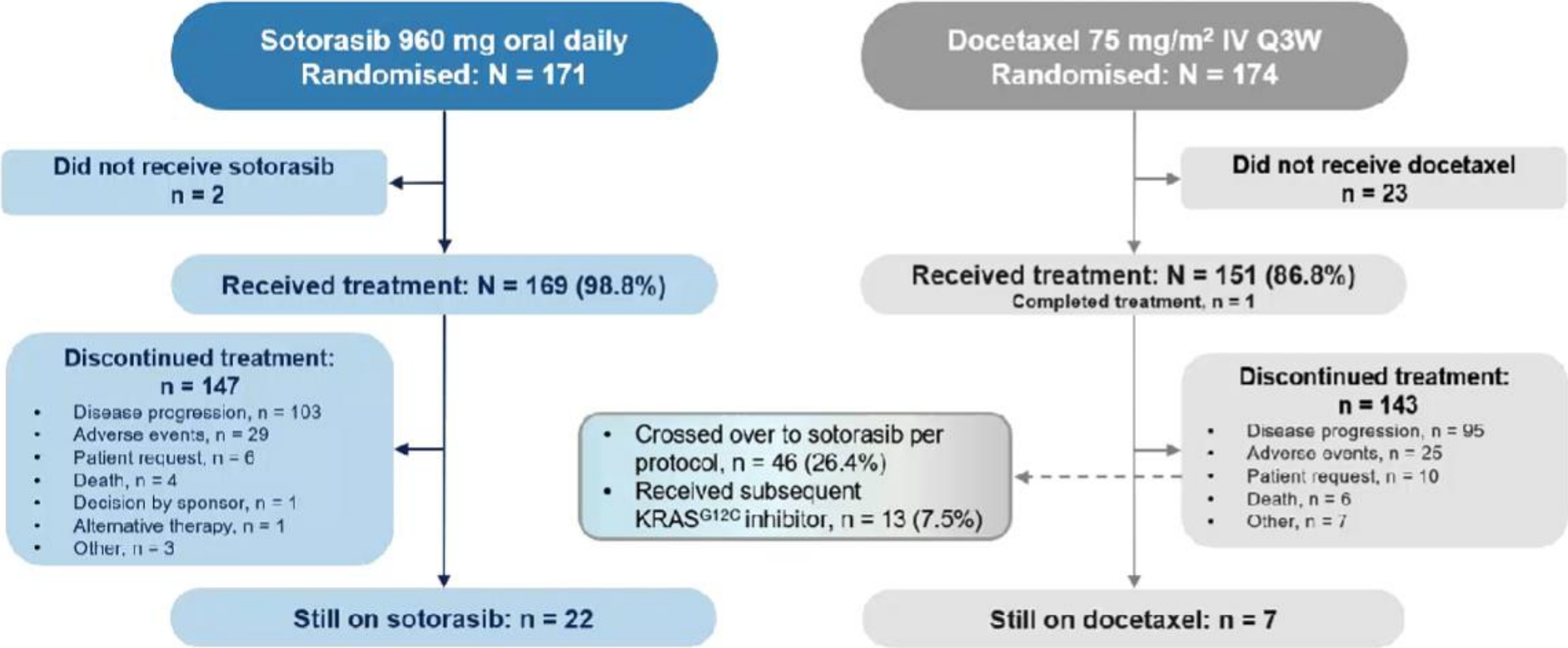
*Treatment with chemotherapy and checkpoint inhibitor could be concurrent or sequential; patients with medical contraindication to these therapies could be included with approval.

†Analysis of OS planned if PFS was found to be statistically significant and when at least 198 OS events have been reached.

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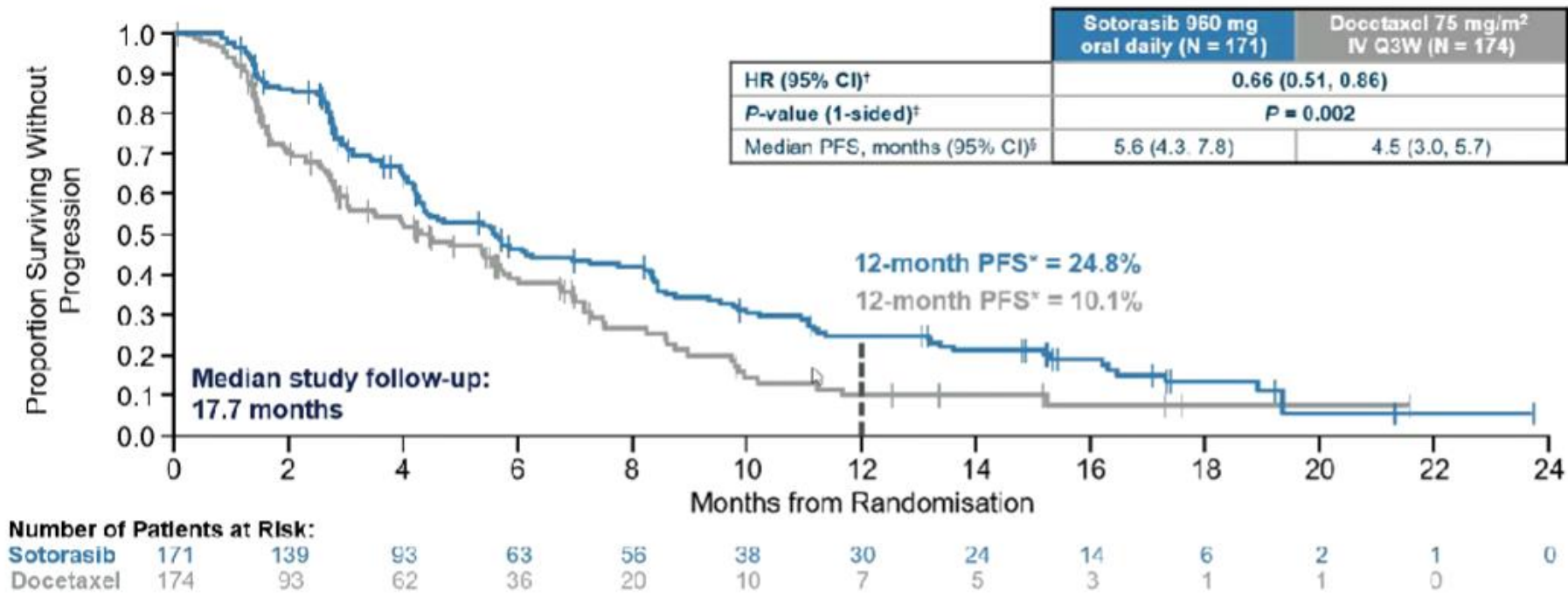
Patient Disposition



Mutacion KRAS G12C - Sotorasib

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Primary Endpoint: PFS by BICR



