

17<sup>TH</sup> ANNUAL

# New Orleans Summer Cancer Meeting

CONFERENCE CHAIRMAN

Edgardo S. Santos Castillero, MD, FACP



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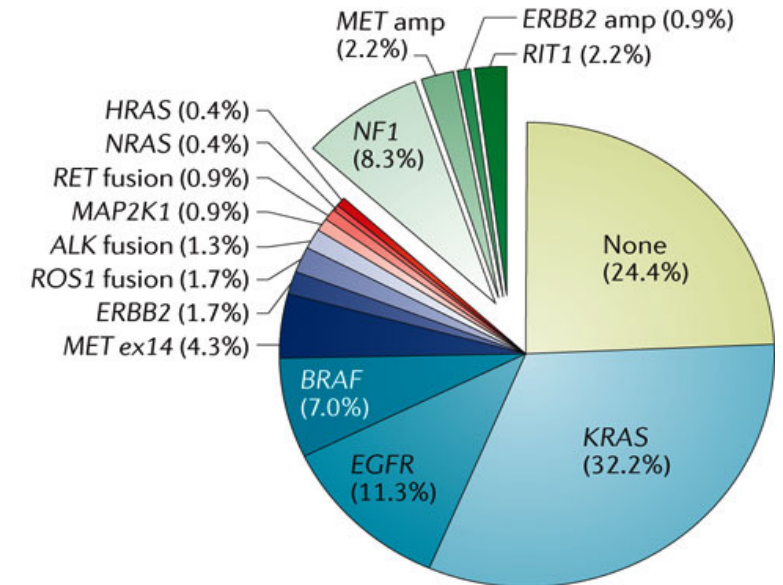
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**Medical Director of Research Services**  
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**Clinical Associate Professor**  
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**Treasurer, FLASCO & President, FLASCO Foundation**

# Targeted Therapy in NSCLC: FDA approvals

Lung Cancer is  
**COMPLEX !**

Tremendous progress has been made in  
personalized therapy



EGFR	ALK	ROS1	BRAF	MET	RET	TRK	KRAS G12C
Erlotinib	Crizotinib	Crizotinib	Dabrafenib	Crizotinib	Vandetanib	Larotrectinib	Sotorasib
Gefitinib	Ceritinib	Entrectinib	Vemurafenib	Tepotinib	Cabozantinib	Entrectinib	
Afatinib	Brigatinib		Trametinib	Capmatinib	Selpercatinib		
Osimertinib	Alectinib				Pralsetinib		
Dacomitinib	Lorlatinib						
Ramu + Erl							
Amivantamab							
Mobocertinib							

# 9 Druggable Pathways in NSCLC →

- EGFR
  - <sup>1</sup> Exon 19/Exon 21
  - <sup>2</sup> EGFRex20ins
- <sup>3</sup> ALK
- <sup>4</sup> ROS1
- <sup>5</sup> BRAF
- <sup>6</sup> RET
- <sup>7</sup> MET
- <sup>8</sup> NTRK
- <sup>9</sup> KRAS
- <sup>?</sup> HER2
- <sup>?</sup> NRG1

## EGFR Exon 19 Deletion or L858R

- First-line therapy
  - ▶ Afatinib<sup>1</sup>
  - ▶ Erlotinib<sup>2</sup>
  - ▶ Dacomitinib<sup>3</sup>
  - ▶ Gefitinib<sup>4,5</sup>
  - ▶ Osimertinib<sup>6</sup>
  - ▶ Erlotinib + ramucirumab<sup>7</sup>
  - ▶ Erlotinib + bevacizumab<sup>c</sup> (nonsquamous)<sup>8</sup>
- Subsequent therapy
  - ▶ Osimertinib<sup>9</sup>

## EGFR S768I, L861Q, and/or G719X

- First-line therapy
  - ▶ Afatinib<sup>1,10</sup>
  - ▶ Erlotinib<sup>2</sup>
  - ▶ Dacomitinib<sup>3</sup>
  - ▶ Gefitinib<sup>4,5</sup>
  - ▶ Osimertinib<sup>6,11</sup>
- Subsequent therapy
  - ▶ Osimertinib<sup>9</sup>

## EGFR Exon 20 Insertion Mutation Positive

- Subsequent therapy
  - ▶ Amivantamab-vmjw<sup>12</sup>
  - ▶ Mobocertinib<sup>13</sup>

## KRAS G12C Mutation Positive

- Subsequent therapy
  - ▶ Sotorasib<sup>14</sup>

## ALK Rearrangement Positive

- First-line therapy
  - ▶ Alectinib<sup>15,16</sup>
  - ▶ Brigatinib<sup>17</sup>
  - ▶ Ceritinib<sup>18</sup>
  - ▶ Crizotinib<sup>15,19</sup>
  - ▶ Lorlatinib<sup>20</sup>
- Subsequent therapy
  - ▶ Alectinib<sup>21,22</sup>
  - ▶ Brigatinib<sup>23</sup>
  - ▶ Ceritinib<sup>24</sup>
  - ▶ Lorlatinib<sup>25</sup>

## ROS1 Rearrangement Positive

- First-line therapy
  - ▶ Ceritinib<sup>24</sup>
  - ▶ Crizotinib<sup>27</sup>
  - ▶ Entrectinib<sup>28</sup>
- Subsequent therapy
  - ▶ Lorlatinib<sup>29</sup>
  - ▶ Entrectinib<sup>28</sup>

## BRAF V600E Mutation Positive

- First-line therapy
  - ▶ Dabrafenib/trametinib<sup>30</sup>
  - ▶ Dabrafenib<sup>30</sup>
  - ▶ Vemurafenib
- Subsequent therapy
  - ▶ Dabrafenib/trametinib<sup>31,32</sup>

## NTRK1/2/3 Gene Fusion Positive

- First-line/Subsequent therapy
  - ▶ Larotrectinib<sup>33</sup>
  - ▶ Entrectinib<sup>34</sup>

NCCN version 3.2022, 03/16/2022

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# EGFR Pathway

## Salvage Osimertinib

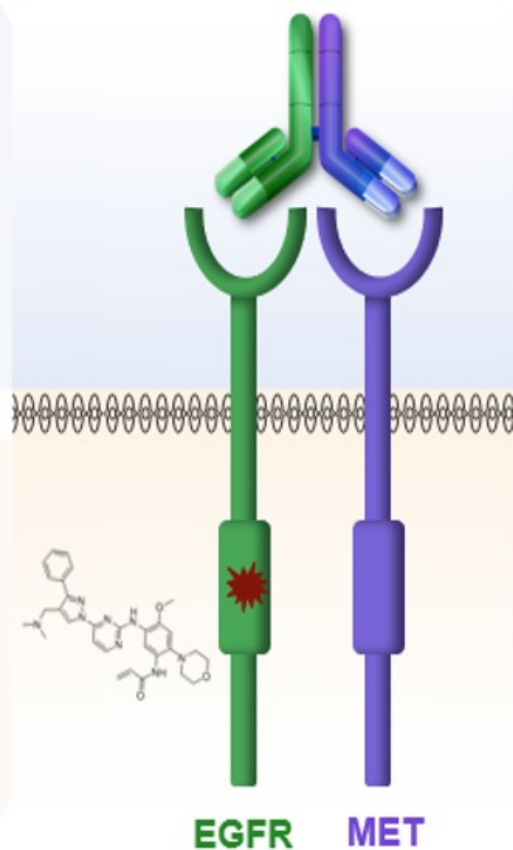
# Amivantamab and Lazertinib CHRYSLIS Study

## Amivantamab (am-e-van-tuh-mab)

- Fully human bispecific antibody that targets EGFR and MET
- Fc portion has immune cell-directing activity<sup>1</sup>
- Demonstrated clinical activity across diverse EGFRm NSCLC<sup>2-4</sup>
- Granted Breakthrough Therapy Designation for EGFRm Exon20ins NSCLC post-chemotherapy in US and China

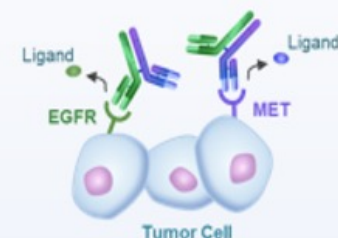
## Lazertinib (la-zer-tin-ib)

- Potent 3<sup>rd</sup>-gen TKI with efficacy in activating EGFR mutations, T790M, and CNS disease<sup>5-6</sup>
- Low rates of EGFR-related toxicity such as rash and diarrhea<sup>5</sup>
- Low cardiovascular safety risk<sup>7</sup>
- Safety profile that supports combination with other anti-EGFR molecules

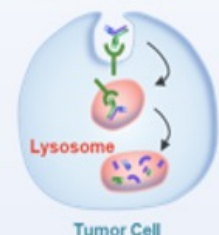


## Amivantamab MOA

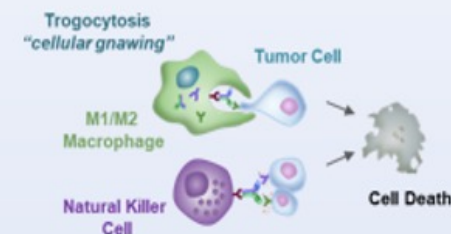
### Inhibition of Ligand Binding



### Receptor Degradation



### Immune Cell-directing Activity



BC Cho et al. 2021 ASCO, [abstr 9006](#).

# CHRYSALIS Phase 1 Study Design: Combination Cohort (NCT02609776)

## Key Objectives

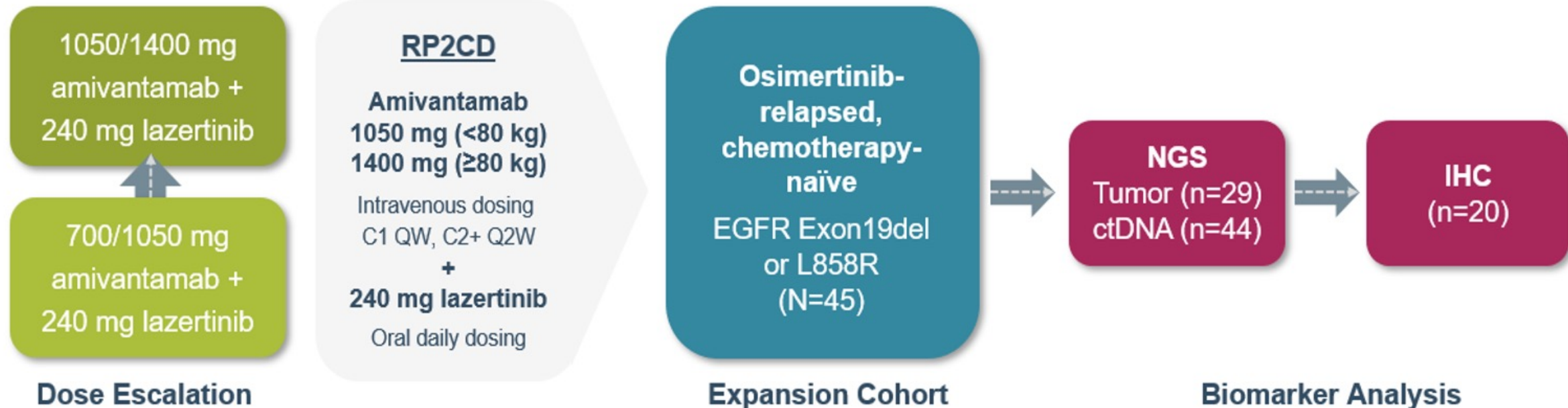
- Establish RP2CD
- Safety and efficacy at RP2CD

## Key Eligibility Criteria

- Metastatic/unresectable NSCLC
- Measurable disease (expansion cohort)
- EGFR Exon19del or L858R mutation

## Biomarker Analysis<sup>a</sup>

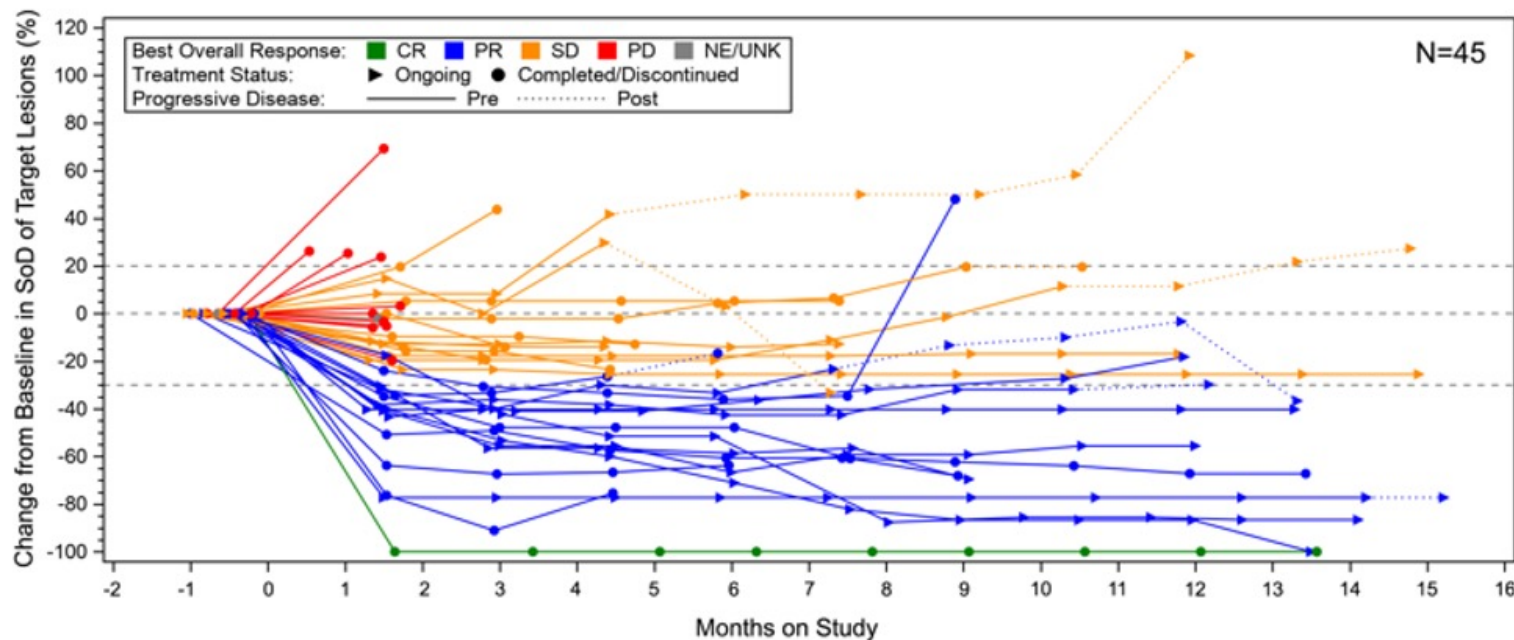
- NGS of pretreatment tumor biopsy and ctDNA collected prospectively
- IHC for EGFR/MET expression