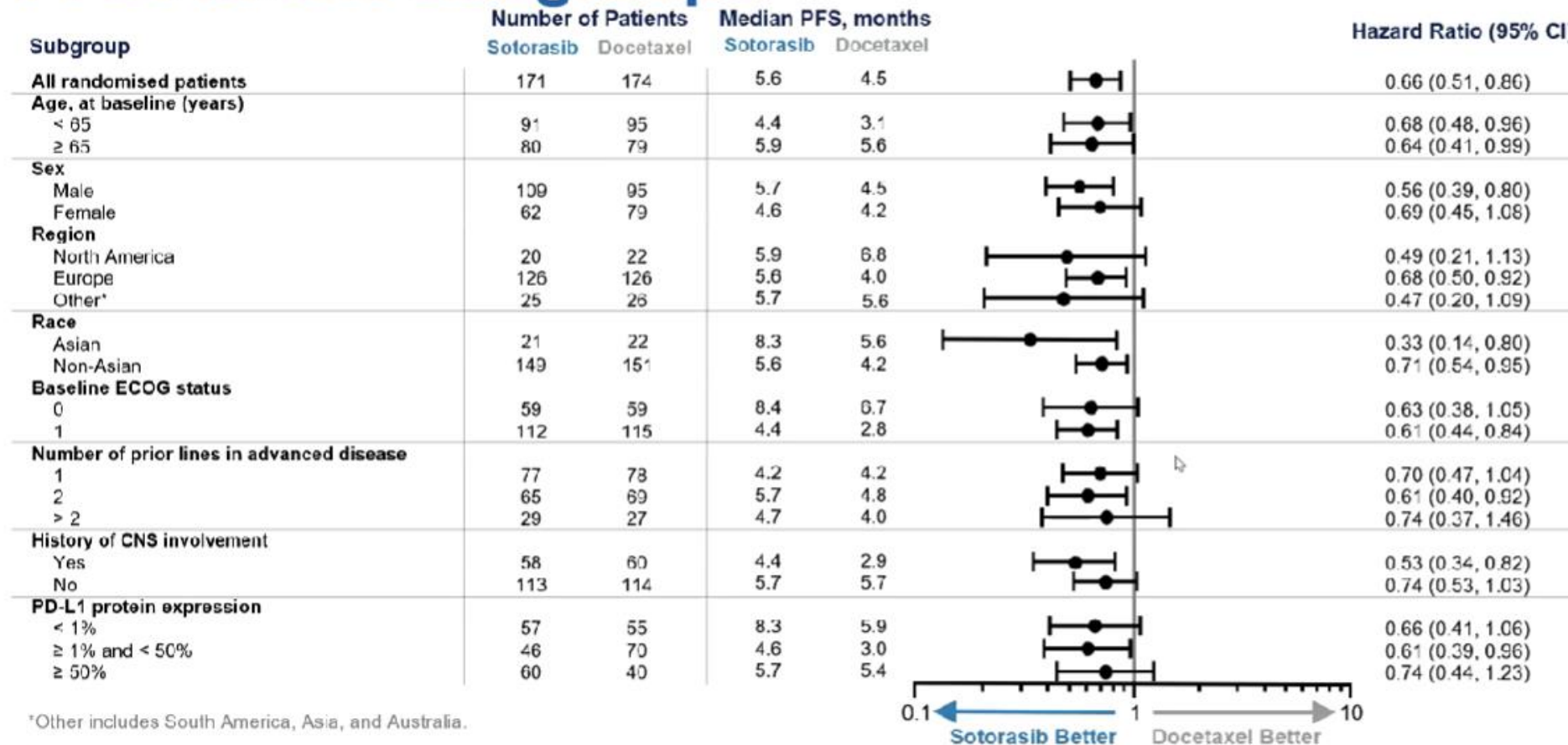
CodeBreakK 200 met its primary endpoint with sotorasib demonstrating superior PFS over docetaxel (HR 0.66, P = 0.002); 12-month PFS rate was 24.8% for sotorasib and 10.1% for docetaxel

*PFS rates estimated using Kaplan-Meier method; ITT population.
†HR and 95% CIs estimated using a stratified Cox proportional hazards model.
‡P-value calculated using a stratified log-rank test.
§Medians estimated using Kaplan-Meier method; 95% CIs estimated using the method by Klein and Moeschberger with log-log transformation.

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PFS Across Subgroups

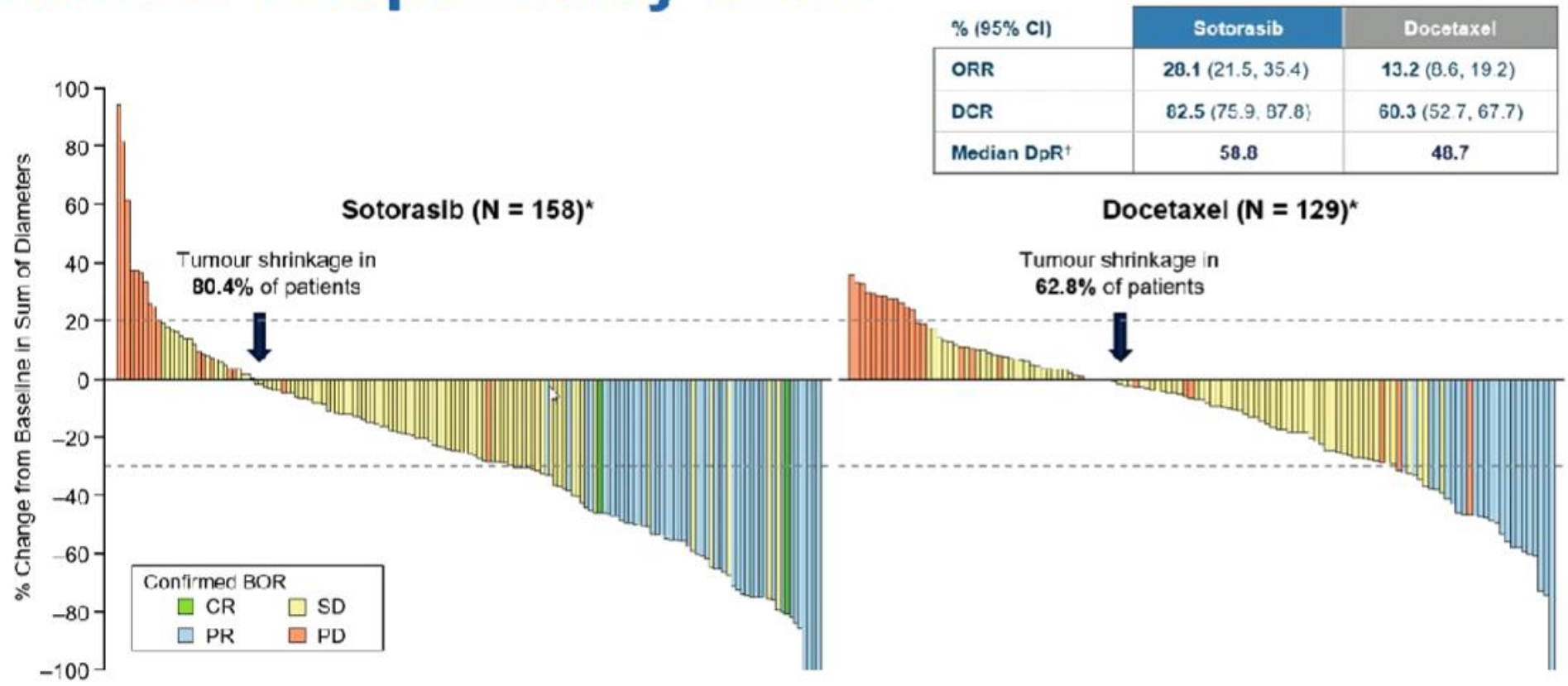


PFS favoured sotorasib versus docetaxel across subgroups

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Tumour Response by BICR



Response rate was significantly higher with sotorasib versus docetaxel ($P < 0.001$)

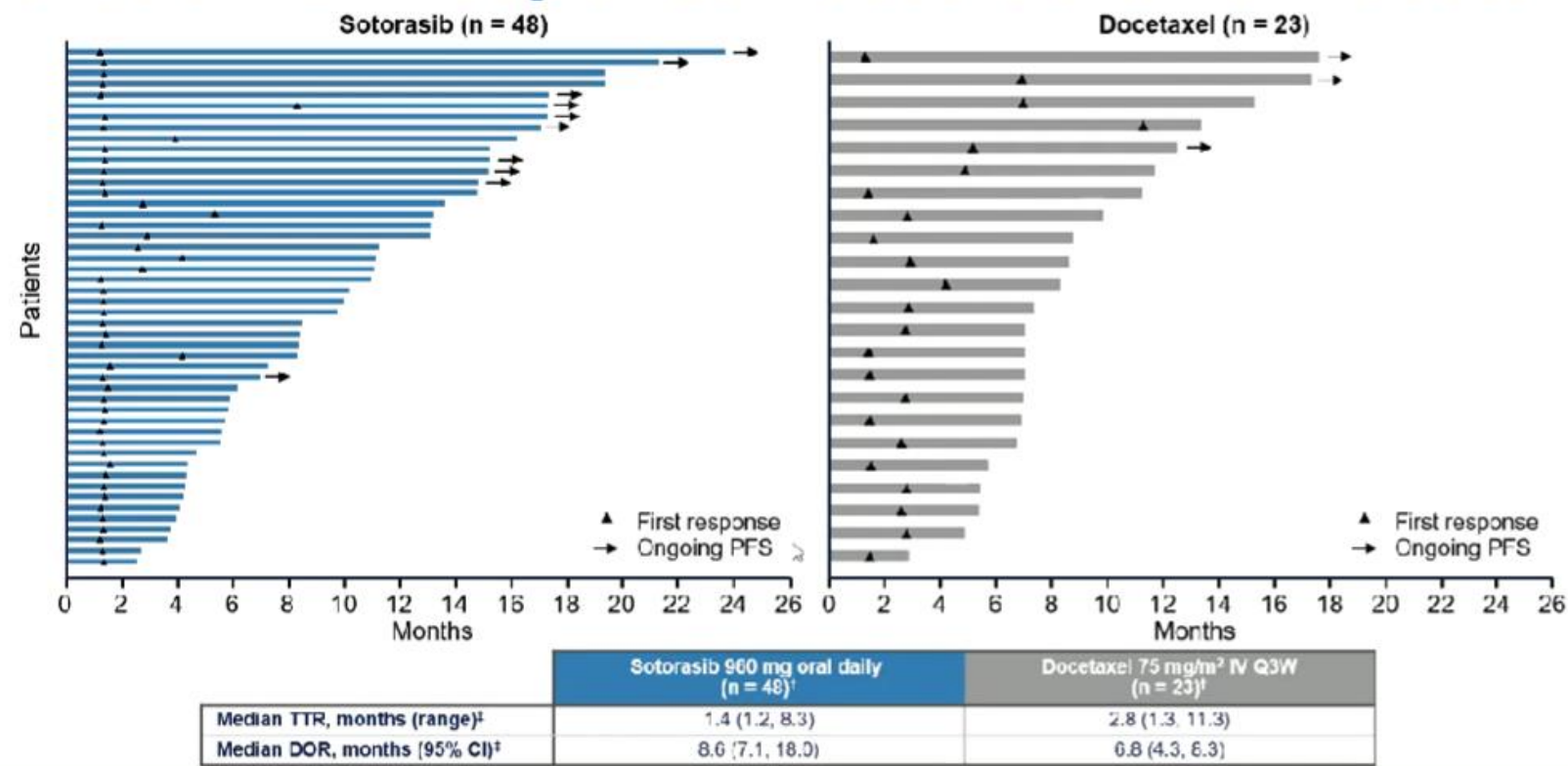
*Patients without baseline target lesions or post-baseline percent changes, or with BOR of NE are not shown.

†Median of best percent change from baseline in sum of diameters for confirmed responders.

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Duration of Response: Sotorasib vs Docetaxel*



Sotorasib was associated with both faster time to response and longer duration of response

*DOR and TTR calculated only for patients who achieved a confirmed best overall response of PR or CR; ITT population.

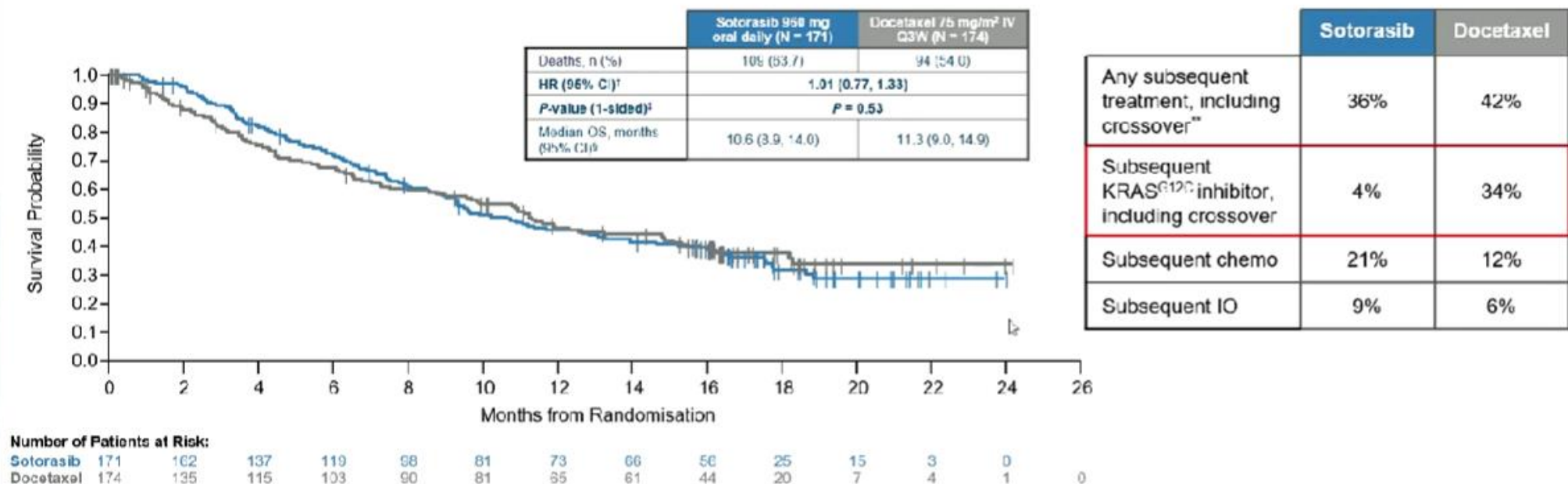
[†]Number of responders.

[‡]Medians and 95% CIs estimated using Kaplan-Meier method.