This presentation provides updated results with longer follow-up from the ESMO 2020 oral presentation (Cho *Ann Oncol* 31:S813 Oral #12580). <sup>a</sup>≥1 alteration detected in 42/44 ctDNA and 29/45 tumor NGS analyses. C, cycle; EGFR, epidermal growth factor receptor; IHC, immunohistochemistry; QW, weekly; Q2W, every 2 weeks; RP2CD, recommended phase 2 combination dose

# Durable Responses Observed with Amivantamab + Lazertinib with Manageable Safety

**CHEMO-NAIVE**



## Investigator-assessed Response (N=45)

mF/U: 11.0 months (range, 1.0–15.0)

mDOT: 5.6 months (range, 0.5–14.8)

**ORR** 36% (95% CI, 22–51)

mDOR, months 9.6 (95% CI, 5.3–NR)

DOR ≥6 months 69%

**CBR** 64% (95% CI, 49–78)

**mPFS, months** 4.9 (95% CI, 3.7–9.5)

- Safety profile consistent with previous experience with amivantamab + lazertinib<sup>1</sup>
- Most common AEs were IRR (78%), rash (acneiform dermatitis, 51% + rash, 27%), and paronychia (49%)
  - Majority were grade 1–2
- Treatment-related: grade ≥3 AE (16%), discontinuations (4%), dose reductions (18%)

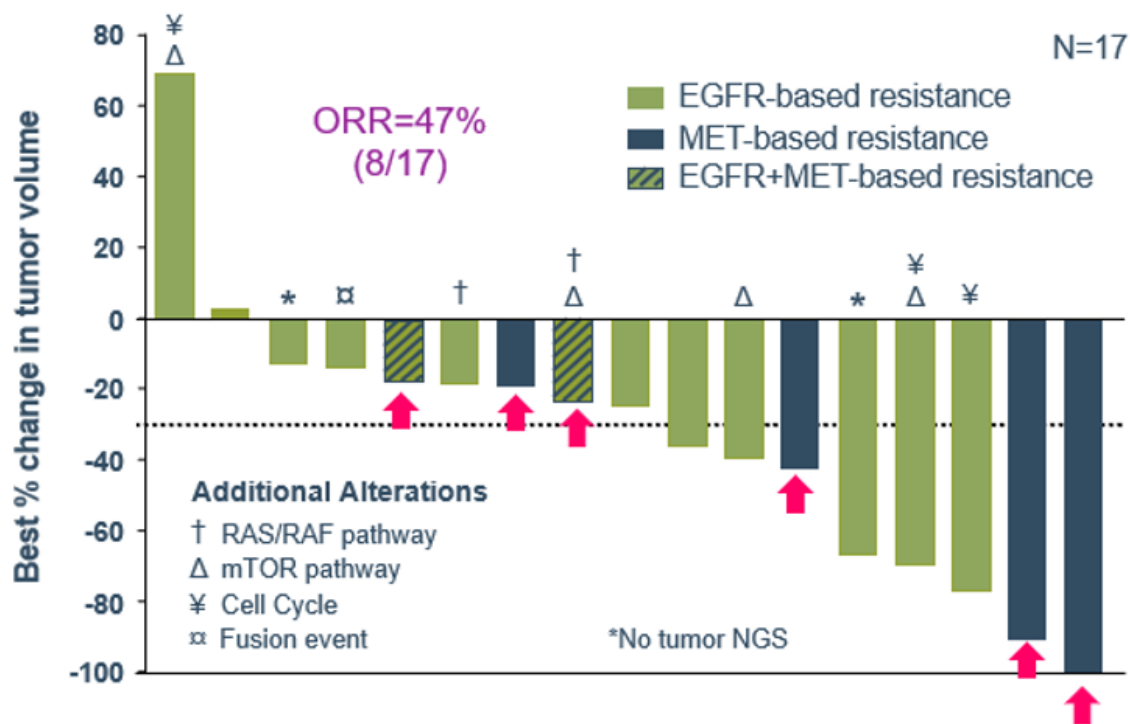
19 Apr 2021 clinical cutoff. Four patients did not have postbaseline disease assessments and are not included in the plot. <sup>1</sup>Cho *Ann Oncol* 31:S813 Oral #12580.

AE, adverse event; CBR, clinical benefit rate (CR, PR, or SD ≥11 weeks); CR, complete response; IRR, infusion-related reaction; mDOR, median duration of response; mDOT, median duration of treatment; mF/U, median follow-up; mPFS, median progression-free survival; NE, not evaluable; NR, not reached; ORR, overall response rate; PD, progressive disease; PR, partial response; SD, stable disease; SoD, sum of target lesion diameters; UNK, unknown

BC Cho et al. 2021 ASCO, [abstr 9006](#).

# Response Among Patients with Identified EGFR/MET-based Resistance

- 17 of 45 patients were identified with either EGFR/MET-based resistance by NGS<sup>a</sup> (ctDNA/tissue)
- ORR in this subgroup was 47%, mDOR was 10.4 months, CBR was 82%, and mPFS was 6.7 months



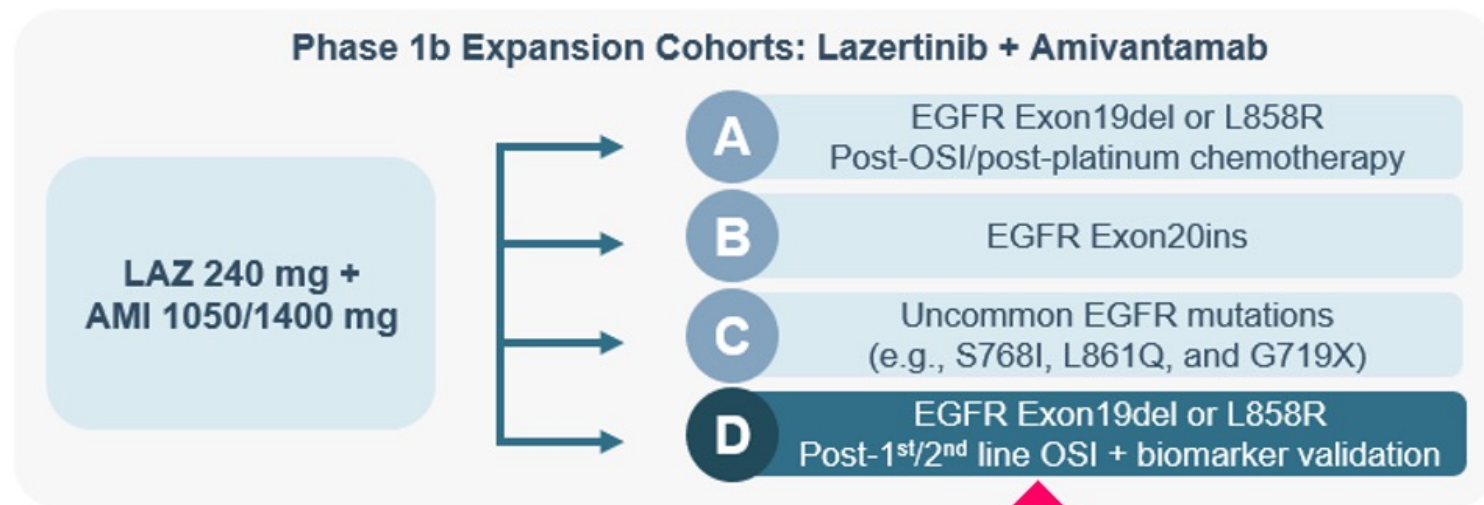
Resistance <sup>b</sup>	Alterations <sup>c</sup>	
EGFR-based	C797S (n=7)	L792H (n=1)
	Amp (n=3)	G796S (n=1)
	L718X (n=3)	E709K (n=1)
	G724S (n=2)	
MET-based	Amp (n=5)	METex14 (n=1)
Additional	PIK3CA E542X (n=2)	KRAS Amp (n=1)
	CCNE1 Amp (n=1)	FGFR3-TACC3 fusion (n=1)
	PIK3CA Amp (n=1)	KRAS G12D (n=1)
	CCND1 Amp (n=1)	CDKN2A G101W (n=1)
	CDK4 (n=1)	

<sup>a</sup>Genomic analysis used Guardant360 for ctDNA NGS and ThermoFisher for tissue NGS; <sup>b</sup>EGFR amp (CNV ≥7) and MET amp (CNV ≥3) were based on tumor NGS; other amps were based on tumor NGS (CNV ≥7) or ctDNA NGS (CNV ≥3). Single nucleotide variants, insertion/deletions, and insertion call threshold was ≥1% allele frequency with >250 reads. <sup>c</sup>Eight patients had ≥1 alteration. Amp, amplification; CNV, copy number variation

BC Cho et al. 2021 ASCO, [abstr 9006](#).



# CHRYSALIS-2 Study Design: Phase 1b Expansion Cohorts (NCT04077463)



looking to validate biomarkers identified at CHRYSALIS  
in a prospective fashion

## Key Inclusion Criteria

### Phase 1b Expansion Cohorts

**A**

- EGFR Exon19del or L858R
- Post-osimertinib (1<sup>st</sup>/2<sup>nd</sup> line) and
- Progression on platinum-based chemotherapy as last line

**B**

- EGFR Exon20ins
- Prior SOC platinum-based chemotherapy or alternatively, EGFR TKI<sup>a</sup> or IO
- ≤3 prior lines of therapy

**C**

- Uncommon non-Exon20ins mutation<sup>b</sup>
- Treatment-naïve or 1 prior 1<sup>st</sup>/2<sup>nd</sup>-gen EGFR TKI as last line
- ≤2 prior lines of therapy

**D**

- EGFR Exon19del or L858R
- Post-osimertinib (1<sup>st</sup>/2<sup>nd</sup> line) as last line
- Amenable to tumor biopsy<sup>c</sup> for biomarker validation

<sup>a</sup>Includes investigational EGFR-TKI targeting Exon20ins (e.g., mobocertinib and poziotinib). <sup>b</sup>e.g., S768I, L861Q, G719X. <sup>c</sup>After progression on most recent system treatment or from initial biopsy in metastatic setting. AMI, amivantamab; Exon20ins; exon 20 insertion; IO, immuno-oncology therapy; LAZ, lazertinib; OSI, osimertinib; SOC, standard of care

# CHRYSALIS-2 (ClinicalTrials.gov Identifier: NCT04077463)

## Study Design

### Dose Expansion Cohorts

RP2CD: Lazertinib 240 mg PO +  
Amivantamab 1050 mg (1400 mg for  $\geq 80$  kg) IV

**Cohort A:** EGFR ex19del or L858R  
Post-osimertinib and platinum-based chemotherapy (n=162)

**Cohort B:** EGFR ex20ins  
Post-standard of care and platinum-based chemotherapy

**Cohort C:** Uncommon EGFR mutations  
Treatment naïve or post-1<sup>st</sup> or 2<sup>nd</sup> generation EGFR TKI

**Cohort D:** EGFR ex19del or L858R  
Post-osimertinib, chemotherapy naïve, biomarker validation

### Endpoints

- Overall response rate (primary)
- Duration of response
- Clinical benefit rate<sup>a</sup>
- Progression-free survival
- Overall survival
- Adverse events

Here we present updated **safety** and **efficacy** results  
of the **amivantamab and lazertinib combination** from **fully enrolled Cohort A**

<sup>a</sup>Percentage of patients with confirmed response or durable stable disease (duration of  $\geq 11$  weeks).

EGFR, epidermal growth factor receptor; ex19del, exon 19 deletion; ex20ins, exon 20 insertion; IV, intravenous; PO, per oral; RP2CD, recommended phase 2 combination dose; TKI, tyrosine kinase inhibitor.

# Demographics and Baseline Characteristics

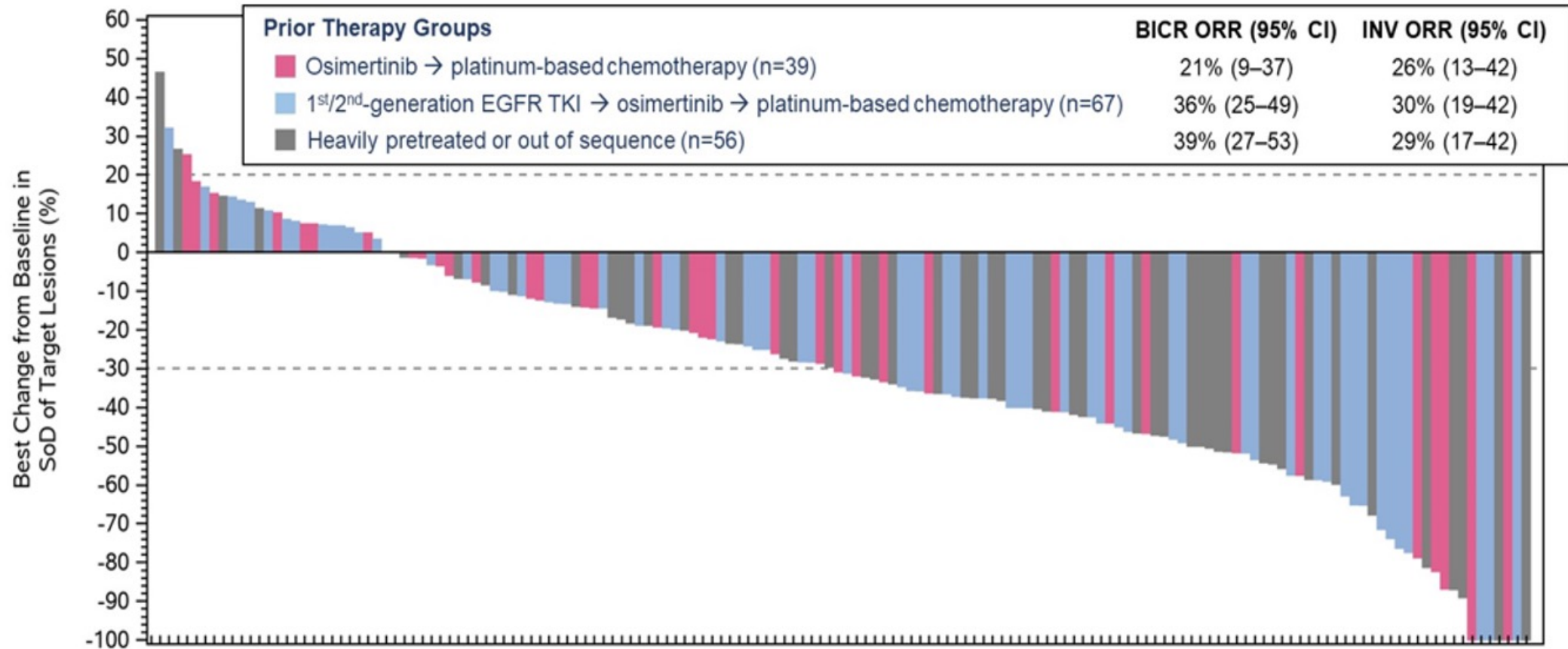
Characteristic, n (%)	n=162	Characteristic, n (%)	n=162
Median age, years (range)	61.5 (31–83)	Smoking history	
Male / female	57 (35) / 105 (65)	Non-smoker	111 (69)
Race		Smoker	49 (30)
White	42 (26)	Unknown	2 (1)
Asian	99 (61)	Median number of prior therapy lines (range)	3 (2–14)
Black	1 (0.6)	2–3	117 (72)
Not reported	20 (12)	≥4	45 (28)
ECOG PS 0 / 1	49 (30) / 113 (70)	Prior therapy regimens	
Brain metastases at baseline <sup>a</sup>	66 (41)	Frontline osimertinib → platinum-based chemo	39 (23)
Untreated	30 (19)	1 <sup>st</sup> /2 <sup>nd</sup> -gen EGFR TKI → osimertinib → platinum-based chemo	67 (42)
Treated	36 (22)	Heavily pretreated or out of sequence	56 (35)

<sup>a</sup>Study initially allowed stable/asymptomatic treated or untreated brain metastases at baseline and was later amended to allow for treated brain metastases only.