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OS: Sotorasib vs Docetaxel*

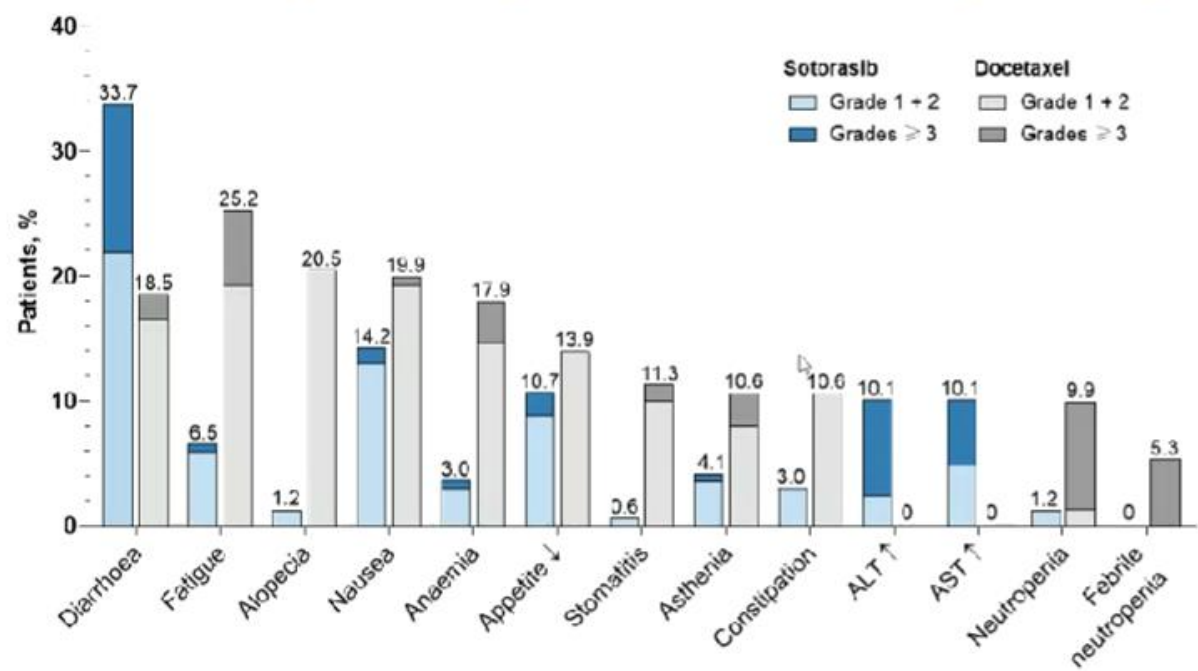


*OS rates estimated using Kaplan-Meier method; ITT population.
†HR and 95% CIs estimated using a stratified Cox proportional hazards model
‡P-value calculated using a stratified log-rank test.
§Medians estimated using Kaplan-Meier method; 95% CIs estimated using the method by Klein and Moeschberger with log-log transformation.
**Patients (16.4% in sotorasib arm, 5.2% in docetaxel arm) were treated beyond progression

Mutacion KRAS G12C - Sotorasib

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Most Common TRAEs Any Grade TRAEs ($\geq 10\%$) or Grade ≥ 3 ($\geq 5\%$)



Most common Grade 3+ TRAEs with sotorasib were diarrhoea and elevated liver enzymes, and with docetaxel were neutropenia, fatigue, and febrile neutropenia

*Highest-level TRAE per preferred term reported

Mutacion HER2 - Trastuzumab-deruxtecan (DESTINY-Lung02)



Trastuzumab Deruxtecan in Patients With *HER2* Mutant Metastatic Non–Small-Cell Lung Cancer: Interim Results From the Phase 2 DESTINY-Lung02 Trial

Koichi Goto, MD, PhD,^a Sang-We Kim, Toshio Kubo, Yasushi Goto, Myung-Ju Ahn, David Planchard, Dong-Wan Kim, James Chih-Hsin Yang, Tsung-Ying Yang, Kaline Pereira, Kapil Saxena, Ryota Shiga, Yingkai Cheng, Mehreteab Aregay, Pasi A. Jänne

On behalf of the DESTINY-Lung02 investigators

^aNational Cancer Center Hospital East, Kashiwa, Japan



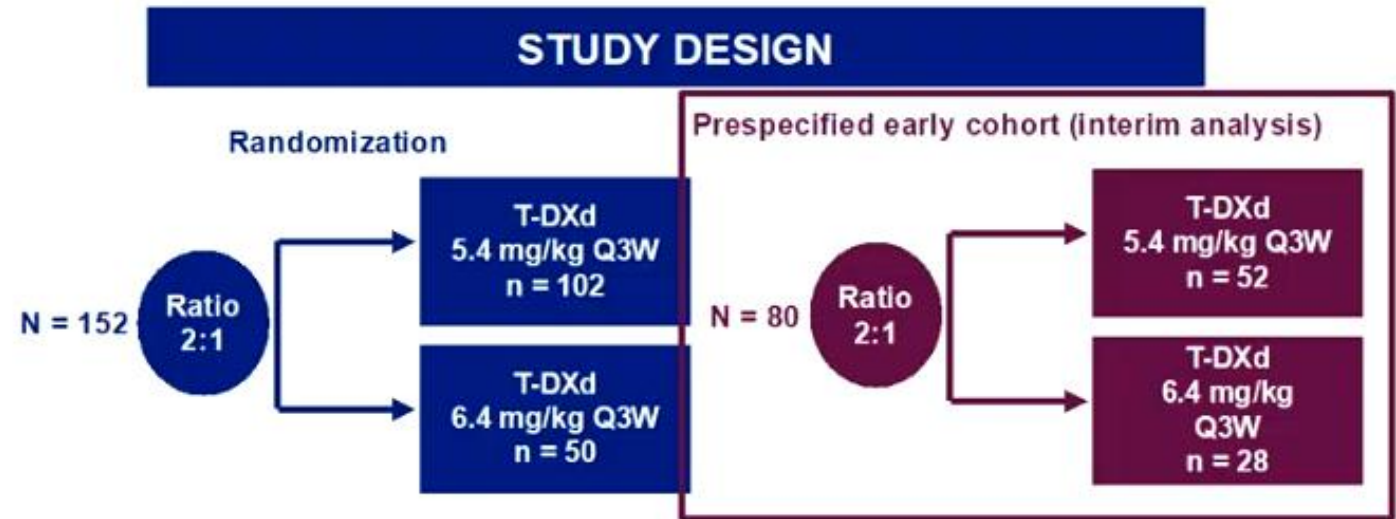
Mutacion HER2 - Trastuzumab-deruxtecan (DESTINY-Lung02)

Diseño del estudio

Design = Prespecified EARLY cohort

KEYPOINTS

- **HER2 mut** advaced NSCLC (PS 0-1)
- **≥ 1 prior therapy** (platinum based chemo)
- **Adecuate washout** of prior treatment
- **CNS+ allowed** if treated/asymphomatic
- **Stratification:** prior PD-(L)1 inhibitor



- **PRIMARY ENDPOINT:** ORR by BIRC
- **The early cohort** = patients randomized **≥ 4.5 mo.** before the interim analysis data cutoff (≥3 post-baseline assessments)

Mutacion HER2 - Trastuzumab-deruxtecan (DESTINY-Lung02)

Eficacia reportada

AntiHER2 therapies in NSCLC

	Study	N	ORR (%)	DCR (%)	DoR (mo.)	PFS (mo.)	OS (mo.)	G3/4 AEs (%)	ILD (%)	FU (mo.)
Destiny Lung 02 T-Dxd, 5.4 mg/kg	Ph 2	52	54%	90%	8.7mo*	-	-	37%	8%	5.6 mo
Destiny Lung 02 Tx-Dxd, 6.4 mg/kg	Ph 2	28	43%	93%	5.9 mo	-	-	71%	18%	5.4 mo
Destiny Lung 01 T-Dxd, 5.4 mg/kg	Ph 2	91	55%	92%	9.3 mo	8.2 mo	17.8 mo	46%	26%	13 mo
TDM-1	Ph 2	18	44.4%	83.3%	4 mo	5 mo	-	5.6%	-	10 mo
Novel TKIs	Ph 2	78- 90	21-30%	70-85%	~ 9 mo	5- 6 mo	10-14 mo	20.5-79%	-	~ 9 mo.