Chemo, chemotherapy; ECOG PS, Eastern Cooperative Oncology Group performance status; EGFR, epidermal growth factor receptor; gen, generation; TKI, tyrosine kinase inhibitor.

CA Shu et al. ASCO 2022

# Best Antitumor Response and ORR by Prior Therapy Group



- 10 efficacy-evaluable patients did not have any evaluable post-baseline target lesion measurements

BICR, blinded independent central review; CI, confidence interval; EGFR, epidermal growth factor receptor; INV, investigator-assessed; ORR, overall response rate; SoD, sum of diameters; TKI, tyrosine kinase inhibitor.

CA Shu et al. ASCO 2022

# CNS Antitumor Activity of Amivantamab + Lazertinib

## Retrospective, Exploratory CNS Analysis

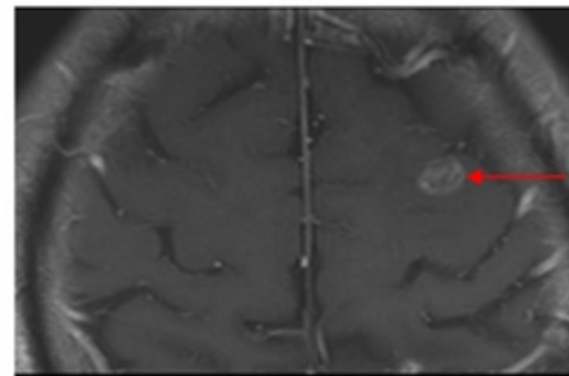
- CHRYSALIS-2 Cohort A allowed stable treated and untreated brain metastases during its conduct; in addition to baseline brain imaging, follow-up imaging was required for those with baseline lesions
- Among the 66 patients with baseline brain lesions,<sup>a</sup> 30 were untreated (no prior brain radiation/surgery), of which 27 completed  $\geq 1$  post-baseline brain scan

Best CNS Lesion Assessment/evaluation	Untreated Brain Metastases (n=27)
Complete clearance ("absent")	7 (26%)
Non-CR/non-PR ("present")	20 (74%)
Progressive disease ("unequivocal progression")	0

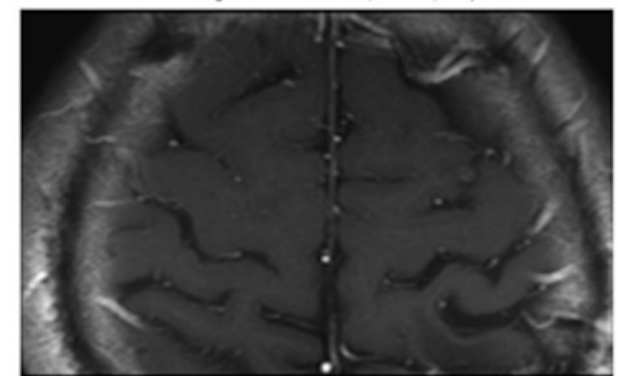
Of the 27 patients, 5 had documented non-target intracranial progression at the time of clinical cutoff<sup>b</sup>

*Images courtesy of Prof. Se-Hoon Lee  
Samsung Medical Center, Seoul, Republic of Korea*

**52-yo M, ECOG PS 1, with distant history of brain mets treated with gamma knife surgery, previously treated with afatinib, followed by cisplatin-pemetrexed, followed by osimertinib presents with new CNS lesion and demonstrated intracranial response at Week 6, which was maintained through Week 54**



Baseline



Week 54

<sup>a</sup>Of these 66 patients, 65 had non-target lesions and 1 patient had a target lesion (see vignette).

<sup>b</sup>Clinical cutoff was March 15, 2022.

CNS, central nervous system; CR, complete response; ECOG PS, Eastern Cooperative Oncology Group performance status; M, male; PR, partial response; yo, year old.

CA Shu et al. ASCO 2022

# Telisotuzumab vedotin and osimertinib in EGFR+

- Teliso-V is an antibody drug conjugate (ADC) directed against MET.
- As monotherapy in MET intermediate/high expressing NSCLC (EGFRwt) the ORR 36.5%
- Lower activity in **EGFR mutant NSCLC ORR 11.6%**

ASCO22 Abstract #9016

DR Camidge et al. Presented at WCLC 2021  
R Guo et al. JTO 2019

*JW Goldman et al. 2022 ASCO, [abstr 9013](#).*

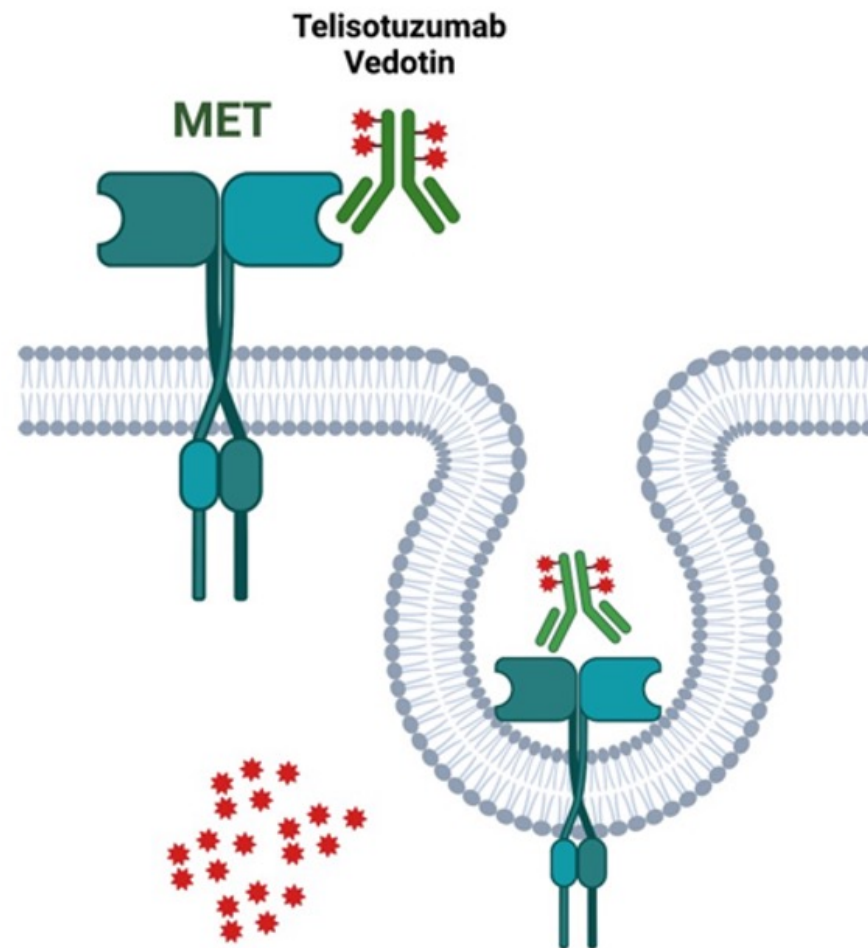


**MET IHC+ = 39%**

≠

**MET amp  
2%**

**MET exon 14  
1%**



# Telisotuzumab vedotin and osimertinib in EGFR+

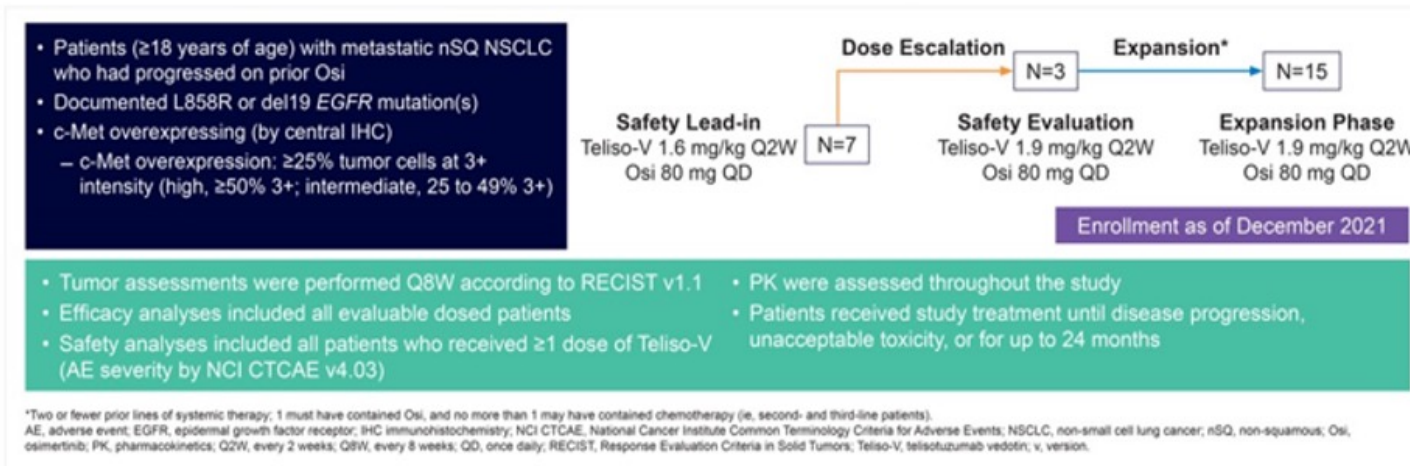
- EGFR L858R, ex 19 deletion
- Prior Osimertinib
- c-MET overexpression:
  - Intermediate: MET IHC 3+ in 25%-49% cells
  - High: MET IHC 3+  $\geq$  50% cells



MET expression	N = 25
Intermediate (25%-49% cells MET IHC 3+)	11 (44%)
High ( $\geq$ 50% cells MET IHC 3+)	13 (52%)
Other	1 (4%)

**Objective:** safety, PK, and preliminary efficacy

## Arm E: Phase 1/1b Multicenter, Open-Label Study Design (NCT02099058)



Prior Therapies	N = 25
Prior Platinum-based chemotherapy	15 (60%)
Duration of prior Osimertinib	
< 6 months	6 (25%)
6-12 months	4 (17%)
>12 months	14 (58%)
Missing	1
Time since end of prior osimertinib to start of therapy	
< 1 month	10 (45%)
1-6 months	7 (32%)
>6 months	5 (23%)
Missing	3

JW Goldman et al. 2022 ASCO, [abstr 9013](#).

# Teliso-V and osimertinib: Preliminary Efficacy

**ORR: 58% (95%CI: 34-80)**

**Best Percentage Change From Baseline in Target Lesion**



**Interim Objective Response Rate**

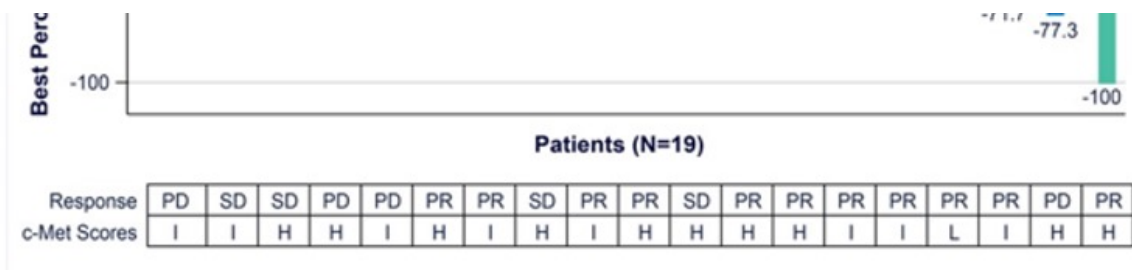
Category	N	ORR,* n (%) [95% CI]
Teliso-V dose		
1.6 mg/kg	7	3 (43) [10, 82]
1.9 mg/kg	12	8 (67) [35, 90]
<b>Total</b>	<b>19†</b>	<b>11 (58) [34, 80]</b>

## Studies currently enrolling

NCT02099058; phase 1b Teliso-V + Osi combo (2022 ASCO, Goldman et al)

NCT03539536; phase 2 Teliso-V mono (LUMINOSITY; 2022 ASCO, Camidge et al)

NCT04928846; phase 3 Teliso-V mono vs docetaxel (TeliMET NSCLC-01)



Last prior regimen	N	ORR,* n (%) [95% CI]
Contained Osi	8	4 (50) [16, 84]
Did not contain Osi	11	7 (64) [31, 89]
<b>Total</b>	<b>19</b>	<b>11 (58) [34, 80]</b>

EGFR, epidermal growth factor receptor; IHC, immunohistochemistry; Int, intermediate; ORR, objective response rate; Osi, osimertinib; PR, partial response; RECIST, Response Evaluation Criteria in Solid Tumors; Teliso-V, telisotuzumab vedotin.  
 \*RECIST v1.1; ORR (confirmed responses, all PR); data not mature for duration of response and progression-free survival. †As of December 2021, 25 patients enrolled, 19 with available RECIST assessment. ‡c-Met IHC score <25% 3+, n=1. †G719S mutation, n=1.

H, c-Met high (≥50%, 3+ staining); I, c-Met intermediate (25–49%, 3+ staining); L, c-Met low (<25, 3+ staining); PD, progressive disease; PR, partial response; Q2W, every 2 weeks; SD, stable disease.

Jonathan W. Goldman et al. Abstract 9013

*JW Goldman et al. 2022 ASCO, abstr 9013.*



# METamp EGFR Mutant NSCLC → Other Efforts (will help define the METamp Landscape)

## ❖ Clinical preliminary data (in osimertinib frontline era)

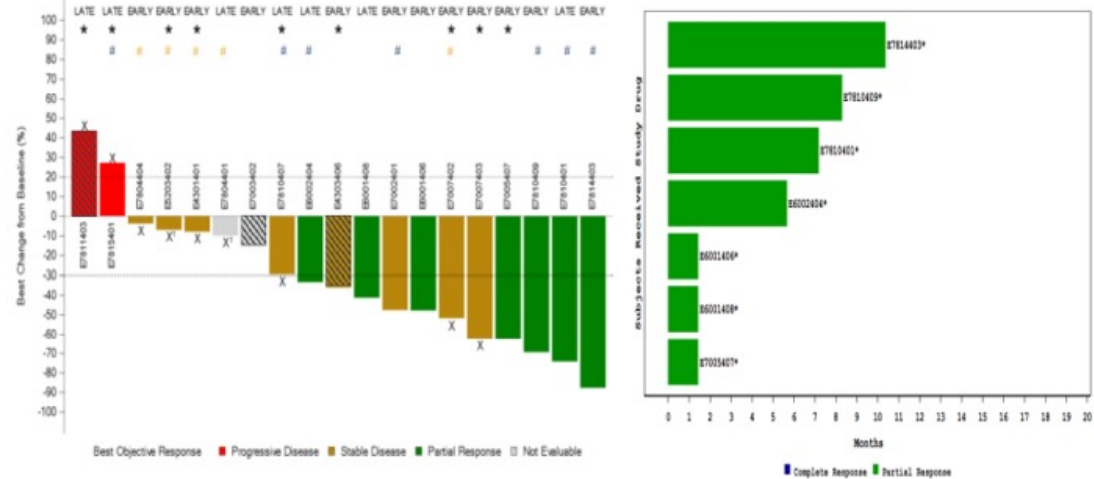
### - **ORCHARD trial** (osimertinib+savolitinib arm)

All osimertinib first-line progressors (n=17)

Biopsy at osimertinib progression: acquired EGFR C797S, fusion drivers, small cell transformation excluded

Well-tolerated toxicity profile

- Confirmed ORR (41%) 7/17
- Unconfirmed ORR (59%) 10/17



Yu and Le ESMO 2021

### **SAVANNAH trial** (NCT03778229)

activated in early 2019

Savolitinib + osimertinib

MET amp by FISH

**Completed trial accrual**

### **INSIGHT2 trial** (NCT03944772)

tepotinib + osimertinib

MET amp by ctDNA or FISH

**Completed interim analysis**

**accrual**

### **GEOMETRY-E** (NCT04816214)

activated in March 2021

Capmatinib + osimertinib

*Compared to platinum-pemetrexed*

MET amp (method unclear)

# Osimertinib and Necitumumab in EGFR+ NSCLC

Osimertinib 80mg + Necitumumab 800mg D1, D8 q21 days

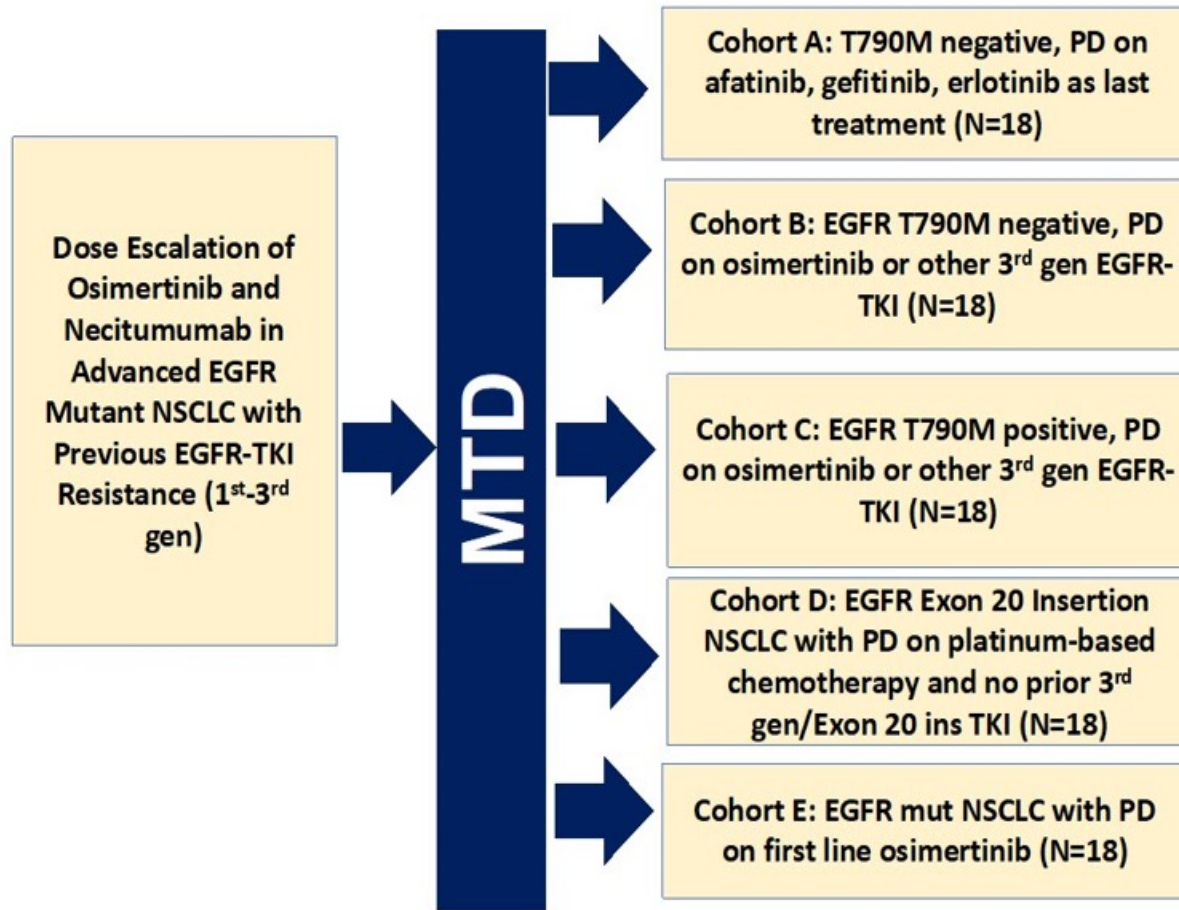
		Confirmed PR	mPFS (95%CI)	
<p>Dose Escalation of Osimertinib and Necitumumab in Advanced EGFR Mutant NSCLC with Previous EGFR-TKI Resistance (1<sup>st</sup>-3<sup>rd</sup> gen)</p> <p><b>MTD</b></p>	Cohort A: T790M negative, PD on afatinib, gefitinib, erlotinib as last treatment (N=18)	✓ 3 (16%)	3.9 (1.3 - 5.7)	
	Cohort B: EGFR T790M negative, PD on osimertinib or other 3 <sup>rd</sup> gen EGFR-TKI (N=18)	✗ 0 (0%)	1.5 (1.2 - 2.6)	← 3 <sup>rd</sup> Generation TKI T790M-
	Cohort C: EGFR T790M positive, PD on osimertinib or other 3 <sup>rd</sup> gen EGFR-TKI (N=18)	✗ 2 (11%)	3.9 (2.4 - 5.6)	← 3 <sup>rd</sup> Generation TKI T790M+
	Cohort D: EGFR Exon 20 Insertion NSCLC with PD on platinum-based chemotherapy and no prior 3 <sup>rd</sup> gen/Exon 20 ins TKI (N=18)	✓ 3 (16%)	6.9 (4.1 - 11.4)	
	Cohort E: EGFR mut NSCLC with PD on first line osimertinib (N=18)	✓ 3 (16%)	2.3 (1.4 - NR)	← 3 <sup>rd</sup> Generation TKI 1st line

- Primary pre-specified efficacy endpoint for expansion cohorts ≥ 3/18 pts with confirmed PR per RECIST per cohort.

JW Riess et al. 2022 ASCO, abstr 9014.

# Osimertinib and Necitumumab: Safety

Osimertinib 80mg + Necitumumab 800mg D1, D8 q21 days



**Drug related  $\geq$ Gr 3 AE: 38%**

Toxicity	Number of Patients with this Grade (N=97)	
	Grade 1-2	$\geq$ Grade 3
Rash maculopapular/acneiform/pustular	64	20
Diarrhea	32	1
Mucositis oral	23	2
Lymphocyte count decreased	12	4
Dyspnea	1	2
Hypophosphatemia	9	1
Hypokalemia	8	1
Infusion related reaction	7	1
Lipase Increased	0	1
AST/ALT Elevation	11	1
Sinus bradycardia	2	1
Thromboembolic event	3	1
Pneumonitis	1	2
Dehydration	0	1
Bone pain	0	1
Dry skin	50	1
Facial Abrasion	35	1
Fatigue	41	2
Electrocardiogram QT corrected interval prolonged	19	2
White blood cell decreased	13	1
Anemia	14	1
Weight loss	13	1

**21%**

JW Riess et al. 2022 ASCO, abstr 9014.

# Overcoming Osimertinib Resistance

Outcomes	Amivantanab + Lazertinib N= 45			Necitumumab + Osimertinib N = 18	Savolitinib + Osimertinib N = 69	Patritumab Deruxtecan N =44	Datopotomab Deruxtecan* N = 34	Teliso-V + Osimertinib N = 25
<b>Target</b>	EGFR + MET Post Osi			EGFR Post 1 <sup>st</sup> line Osi	EGFR + MET Post 3rd Gen TKI	HER3 Post Osi	TROP2 Post EGFR ,ALK, ROS1	EGFR + MET Post Osi
<b>Biomarker</b>	EGFR/MET resistance	Unknown resistance	Other resistance	No	MET amplification	No	No	MET expression
<b>ORR (%)</b>	47%	29%	0%	16%	30%	39%	35%	58%
<b>mDOR, median (months)</b>	10.4	8.3		Not reported	7.9	7.0	9.5	Not reported
<b>mPFS, median (months)</b>	6.7	4.1		2.3	5.4	8.2	Not reported	Not reported
<b>Grade ≥ 3 TRAE</b>	16%			38%	57%	54%	38%	32%

Cross-trial comparisons have significant limitations. This information is presented to generate discussion, not to make comparisons between study results.

\* Includes post Osimertinib, and other targets (ALK,ROS1) and therapies

BC Cho et al. Presented at ASCO 2021L. Sequist et al. Lancet Oncology 2020  
P. Janne et al Presented at ASCO 2021EB Garon et al. Presented at ESMO 2021



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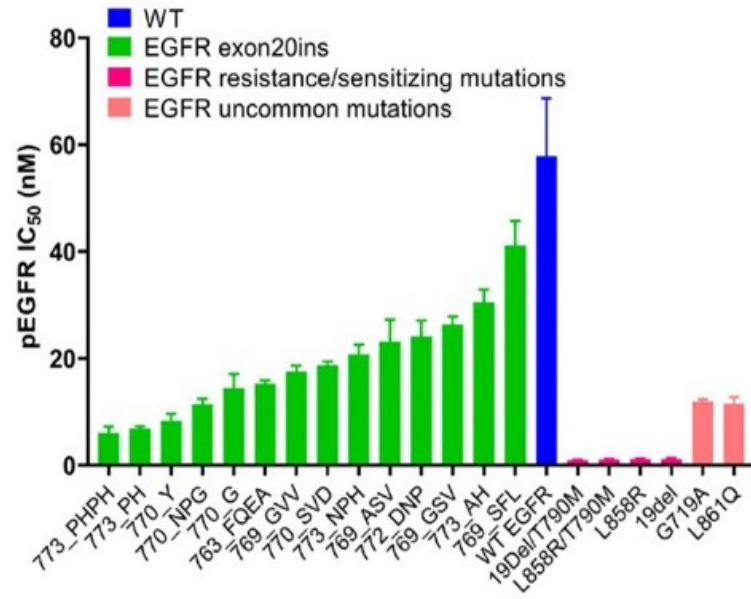
# EGFR Pathway

## EGFRex20ins

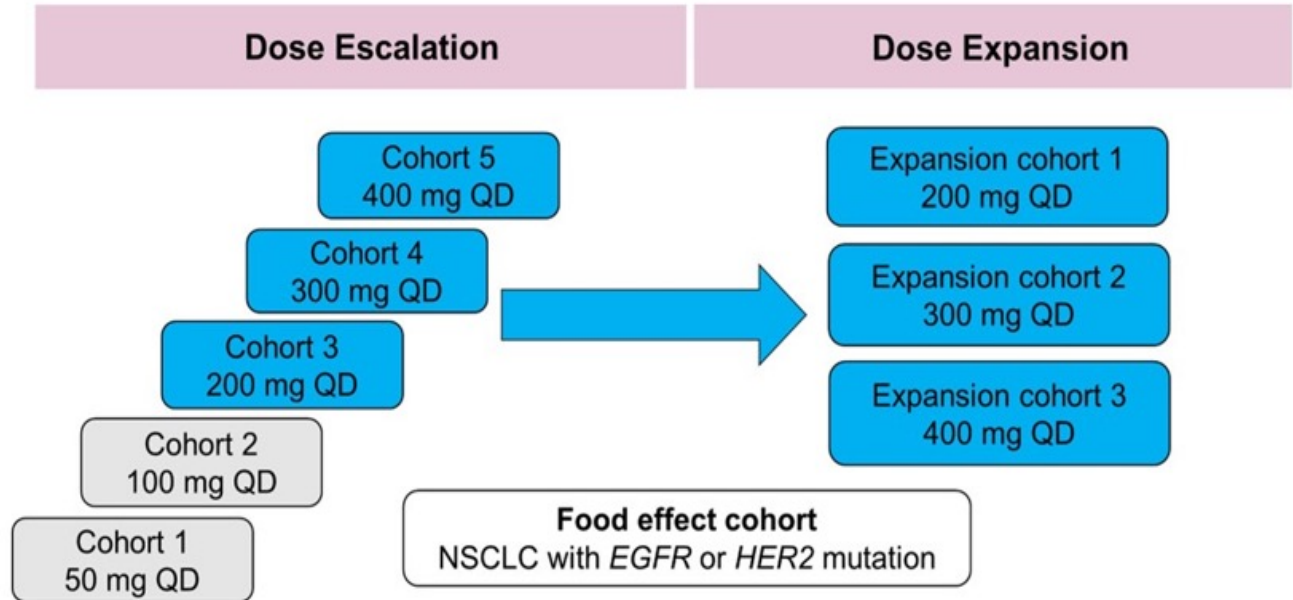
# Sunvozertinib in EGFR exon 20 mutant NSCLC