* Data with 3 months of extended FU

Goto, ESMO 2022; Lin, NEJM 2022, Le X, JCO 2022; Song, BMC Medicine 2022, Mazières J, <https://dailynews.ascopubs.org/doi/10.1200/ADN.22.201105/full/>

Mutacion HER2 - Trastuzumab-deruxtecan (DESTINY-Lung02)

Toxicidad pulmonar (neumonitis intersticial)

Hospital Universitari

Adjudicated drug-related ILD

	Study	N	ILD (%)	G1 (%)	G2 (%)	G3 (%)	G4 G5	Median time ILD (days)	Cases resolved	FU (mo)
DESTINY LUNG 02, Safety analysis set										
T-Dxd, 5.4 mg/kg	Phase 2	101	6%	3%	2%	1%	-	67.5 (40-207)	50%	5.6 mo
<u>Tx-Dxd, 6.4 mg/kg</u>		50	14%	2%	12%	0%	-	41.0 (36-208)	14%	5.4 mo
DESTINY LUNG 01, Previous data										
T-Dxd, 5.4 mg/kg	Phase 2	91	26%	3.3%	16.5%	4.4%	G5 2.2%	141 (14-462)	54%	13 mo

↑ ILD rate with ↑ dose,
↓ % than in DESTINY lung 01???

No severe ILD
Early ILD if higher dose
Different from prior data

Different FU

Mutacion EGFR resistente a TKI

Papel de sintilimab +/- IBI305 + Quimio: ORIENT-31 trial



Sintilimab with or without IBI305 plus chemotherapy in patients with EGFR mutated non-squamous non-small-cell lung cancer (EGFRm nsqNSCLC) who progressed on EGFR tyrosine-kinase inhibitors (TKIs) therapy: second interim analysis of phase 3 ORIENT-31 study

Shun Lu, MD

Department of Medical Oncology, Shanghai Chest Hospital, School of Medicine, Shanghai Jiao Tong University, Shanghai, China