**Sunvozertinib** is an oral, irreversible, selective EGFR TKI:

- Exon 19 deletions/L858R
- T790M
- EGFR exon 20 insertions



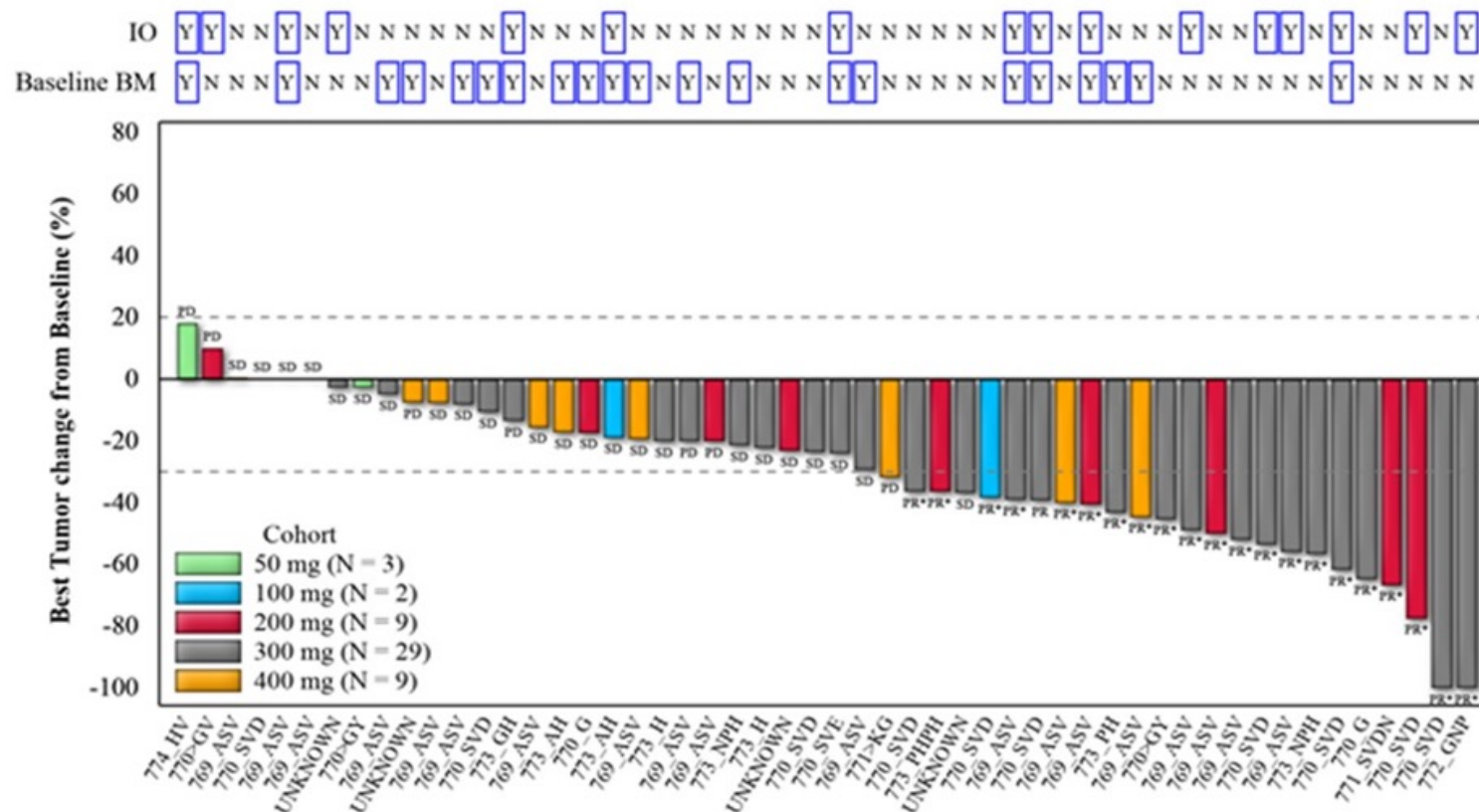
## Phase 1 study design (WU-KONG1 and WU-KONG2 trials)



Mengzhao Wang et al Cancer Discov. 2022 Apr 11;candisc.1615.2021  
 Pasi A. Janne et al. Abstract 9015: Antitumor activity of sunvozertinib in NSCLC patients with EGFR Exon20 insertion mutations after platinum and anti-PD(L)1 treatment failures

# Sunvozertinib in platinum pretreated NSCLC with EGFR Exon20ins

Results	N = 52
Previous therapies median (range)	3 (1-10)
Brain Mets	21 (40%)
Prior Immunotherapy	15 (29%)
<b>ORR (%)</b>	<b>40.4%</b>
<b>DCR. (%)</b>	<b>84.6%</b>
<b>mDOR (months)</b>	<b>5.9</b>



Median follow-up time: 10.5 months

Pasi A. Janne et al. Abstract 9015: Antitumor activity of sunvozertinib in NSCLC patients with EGFR Exon20 insertion mutations after platinum and anti-PD(L)1 treatment failures

# Sunvozertinib and prior immunotherapy

	N	PR	Drug related Grade $\geq$ 3 AE	Dose Reduction	Dose Interruption	Treatment Discontinuation
PD-(L)1 therapy	15	53.3%	38.9%	25%	41.7%	2.8%
No anti PD-(L)1	34	38.2%	43.8%	6.3%	31.3%	6.3%

Dose  $\geq$  100mg

K. Park JCO 2021, C. Zhou Jama Onc 2021, PA Janne ASCO 2022,  
Piotrowska et al, ASCO 2021, R Cornelissen WCLC 2020, Z. Wierenga ESMO 2021



# Efficacy of EGFR exon 20 targeted therapies

## Post platinum-based chemotherapy

	Amivantamab n = 81	Mobocertinib N = 114	Pozitotinib N = 115	Osimertinib* N = 25	CLN-081 N = 39	Sunvozertinib# N = 52	Necitumumab Osimertinib N = 18
<b>ORR (%)</b>	<b>40%</b>	<b>28%</b>	<b>15%</b>	<b>28%</b>	<b>41%</b>	<b>40.4%</b>	<b>16%</b>
<b>mDOR (months)</b>	11.1	17.5	7.4	4,2	>21	5.9	---
<b>mPFS (months)</b>	8.3	7.3	4.2	6.8	12.0	---	6.9
<b>mOS (months)</b>	22.8	24.0	---	15.2	---	---	---
<b>Grade ≥ 3 AE</b>	35%	47%	---	---	5%	40%	38%^

Cross-trial comparisons have significant limitations. This information is presented to generate discussion, not to make comparisons between study results.

K. Park JCO 2021, C. Zhou Jama Onc 2021, PA Janne ASCO 2022,  
Piotrowska et al, ASCO 2021, R Cornelissen WCLC 2020, Z. Wierenga ESMO 2021

\*Osimertinib dose 160mg/day # Sunvozertinib all doses  
^ in all patients included EGFR sensitizing mutations and exon 20 insertions



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# K-RAS Pathway

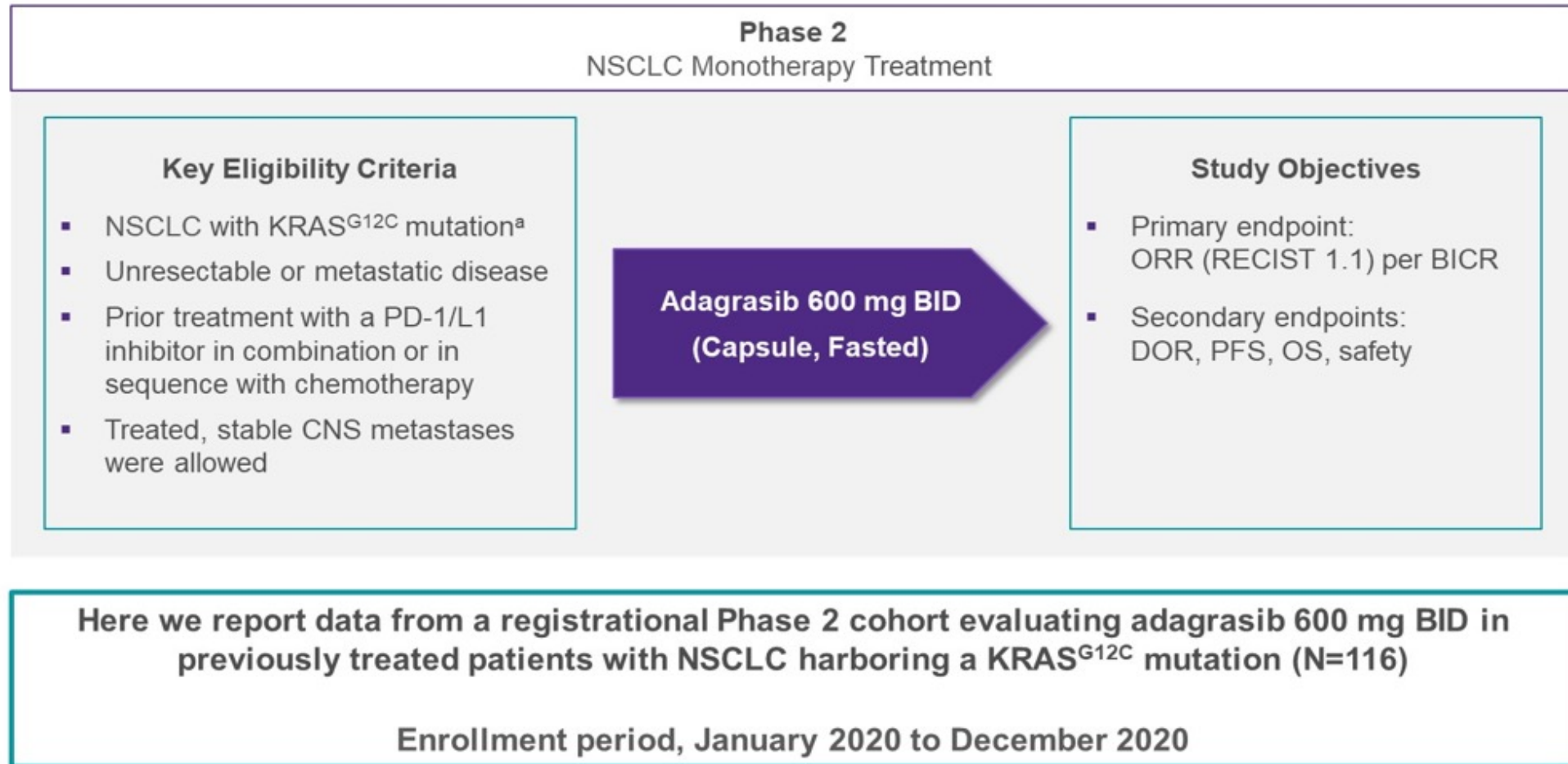


# KRYSTAL-1: Activity and Safety of Adagrasib (MRTX849) in Patients with Advanced/Metastatic Non-Small Cell Lung Cancer Harboring a KRAS<sup>G12C</sup> Mutation

Alexander I. Spira<sup>1</sup>, Gregory J. Riely<sup>2</sup>, Shirish M. Gadgeel<sup>3</sup>, Rebecca S. Heist<sup>4</sup>, Sai-Hong Ignatius Ou<sup>5</sup>, Jose M. Pacheco<sup>6</sup>, Melissa L. Johnson<sup>7</sup>, Joshua K. Sabari<sup>8</sup>, Konstantinos Leventakos<sup>9</sup>, Edwin Yau<sup>10</sup>, Lyudmila Bazhenova<sup>11</sup>, Marcelo V. Negrao<sup>12</sup>, Nathan A. Pennell<sup>13</sup>, Jun Zhang<sup>14</sup>, Karen Velastegui<sup>15</sup>, James G. Christensen<sup>15</sup>, Xiaohong Yan<sup>15</sup>, Kenna Anderes<sup>15</sup>, Richard C. Chao<sup>15</sup>, Pasi A. Jänne<sup>16</sup>

<sup>1</sup>Virginia Cancer Specialists, Fairfax, VA; US Oncology Research, The Woodlands, TX; NEXT Oncology Virginia, Fairfax, VA; <sup>2</sup>Memorial Sloan Kettering Cancer Center, Weill Cornell Medical College, New York, NY; <sup>3</sup>Henry Ford Cancer Institute, Detroit, MI; <sup>4</sup>Massachusetts General Hospital, Boston, MA; <sup>5</sup>University of California, Irvine, Chao Family Comprehensive Cancer Center, Orange, CA; <sup>6</sup>University of Colorado Anschutz Medical Campus, Aurora, CO; <sup>7</sup>Sarah Cannon Research Institute Tennessee Oncology, Nashville, TN; <sup>8</sup>Perlmutter Cancer Center, New York University Langone Health, New York, NY; <sup>9</sup>Mayo Clinic, Rochester, MN; <sup>10</sup>Roswell Park Comprehensive Cancer Center, Buffalo, NY; <sup>11</sup>UC San Diego Moores Cancer Center, La Jolla, CA; <sup>12</sup>MD Anderson Cancer Center, Houston, TX; <sup>13</sup>Cleveland Clinic, Cleveland, OH; <sup>14</sup>University of Kansas Medical Center, Kansas City, KS; <sup>15</sup>Mirati Therapeutics, Inc., San Diego, CA; <sup>16</sup>Dana-Farber Cancer Institute, Boston, MA

# KRYSTAL-1 (849-001) Phase 2 Cohort A Study Design



<sup>a</sup>KRAS<sup>G12C</sup> mutation detected in tumor tissue by sponsor-approved local laboratory testing  
ClinicalTrials.gov. NCT03785249

# Adagrasib in Previously Treated Patients with KRAS<sup>G12C</sup>-mutated NSCLC: Tumor Response by BICR

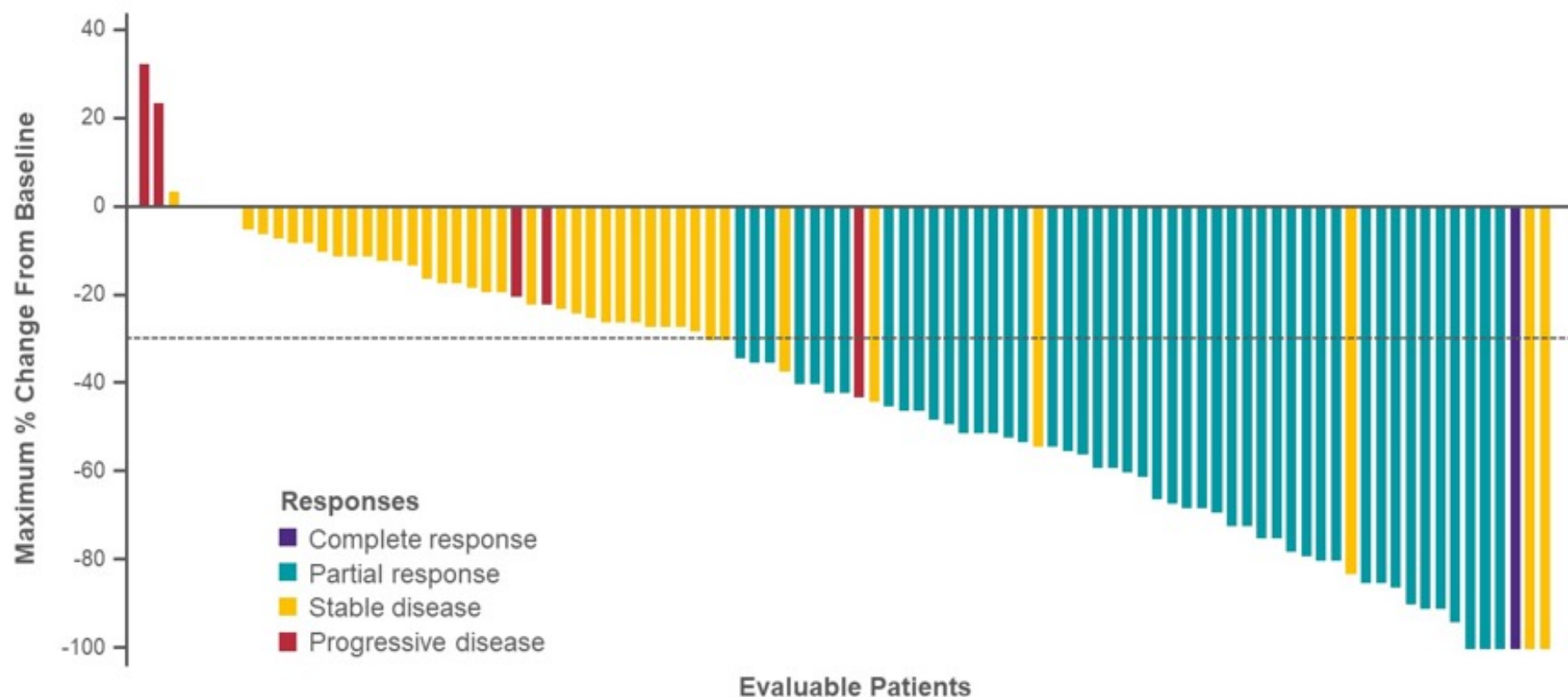
Efficacy Outcome	Adagrasib Monotherapy (n=112) <sup>a</sup>
Objective response rate, n (%)	48 (43%)
<b>Best overall response, n (%)</b>	
Complete response	1 (1%)
Partial response	47 (42%)
Stable disease	41 (37%)
Progressive disease	6 (5%)
Not evaluable	17 (15%)
<b>Disease control rate, n (%)</b>	89 (80%)