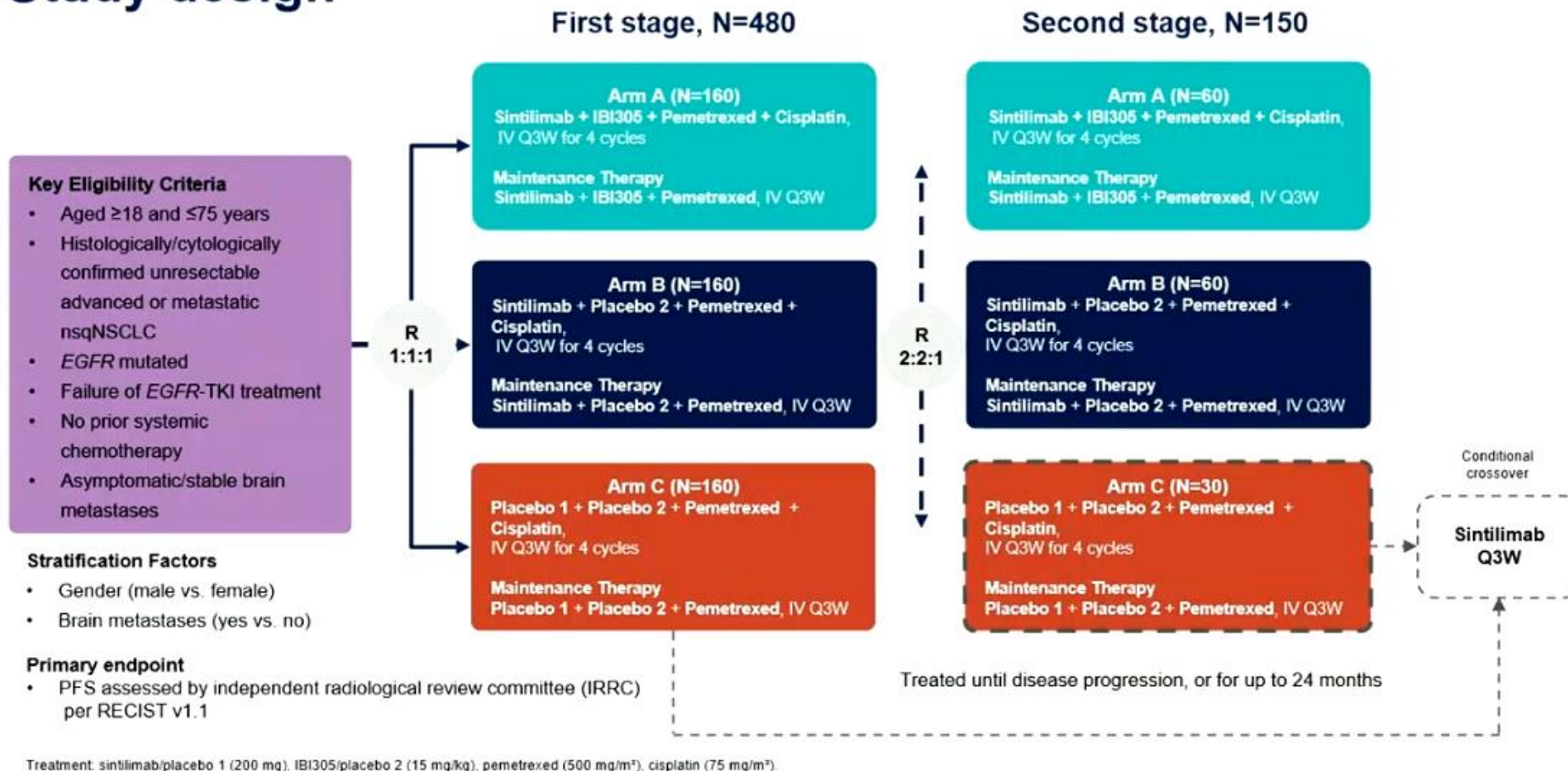
September 11, 2022



Mutacion EGFR resistente a TKI

Papel de sintilimab +/- IBI305 + Quimio: ORIENT-31 trial

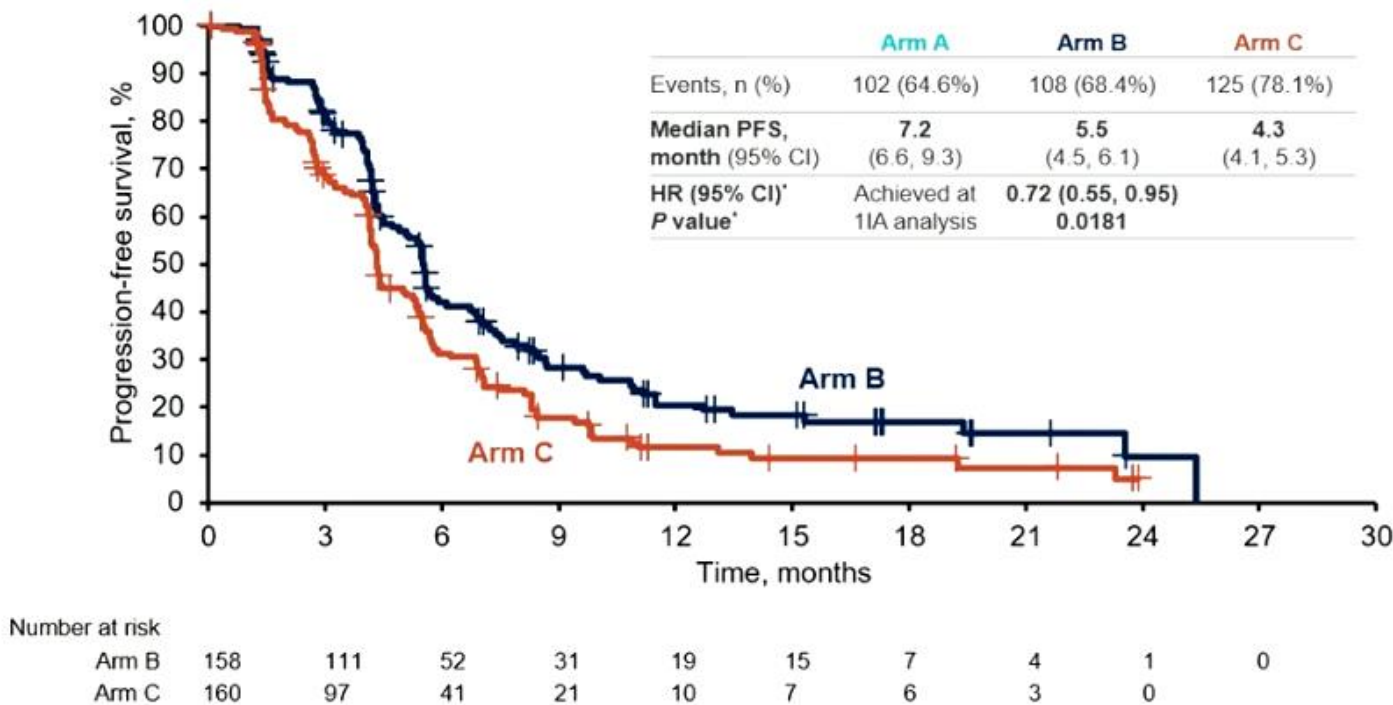
Study design



Mutacion EGFR resistente a TKI

Papel de sintilimab +/- IBI305 + Quimio: ORIENT-31 trial

Study met primary endpoint of PFS (by IRRC) in Arm B vs Arm C

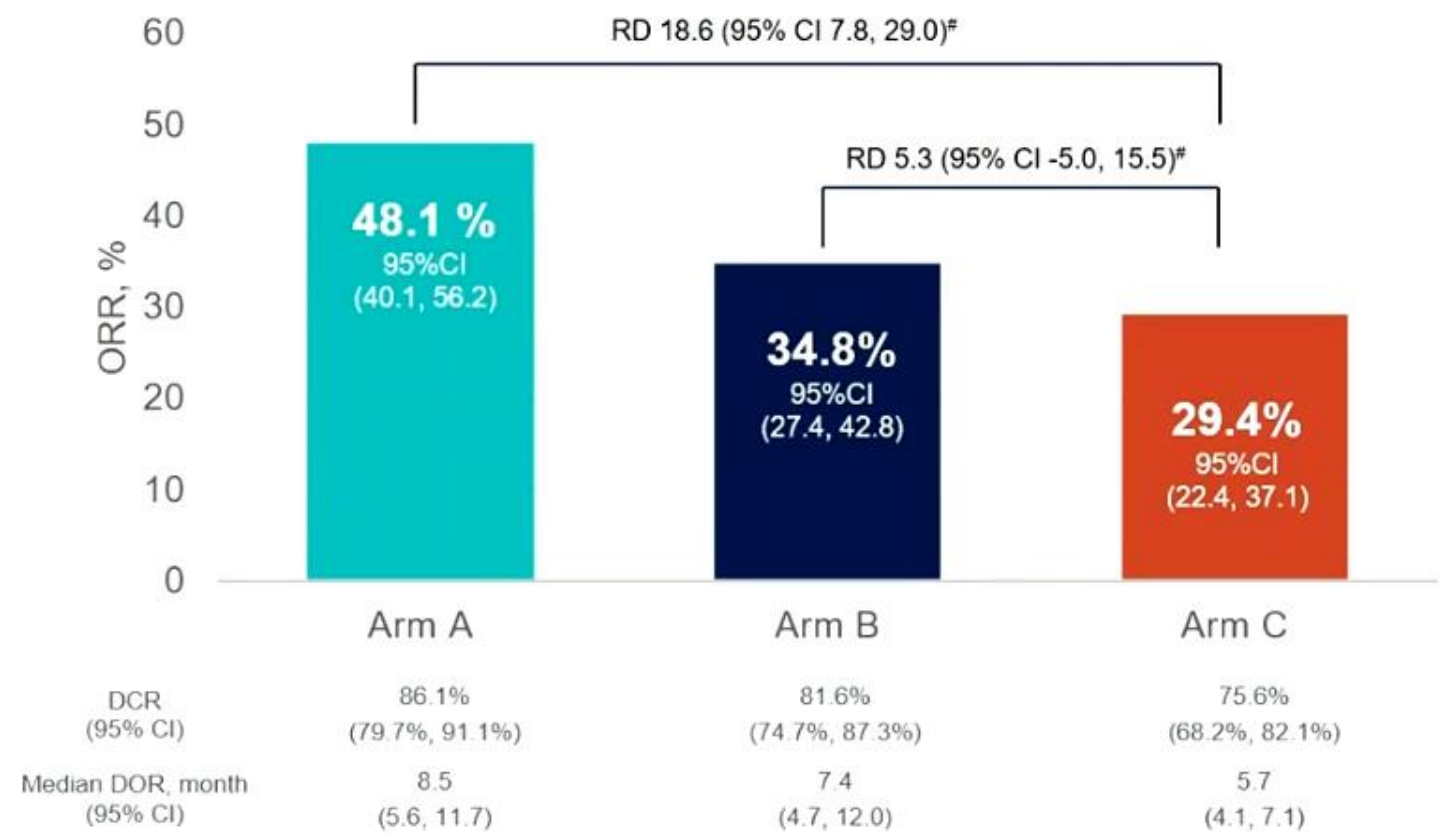


* Compared with Arm C. HR and P value were calculated with stratified Cox model and log rank test, and were stratified by gender (male vs. female), presence of brain metastases (yes vs. no) and prior EGFR-TKI treatment (1 line vs. 2 lines). The two-sided α boundary is 0.0444 as calculated using Lan-Demets spending function with O'Brien-Fleming approximation. Data cutoff, 31 Mar 2022; median follow up, 13.1 months. IA, interim analysis; HR, hazard ratio; CI, confidence interval.

Mutacion EGFR resistente a TKI

Papel de sintilimab +/- IBI305 + Quimio: ORIENT-31 trial

Secondary endpoint: ORR, DCR and DOR (by IRRC)

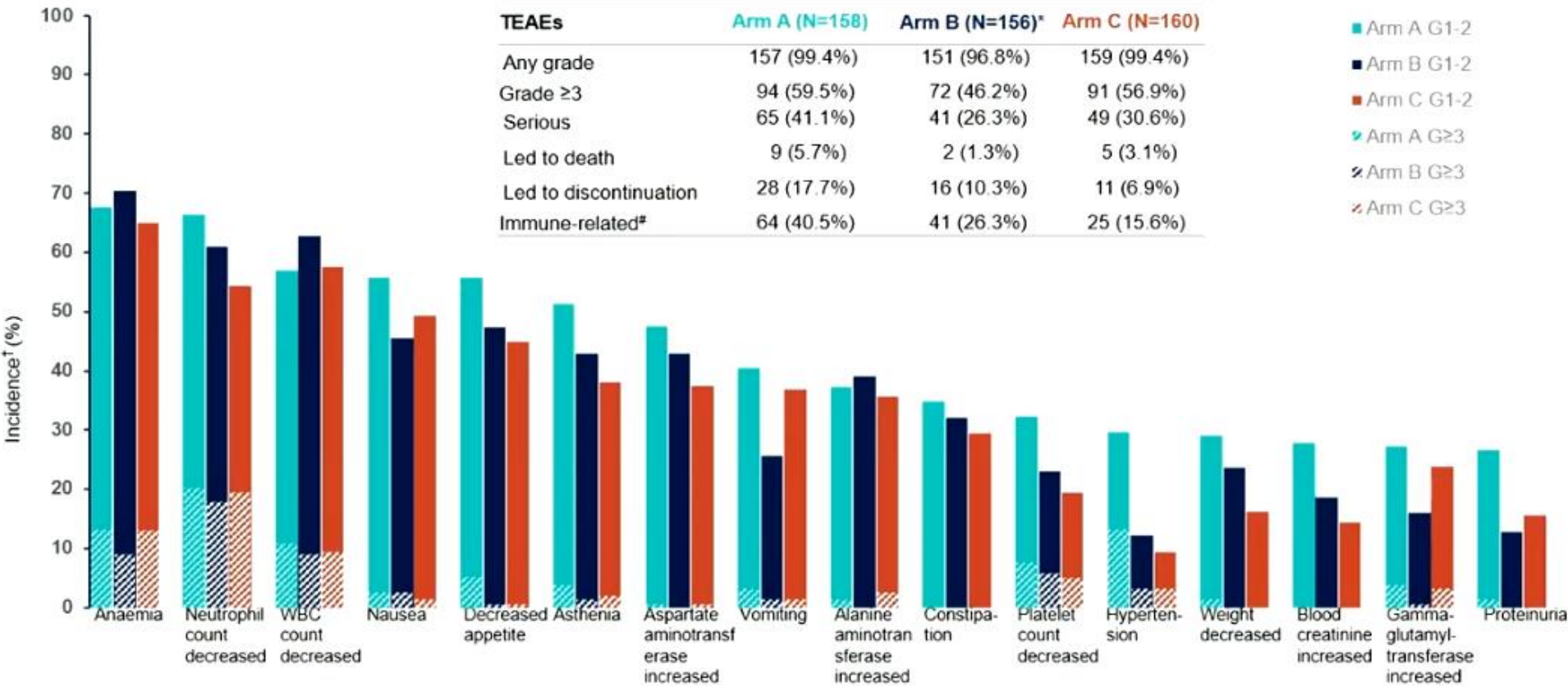


ORR, objective response rate; DCR, disease control rate; DOR, duration of response; RD, rate difference; CI confidence interval.
* RD and CI was calculated using Miettinen & Nurminen method stratified by gender (male vs. female), presence of brain metastases (yes vs. no) and prior EGFR-TKI treatment (1 line vs. 2 lines)

Mutacion EGFR resistente a TKI

Papel de sintilimab +/- IBI305 + Quimio: ORIENT-31 trial

Safety summary in all treated patients



* Two patients didn't receive any study treatment and were excluded from safety analysis set. [#] immune-related AE per investigator's assessment. [†] TEAEs with ≥20% incidence in any treatment arm; data cutoff, 31 Mar 2022. TEAEs, treatment-emergent adverse events.

EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2



Tepotinib + osimertinib for *EGFR*m NSCLC with *MET* amplification (*MET*amp) after progression on first-line (1L) osimertinib: Initial results from the INSIGHT 2 study

Julien Mazieres, Tae Min Kim, Boon Khaw Lim, Marie Wislez, Christophe Doms, Giovanna Finocchiaro, Hidetoshi Hayashi, Chong Kin Liam, Jo Raskin, Lye Mun Tho, Filippo de Marinis, Ernest Nadal, Egbert F. Smit, Xiuning Le, Sabine Brtuch, Aurora O'Brate, Svenja Adrian, Barbara Ellers-Lenz, Niki Karachaliou, Yi-Long Wu

Toulouse, France



EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2

Study Design of INSIGHT 2

An open-label, two-arm Phase II study of advanced *EGFR*m NSCLC with *MET*amp after progression on 1L osimertinib (N=~120)

Key inclusion criteria

- Locally advanced or metastatic NSCLC with activating *EGFR* mutation
- Acquired resistance to 1L osimertinib
- *MET*amp detected by either central or local* FISH testing (TBx) or central NGS testing (LBx)[†]
- ECOG PS of 0 or 1
- Stable, treated brain metastases allowed

**Tepotinib 500 mg QD
+
Osimertinib 80 mg QD[‡]**

**Tepotinib
monotherapy arm[§]**

Primary objective

- ORR by IRC for patients with *MET*amp centrally confirmed by TBx FISH treated with tepotinib plus osimertinib

Secondary objectives include:

- ORR by IRC in patients with:
 - *MET*amp by LBx NGS treated with tepotinib plus osimertinib
 - *MET*amp centrally confirmed by TBx FISH treated with tepotinib monotherapy

**Initial results are presented; global enrollment is complete,
primary analysis is planned when all patients have ≥9 months' follow-up**

*Enrollment could take place based on local results while central confirmation of *MET*amp was ongoing. [†]Submission of tumor tissue and blood sample obtained after progression on 1L osimertinib was mandatory for all patients, for *MET*amp testing. [‡]Safety run-in was completed prior to combination treatment. [§]Patients receiving tepotinib monotherapy could switch over to the combination at the time of disease progression.

EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2

Detection of *MET*amp

*MET*amp definitions

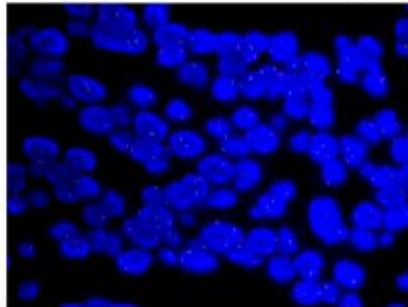
TBx FISH:
MET GCN ≥ 5
and/or
MET/CEP7 ≥ 2