- 17 patients were not evaluable due to having received post-baseline scans too early (n=3) or study withdrawal prior to first scheduled assessment (n=14)<sup>b</sup>
- For evaluable patients (on treatment and who had a scan at ~6 weeks<sup>c</sup>), ORR was 51% (48/95)

<sup>a</sup>Full analysis set as per BICR excludes 4 patients who did not have measurable disease at baseline; <sup>b</sup>Due to reasons of: withdrawal by patient (n=5), AEs (n=3; 2 patients experienced AEs not related to treatment, 1 patient experienced a TRAE), global deterioration of health (n=3), death (n=2), non-compliance (n=1); <sup>c</sup>6 weeks ± 10 days

Data as of October 15, 2021 (median follow-up: 12.9 months)

# Adagrasib in Previously Treated Patients with KRAS<sup>G12C</sup>-mutated NSCLC: Best Tumor Change From Baseline



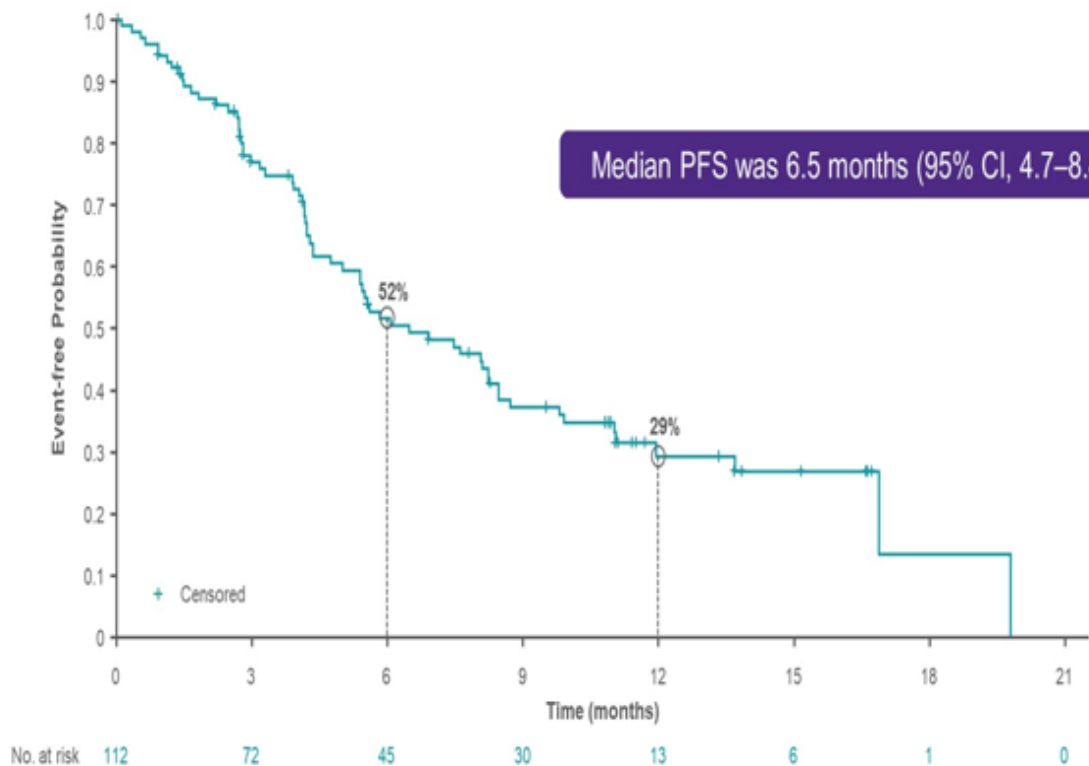
- Objective responses were observed in 43% (95% CI, 33.5–52.6); DCR was 80% (95% CI, 70.8–86.5)
- Responses were deep with 75% of responders achieving >50% tumor reduction

All results are based on BICR. Responses include target lesion tumor regression, as well as non-target lesion assessment  
Data as of October 15, 2021 (median follow-up: 12.9 months)

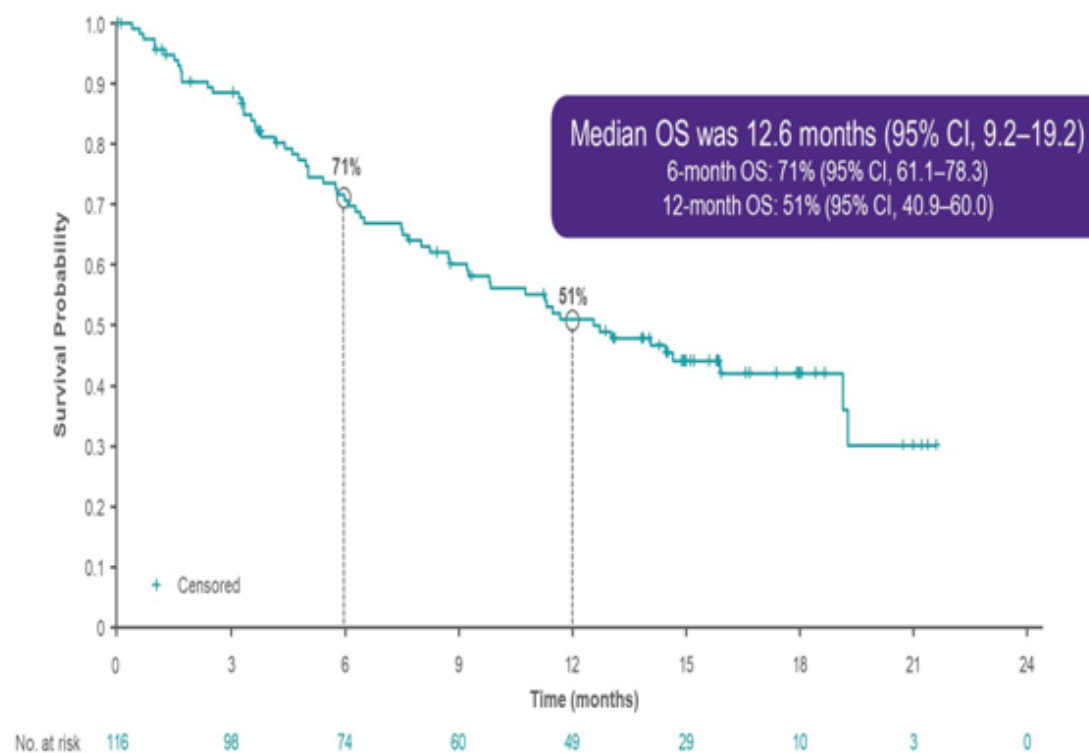
Al Spira et al. 2022 ASCO, abstr 9002



# Adagrasib in Previously Treated Patients with K-Ras<sup>G12C</sup>-mutated NSCLC: Median Progression-free Survival and Median Overall Survival



All results are based on BICR  
Data as of October 15, 2021 (median follow-up: 12.9 months)



As of October 15, 2021, median OS was 11.7 months (95% CI, 9.2–16.2); median follow-up: 12.9 months  
Data as of January 15, 2022 (median follow-up: 15.6 months)

*Al Spira et al. 2022 ASCO, abstr 9002*



# Efficacy KRAS G12C inhibitor: Adagrasib vs. Sotorasib

Parameter	Adagrasib (KRYSTAL-1)	Sotorasib (CodeBreakK100) <sup>1</sup>
<b>N=</b>	116 (112 for efficacy)	126 (124 for efficacy)
<b>Prior Platinum Chemo + IO</b>	<b>98%</b>	<b>81%</b>
<b>ORR</b>	<b>43%</b> (95% CI 33.5-52.6)	<b>37.1%</b> (95% CI 28.6-46.2)
<b>DCR</b>	<b>80%</b> (95% CI 70.8-86.5)	<b>80.6%</b> (95% CI 72.6-87.2)
<b>TTR, median (range)</b>	<b>1.4 mo</b> (0.9-7.2)	<b>1.4 mo</b> (1.2-10.1)
<b>DOR, median</b>	<b>8.5 mo</b> (95% CI 6.2-13.8)	<b>11.1 mo</b> (95% CI 6.9-NE)
<b>PFS, median</b>	<b>6.5 mo</b> (95% CI 4.7-8.4)	<b>6.8 mo</b> (95% CI 5.1-8.2)
<b>OS, median</b>	<b>12.6 mo</b> (95% CI 9.2-19.2)	<b>12.5 mo<sup>2</sup></b> (95% CI 10.0-NE)
<b>Follow-up, median</b>	12.9 mo	15.3 mo <sup>2</sup>

1= Skoulidis et al. N Engl J Med. 2021 Jun 24;384(25):2371-2381; 2=Pooled phase 1/2 of 174 pts with median f/u 24.9 mo, median OS 12.5 mo (95% CI 10.0-17.8), 1-year OS 50.8%, 2-year OS 32.5% (Dy G et al. AACR 2022)



# Treatment-Related Adverse Event (TRAE)

## ADAGRASIB

	Adagrasib (N=116) <sup>1</sup>	
TRAEs, n (%)	Any Grade	Grades 3–4 <sup>2</sup>
Any TRAEs	113 (97%)	50 (43%)
<b>Most frequent TRAEs, n (%)</b>		
*Diarrhea	73 (63%)	1 (<1%)
*Nausea	72 (62%)	5 (4%)
*Vomiting	55 (47%)	1 (<1%)
*Fatigue	47 (41%)	5 (4%)
*ALT increase	32 (28%)	5 (4%)
Blood creatinine increase	30 (26%)	1 (<1%)
*AST increase	29 (25%)	4 (3%)
Decreased appetite	28 (24%)	4 (3%)
Anemia	21 (18%)	6 (5%)
Amylase increase	20 (17%)	1 (0.9%)
QT prolongation	19 (16%)	5 (4%)

1=Capsule, Fasted

2=3 Grade 4 TRAEs, 2 Grade 5 TRAE (1 Cardiac Failure, 1 Pulmonary Hemorrhage)

## SOTORASIB

	Sotorasib (N=126)	
TRAEs, n (%)	Any Grade	Grades 3–4 <sup>1</sup>
Any TRAEs	88 (70%)	26 (21%)
<b>Most frequent TRAEs, n (%)</b>		
Diarrhea	40 (32%)	5 (4%)
Nausea	24 (19%)	0
ALT increase <sup>2</sup>	19 (15%)	8 (6%)
AST increase <sup>2</sup>	19 (15%)	7 (6%)
Fatigue	14 (11%)	0
Vomiting	10 (8%)	0

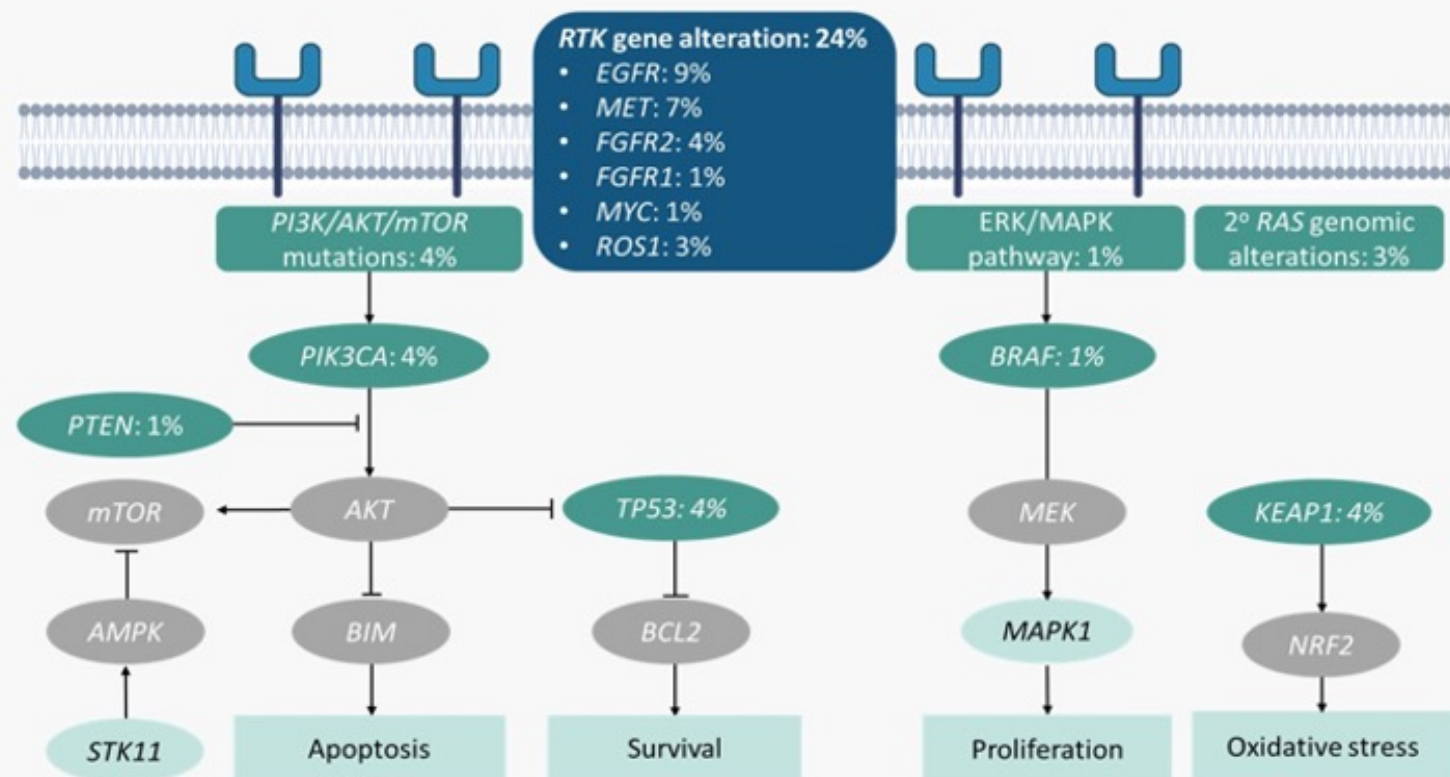
1= Only 1 patient with Grade 4 TRAE of dyspnea & pneumonitis. No Grade 5 TRAE.