and/or

LBx NGS:
MET GCN ≥ 2.3 ;
Archer®

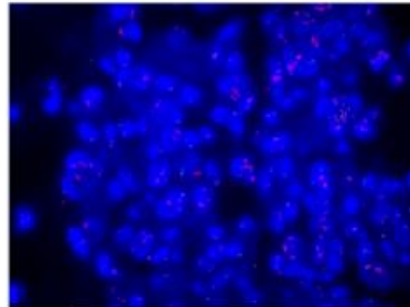
Central testing was mandatory for both

TBx FISH: *MET*amp -



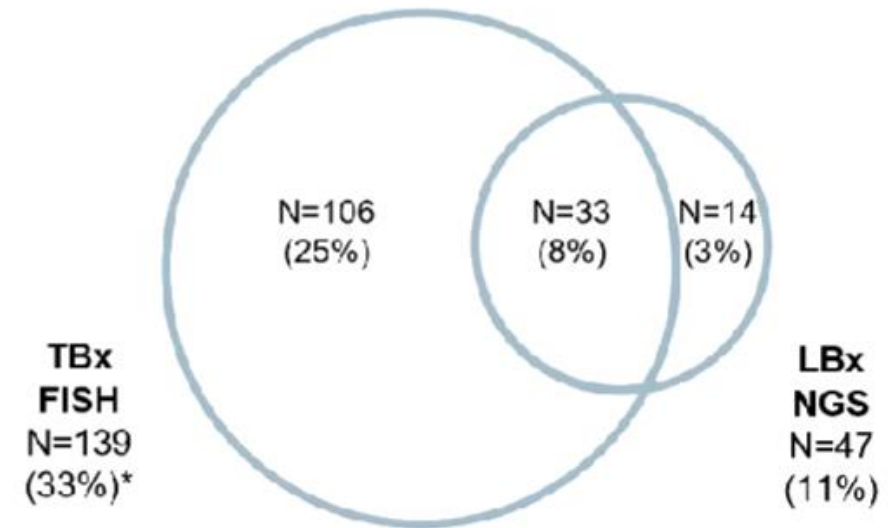
MET GCN, 2.33; *MET/CEP7*, 0.96

TBx FISH: *MET*amp +



MET GCN, 17.4; *MET/CEP7*, 7.35

- Among 425 pre-screened patients, *MET*amp was detected in 153 patients (36%) by:



*30 patients were local TBx FISH test positive and were also analyzed by central TBx FISH. When excluding these locally preselected patients, the central TBx FISH *MET*amp rate was 20%.

EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2

Objective Response Rate of Tepotinib plus Osimertinib

Tepotinib plus osimertinib (IRC)					Tepotinib monotherapy (IRC)	
	METamp by central TBx FISH		METamp by central LBx NGS			METamp by central TBx FISH
Follow-up	≥9 months (N=22)	≥3 months (N=48)	≥9 months (N=16)	≥3 months (N=23)	Follow-up	≥6 months (N=12)
ORR (95% CI)	54.5% (32.2, 75.6)	45.8% (31.4, 60.8)	50.0% (24.7, 75.3)	56.5% (34.5, 76.8)	ORR (95% CI)	8.3% (0.2, 38.5)
BOR, n (%)					BOR, n (%)	
PR	12 (54.5)	22 (45.8)	8 (50.0)	13 (56.5)	PR	1 (8.3)
SD	2 (9.1)	5 (10.4)	1 (6.3)	1 (4.3)	SD	2 (16.7)
PD	4 (18.2)	10 (20.8)	5 (31.3)	5 (21.7)	PD	8 (66.7)
NE	4 (18.2)	11 (22.9)*	2 (12.5)	4 (17.4)	NE	1 (8.3)
Similar ORRs were reported according to METamp GCN (TBx FISH):					Seven patients switched to tepotinib plus osimertinib and five of them are still on combination treatment	
Patients with ≥3 months' follow-up (N=48): ≥10 GCN: 51.9% (95% CI: 31.9, 71.3) (N=27);						
5–<10 GCN: 40.0% (95% CI: 19.1, 63.9) (N=20)†						

Confirmed ORR was 54.5% in patients with METamp detected by TBx FISH with ≥9 months' follow-up

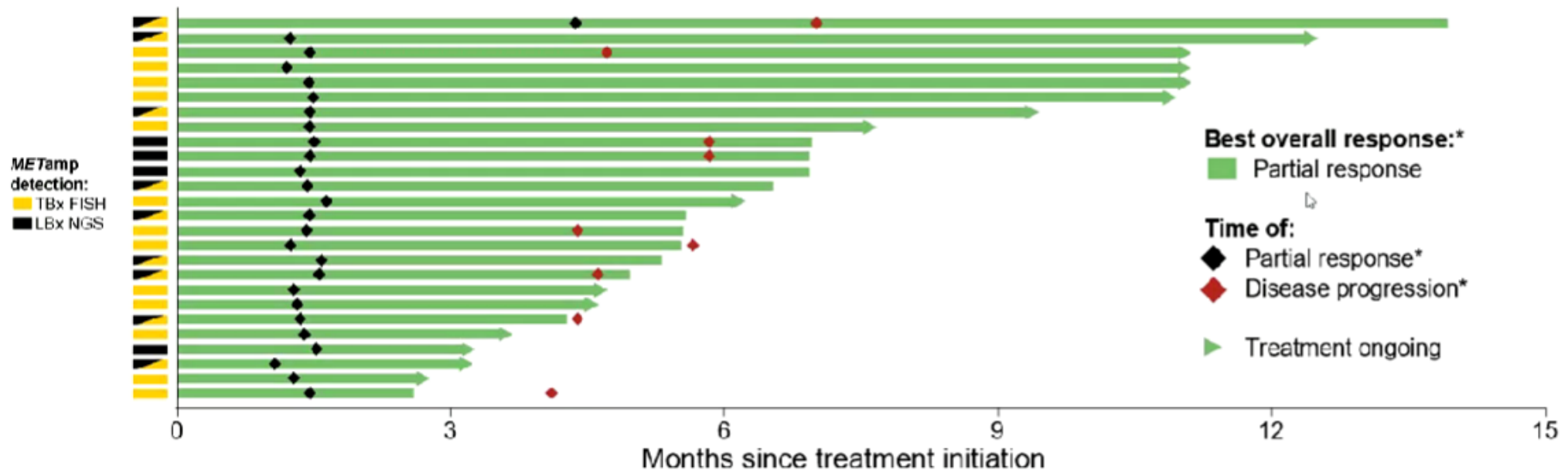
*Incomplete post-baseline assessments (n=2), SD <12 weeks (n=3), COVID-19-related early discontinuation (n=1), and PD/AE-related early discontinuations (n=5). †One patient had GCN 4.96 and enrolled through ≥ MET/CEP7 ratio ≥2.

EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2

Responses to Tepotinib Plus Osimertinib were Rapid and Long-lasting

Time on treatment in responders (IRC) with *MET*amp detected by central TBx FISH and/or LBx NGS treated with tepotinib plus osimertinib (N=26)



Responses mostly occurred within 6 weeks; half of responders had a duration of treatment ≥ 6 months
Median DOR was not reached

*By IRC; treatment-end decisions were based on investigator-assessed disease progression.

EGFR resistente con MET amplificación

Tepotinib + osimertinib : Estudio INSIGHT 2

Safety Profile of Tepotinib plus Osimertinib

TRAEs of any grade in >10% all patients, n (%)	Tepotinib + osimertinib N=88	
	Any grade	Grade ≥3
Any	65 (73.9)	21 (23.9)
Diarrhea	36 (40.9)	0
Peripheral edema	21 (23.9)	4 (4.5)
Paronychia	15 (17.0)	1 (1.1)
Nausea	12 (13.6)	0
Decreased appetite	10 (11.4)	2 (2.3)
Vomiting	10 (11.4)	1 (1.1)

- AEs led to a dose reduction in 16 patients (18.2%)
 - Tepotinib dose was reduced in 14 patients (15.9%)
 - Osimertinib dose was reduced in four patients (4.5%)
 - Two patients had a dose reduction in both drugs
- Primary reason for treatment discontinuation was AEs in six patients (6.8%)
- Two patients had AEs leading to death that were considered potentially related to either trial drug by the investigator
 - One patient had pneumonia/pneumonitis
 - One patient had pleural effusion

The safety profile of the combination was consistent with the known safety profiles of tepotinib and osimertinib