2=TRAE (Any Grade/G3): Blood alk phos increase 9 (7%)/1 (<1%); Drug-induced liver injury 3 (2.4%)/2 (1.6%); Gamma-GGT increase 3 (2.4%)/3 (2.4%); Abnl hepatic function 2 (1.6%)/1 (<1%); 1 G3 event each of Hepatotoxic Event, Increase liver function level, Abnormal aminotransferase level

- **Dose Reduction/Interruption**
- Adagrasib: **52%** Dose Reduction, 61% Dose Interruption
  - 33% 400 mg bid, 11% 600 mg qd, 14% (200 mg bid or 400 mg qd)
- Sotorasib (both interruption/reduction): 22.2%
- **TRAEs led to dose discontinuation:** Adagrasib 7%, Sotorasib 7.1%

Skoulidis F et al. N Engl J Med. 2021 Jun 24;384(25):2371-2381.

## Putative Acquired Resistance Mechanisms To Sotorasib\*



### OncKB<sup>1</sup>

10/31 alterations were potentially targetable<sup>‡</sup>

- Level 1: *PIK3CA* E542K (1)  
*PIK3CA* E545K (1)
- Level 2: *MET* amp. (3)<sup>‡</sup>  
*BRAF* K601E (1)<sup>‡</sup>
- Level 3: *FGFR1* amp. (1)
- Level 4: *EGFR* amp. (2)  
*PTEN* deletion (1)

**RTK gene alterations: the most prevalent acquired genomic alteration in NSCLC patients (16/67 [24%])**

1. Chakravarty D, et al. *JCO Precis Oncol*. 2017;doi:10.1200/PO.17.00011.

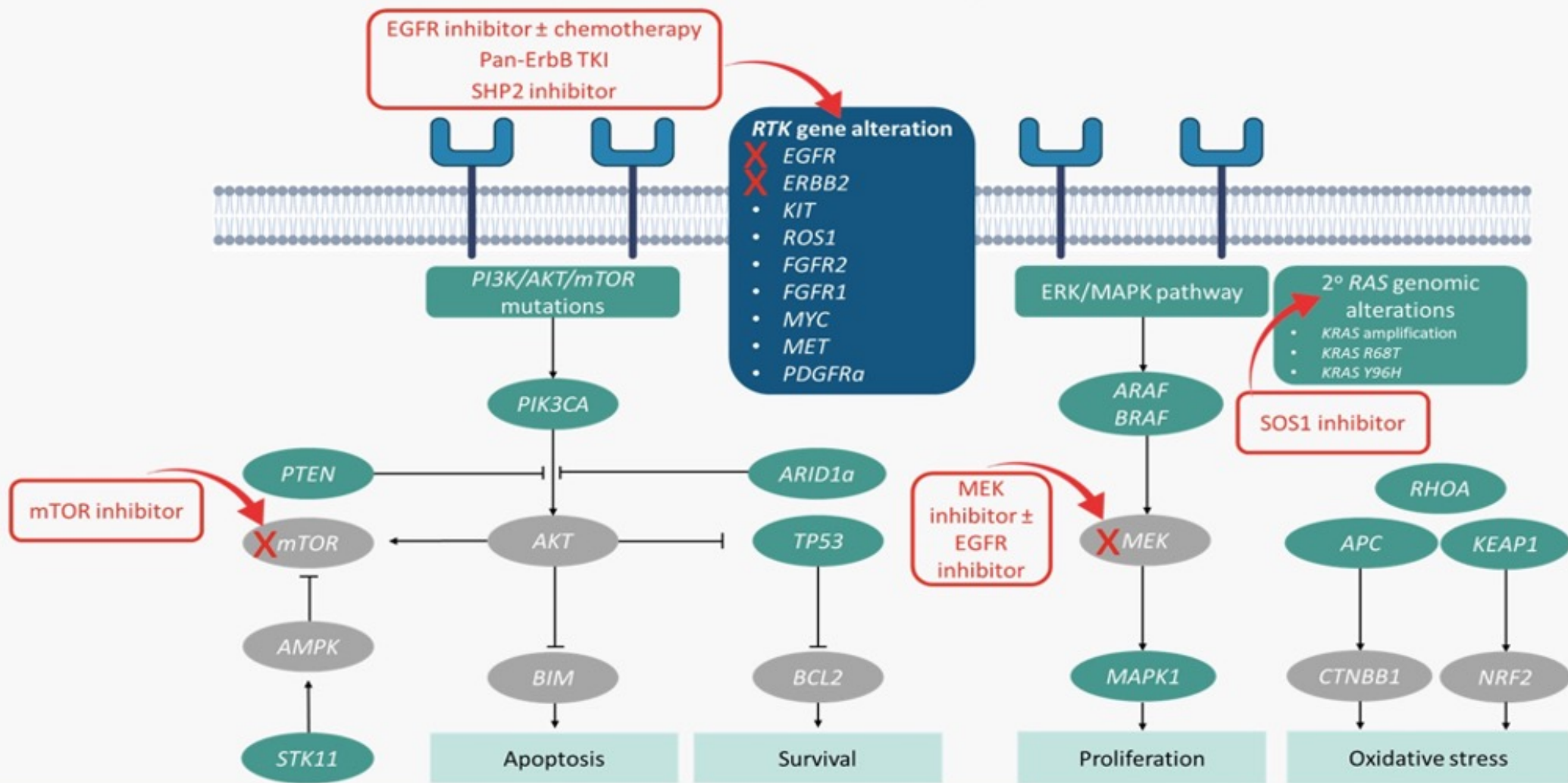
\*Mutation rate presented based on 67 evaluable patients.

<sup>1</sup>Actionability levels defined in full at <https://www.oncokb.org/levels>; actionable variants are based on evidence from any cancer indication.

<sup>‡</sup>Evidence of targetability in NSCLC: *MET* amp., Level 2; *BRAF* K601E, Level 4.

amp., amplification; NSCLC, non-small cell lung cancer.

# Acquired Resistance Mechanisms May Inform Potential Sotorasib Combination Therapies (CodeBreakK 101)



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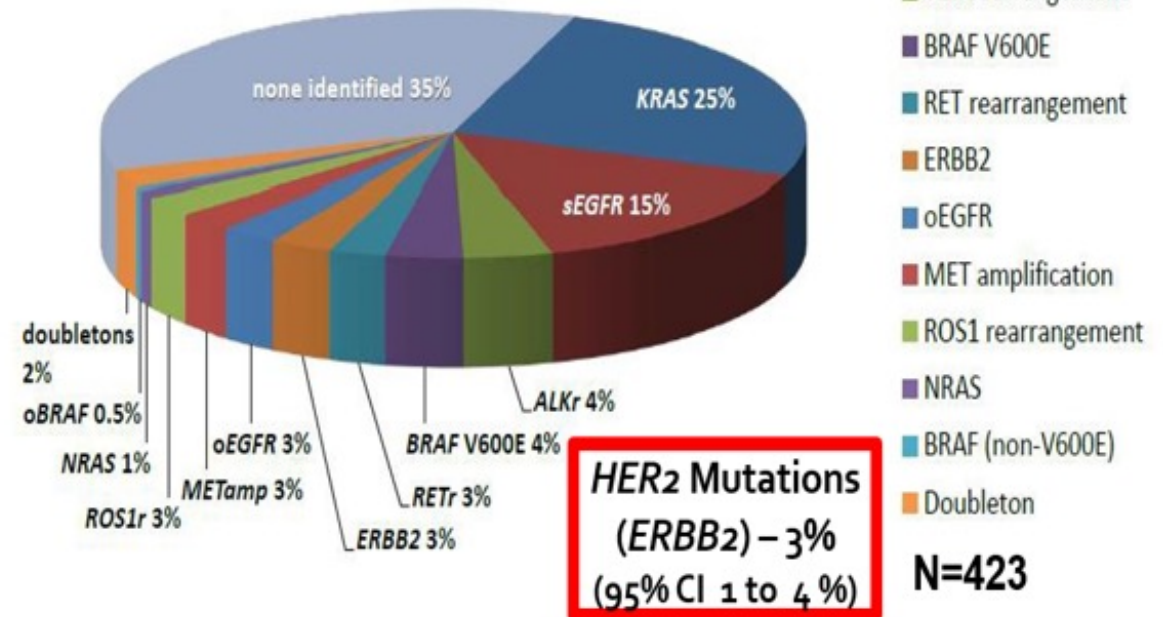
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# ERBB2 Pathway

# HER2 in Lung Cancers

## Mechanisms Underlying HER2 Dependency in Lung Cancers

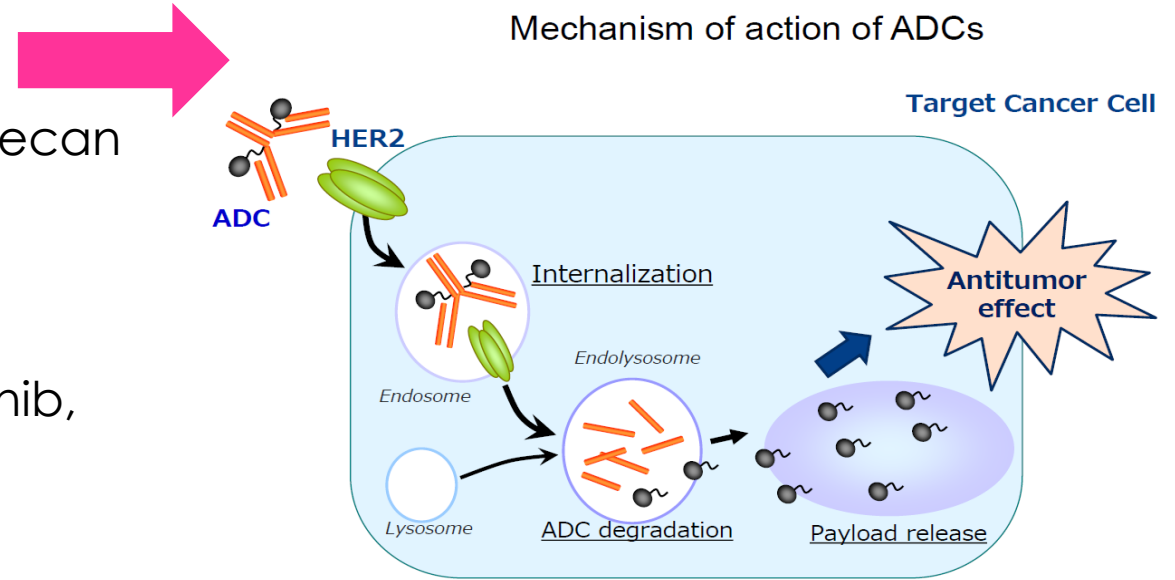
Available tissue and blood NGS panels adequately detect *HER2* mutations and amplification  
(Ross J Mol Diagn 2017)  
No need for additional IHC or FISH testing



DL Aisner et al. Clin Cancer Research 2018

# HER2 (ERBB2) in Lung Cancers

- ❑ Anti-HER2 Antibody Drug Conjugates (ADCs)
  - Ado trastuzumab emtansine, trastuzumab deruxtecan (DS8201A), trastuzumab duocarmazine, ZW-49, DHES0815A, RC48-ADC, A166
- ❑ HER2 Kinase Inhibitors
  - Afatinib, dacomitinib, neratinib, poziotinib, lapatinib, pyrotinib, AP32788
- ❑ Anti-HER2 MoAbs
  - Trastuzumab, pertuzumab, margetuximab (MGAH22)
- ❑ Anti-HER2 MoAb Bispecific Antibodies
  - GO40311 (HER2-CD3)
- ❑ Cytotoxic Chemotherapies
  - Pemetrexed, vinorelbine, paclitaxel
- ❑ Immune Checkpoint Blockade



# Phase 2 Trials in *HER2*-Mutant Lung Cancers

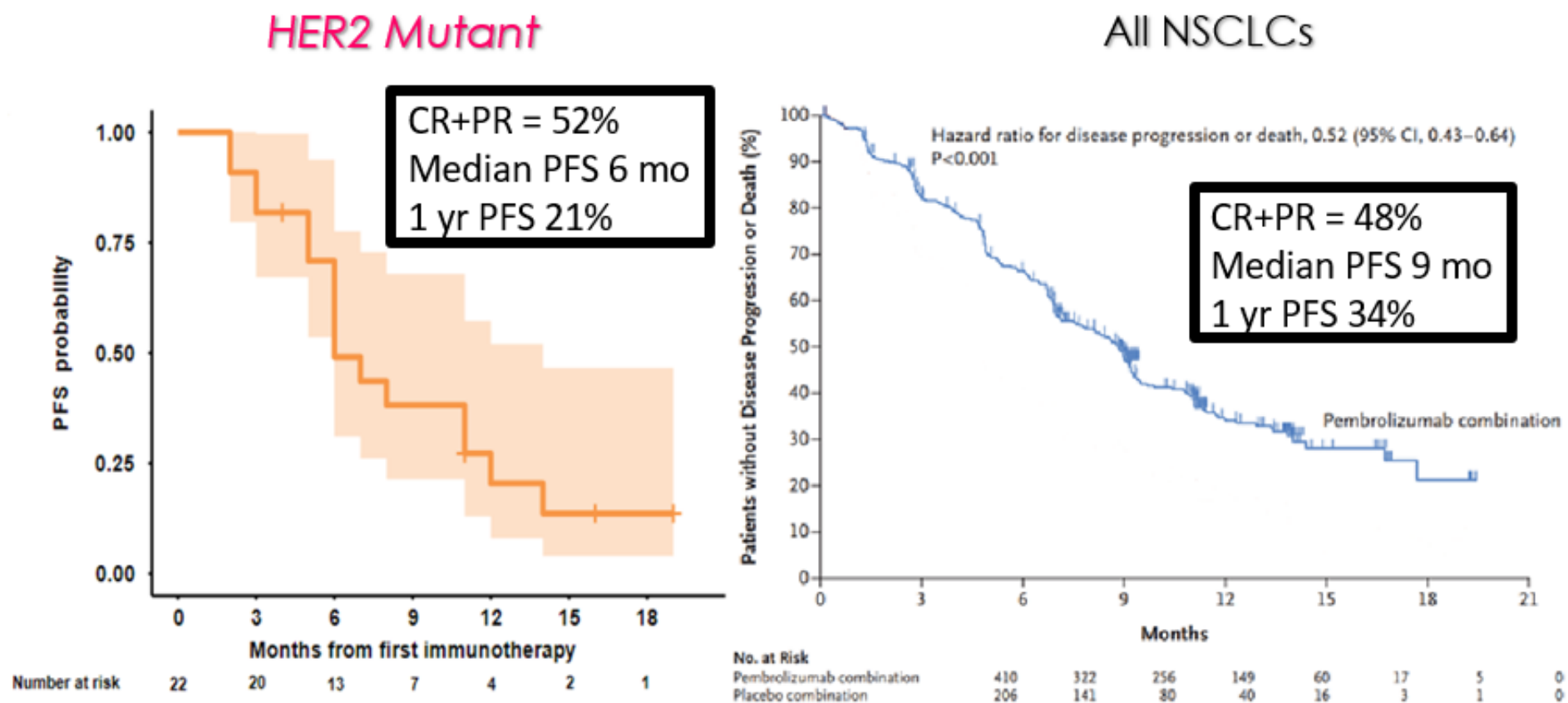
Drug Type and Reference†	No. of Patients	Agent or Agents	Objective Response	Disease Control	Median Progression-free Survival (95% CI)	Median Overall Survival (95% CI)
			<i>no. of patients (%)</i>		<i>mo</i>	<i>mo</i>
<b>Pan-ErbB family TKIs</b>						
Kris et al. 2015	26	Dacomitinib	3 (12)	—	3 (2–4)	9 (7–21)
Hyman et al. 2018	26	Neratinib	1 (4)	11 (42)	5.5‡	—
Dziadziuszko et al. 2019	13	Afatinib	1 (8)	7 (54)	3.7 (1.4–8.1)§	12.9 (3.7–NR)§
Wang et al. 2019	15	Pyrotinib	8 (53)	11 (73)	6.4 (1.6–11.2)	12.9 (2.1–23.8)
Zhou et al. 2020	60	Pyrotinib	18 (30)¶	51 (85)	6.9 (5.5–8.2)	14.4 (12.3–21.3)
<b>Selective HER2 TKIs</b>						
Liu et al. 2020	9	Tarloxotinib	2 (22)	6 (67)	—	—
Le et al. 2021	74	Poziotinib	26 (35)	61 (82)	5.5 (0.6–17.6)	—
Cornelissen et al. 2021	48**	Poziotinib	21 (44)	36 (75)	5.6 (0–20.2)	—
Elamin et al. 2021	30	Poziotinib	8 (27)	22 (73)	5.5 (4.0–7.0)	15 (9.0–NR)
<b>Trastuzumab</b>						
Hainsworth et al. 2018	14	Trastuzumab and pertuzumab	3 (21)	6 (43)	—	—
Mazieres et al. 2021	45	Trastuzumab, pertuzumab, and docetaxel	13 (29)	39 (87)	6.8 (4.0–8.5)	—
<b>Antibody–drug conjugates</b>						
Li et al. 2018 <sup>4</sup>	18	Trastuzumab emtansine	8 (44)	15 (83)	5 (3–9)	—
Li et al. 2021 <sup>6</sup>	91	Trastuzumab derux-tecan	50 (55)	84 (92)	8.2 (6.0–11.9)	17.8 (13.8–22.1)



Passaro *N Engl J Med* 2022

# Outcomes with Initial Chemoimmunotherapy

## HER2 Mutant vs All NSCLCs



Saalfeld. *J Thorac Oncol* 2021, Gandhi *N Engl J Med* 2018



# Open-Label, Randomized, Multicenter, Phase 3 Study Evaluating Trastuzumab Deruxtecan (T-DXd) as First-Line Treatment in Patients With Unresectable, Locally Advanced, or Metastatic Non-Small Cell Lung Cancer (NSCLC) Harboring *HER2* Exon 19 or 20 Mutations (DESTINY-Lung04)

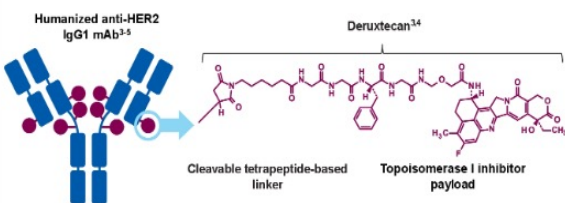
Bob T. Li, MD, PhD, MPH<sup>1</sup>; Myung-Ju Ahn, MD, PhD<sup>2</sup>; Koichi Goto, MD, PhD<sup>3</sup>; Julien Mazieres, MD<sup>4</sup>; Sukhmani K. Padda, MD<sup>5</sup>; William Nassib William Jr, MD<sup>6</sup>; Yi-Long Wu, MD<sup>7</sup>; Simon Dearden, MSc<sup>8</sup>; Alejandra Ragone, MD<sup>9</sup>; Natasha Viglianti, MSc<sup>8</sup>; Amaya Gascó Hernández, MD, PhD<sup>10</sup>

<sup>1</sup>Memorial Sloan Kettering Cancer Center, New York, NY, USA; <sup>2</sup>Samsung Medical Center, Sungkyunkwan University, Seoul, South Korea; <sup>3</sup>National Cancer Center Hospital East, Kashiwa, Japan; <sup>4</sup>Hôpital Larrey, Service de Pneumologie, Toulouse, France; <sup>5</sup>Samuel Oschin Cancer Center, Cedars-Sinai Medical Center, Los Angeles, CA, USA; <sup>6</sup>Hospital BP, a Beneficência Portuguesa de São Paulo, São Paulo, Brazil; <sup>7</sup>Guangdong Provincial People's Hospital, Guangzhou, Guangdong, China; <sup>8</sup>AstraZeneca Pharmaceuticals, Cambridge, UK; <sup>9</sup>AstraZeneca Pharmaceuticals, Mississauga, ON, Canada; <sup>10</sup>AstraZeneca Pharmaceuticals, Gaithersburg, MD, USA

## Background

- The standard of care for patients with metastatic NSCLC is guided by specific molecular characterization and includes chemotherapy, immunotherapy, chemoimmunotherapy, and oncogene-directed targeted therapies<sup>1,2</sup>
- Although *HER2*-targeted therapies have transformed the care of patients with breast and gastric cancers, there is currently no approved *HER2*-targeted therapy for NSCLC
- T-DXd is an antibody-drug conjugate composed of an anti-*HER2* antibody, a tetrapeptide-based cleavable linker, and a topoisomerase I inhibitor payload<sup>3,4</sup>

### Structure of T-DXd



T-DXd demonstrated durable and robust anticancer activity in pretreated (median, 2 prior lines) patients with unresectable or metastatic *HER2*-mutant NSCLC in the DESTINY-Lung01 trial<sup>6</sup>

- In DESTINY-Lung01, T-DXd demonstrated a confirmed ORR of 55%, median DOR of 9.3 months, median PFS of 8.2 months, and median OS of 17.8 months<sup>6</sup>
- Given the efficacy observed in later-line settings and the unmet need for targeted therapies in patients with *HER2*-mutant NSCLC, evaluating the efficacy of T-DXd vs standard of care in the first-line setting is important to determine the optimal treatment approach

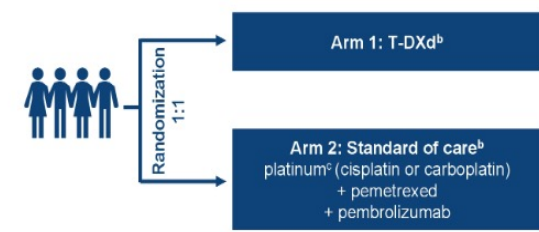
Here we describe DESTINY-Lung04, an open-label, randomized, phase 3 trial evaluating the efficacy and safety of first-line T-DXd in patients with unresectable, locally advanced, or metastatic NSCLC harboring *HER2* mutations

- For more information, please visit [ClinicalTrials.gov](https://ClinicalTrials.gov) (NCT05048797)

## Study Design and Population

### Patient population (N=264)

- Unresectable, locally advanced (not amenable to curative therapy), or metastatic nonsquamous NSCLC with *HER2* exon 19 or 20 mutations<sup>a</sup>
- Naive to systemic therapy in the locally advanced or metastatic setting
- No known other targetable oncogenic mutations/alterations

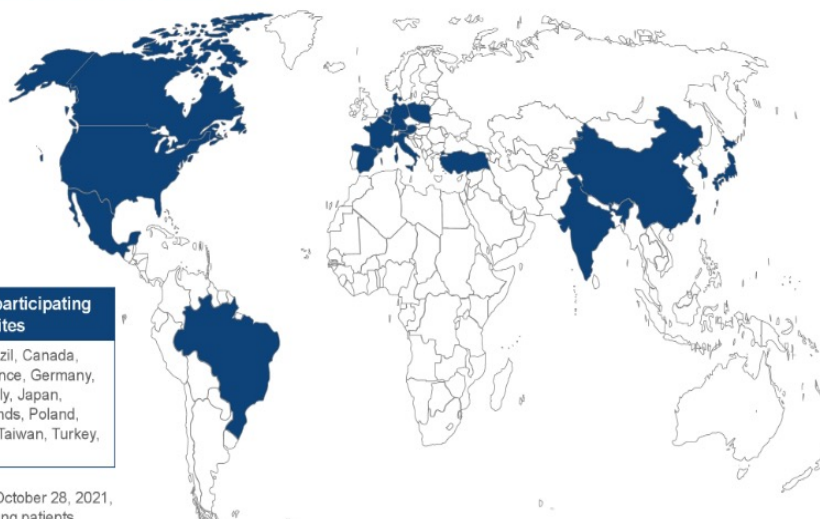


**Arm 1: T-DXd<sup>b</sup>**

**Arm 2: Standard of care<sup>b</sup>**  
platinum<sup>c</sup> (cisplatin or carboplatin) + pemetrexed + pembrolizumab

<sup>a</sup> *HER2* mutations may be detected in tissue or ctDNA.  
<sup>b</sup> Crossover is not permitted.  
<sup>c</sup> Investigator's choice of cisplatin or carboplatin.

### Countries With Enrollment Sites



#### Countries with participating study sites

Austria, Belgium, Brazil, Canada, China, Denmark, France, Germany, Hong Kong, India, Italy, Japan, Mexico, the Netherlands, Poland, South Korea, Spain, Taiwan, Turkey, United States

This study started on October 28, 2021, and is currently recruiting patients.

## Key Inclusion Criteria

- Age  $\geq 18$  years
- Locally advanced (not amenable to curative therapy) or metastatic NSCLC
- Histologically documented nonsquamous NSCLC with *HER2* mutation in exon 19 or 20 detected by tissue sequencing or plasma ctDNA (local or central testing)
- Naive to systemic therapy in the locally advanced or metastatic setting
- Left ventricular ejection fraction  $\geq 50\%$
- Measurable disease based on RECIST v1.1
- Adequate organ function, including cardiac, renal, and hepatic function, as defined in the protocol
- ECOG performance status of 0 or 1
- Tumor tissue available for central testing

## Key Exclusion Criteria

- Tumors with other known targetable mutations/alterations<sup>a</sup>
- Clinically active brain metastases (previously treated and asymptomatic brain metastases are allowed)
- Active autoimmune or inflammatory disorders
- Pleural effusion, ascites, or pericardial effusion that requires drainage
- Medical history of myocardial infarction within 6 months prior to randomization
- History of noninfectious ILD/pneumonitis that required steroids or current or suspected ILD/pneumonitis that cannot be ruled out by imaging at screening
- Lung-specific, intercurrent, clinically significant severe illness
- Contraindication to platinum-based doublet chemotherapy or pembrolizumab

<sup>a</sup> If routinely tested for approved available therapy, including, but not limited to, alterations to *EGFR* and *ALK* fusions.

## Key Study Endpoints

### 1° Primary endpoint

- Progression-free survival (PFS) by blinded independent central review (BICR)<sup>a,b</sup>

### 2° Secondary endpoints

- Overall survival (OS)<sup>b</sup>
- PFS by investigator<sup>a</sup>
- Overall response rate (ORR) by BICR and investigator<sup>a</sup>
- Duration of response (DOR) by BICR and investigator<sup>a</sup>
- Time to second progression<sup>c</sup> or death
- Landmark PFS at 12 months by BICR and investigator<sup>a</sup>
- Landmark OS at 24 months
- CNS-PFS by BICR<sup>a</sup>
- Safety and tolerability<sup>d</sup>
- Pharmacokinetics, including serum concentrations of T-DXd, total anti-*HER2* antibody, and Dx<sup>d</sup>
- Immunogenicity assessed by presence of anti-drug antibodies for T-DXd
- Patient-reported pulmonary symptoms<sup>e</sup>
- Patient-reported tolerability<sup>f</sup>

<sup>a</sup> According to RECIST version 1.1.  
<sup>b</sup> Endpoint statistically controlled in the multiple testing procedure.  
<sup>c</sup> Assessed by the investigator per local standard clinical practice.  
<sup>d</sup> Assessed per the occurrence of AEs, SAEs, and changes from baseline in laboratory parameters, vital signs, ECOG, and ECHO/MUGA scan results.  
<sup>e</sup> Assessed using the NSCLC-SAQ.  
<sup>f</sup> Described using symptomatic AEs (assessed via the PRO-CTCAE and items from the EORTC library), overall side-effect bother (assessed via the PGI-TT), and physical function (assessed via the EORTC QLQ-C30).

# Conclusions

- ❑ In my opinion, combination of Ami + Laz should be discussed for approval based on CHRYSALIS and CHRYSALIS-2 (Coh-A) data; this is a critical **Unmet Need in NSCLC!**
- ❑ Sunvozertinib showed comparable efficacy to standard therapies with comparable safety profile to other TKIs; Osi + Neci showed activity but lower than other agents.
- ❑ Based on the ORR, DCR and 1-yr OS DOR as well as comparable safety profile of adagrasib reported in the KRYSTAL study, NDA has been accepted and is under accelerated review for its approval.
- ❑ Confirmatory phase III trial KRYSTAL-12 is undergoing comparing adagrasib vs docetaxel.
- ❑ New RTK alterations have been found as mechanism of resistance to sotorasib in NSCLC and CRC, opening the concept of combining sotorasib with upstream inhibitors of RTK such as EGFR and SHP2.
- ❑ ADC looks as the most promising agents against HER2-mutant NSCLC; Trastuzumab deruxtecan is entering into a phase 3 front-line against chemo/io combo.



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