# A SINGLE-ARM, PHASE 2 STUDY OF AMIVANTAMAB (AMI), LAZERTINIB (L) AND PEMETREXED (P) FOR FIRST-LINE TREATMENT OF RECURRENT/METASTATIC NON-SMALL CELL LUNG CANCERS (NSCLCS) WITH EGFR MUTATIONS IN EXONS 19 OR 21 (EGFR 19/21): AMIGO-1 (LACOG0821)



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#### BACKGROUND

- Osimertinib (OSI) is the current first-line standard treatment for patients with NSCLCs with EGFR 19/21.
- Data suggest that combining EGFR tyrosine kinase inhibitor (TKI) with chemotherapy may be superior to a sequential approach of first-line TKI followed by salvage therapy.
- AMI is an EGFR/MET bi-specific antibody currently approved for NSCLCs with EGFR exon 20 insertions. AMI is also being evaluated for NSCLCs with EGFR 19/21 in combination chemotherapy with (MARIPOSA-2 study) +/- L after OSI progression.

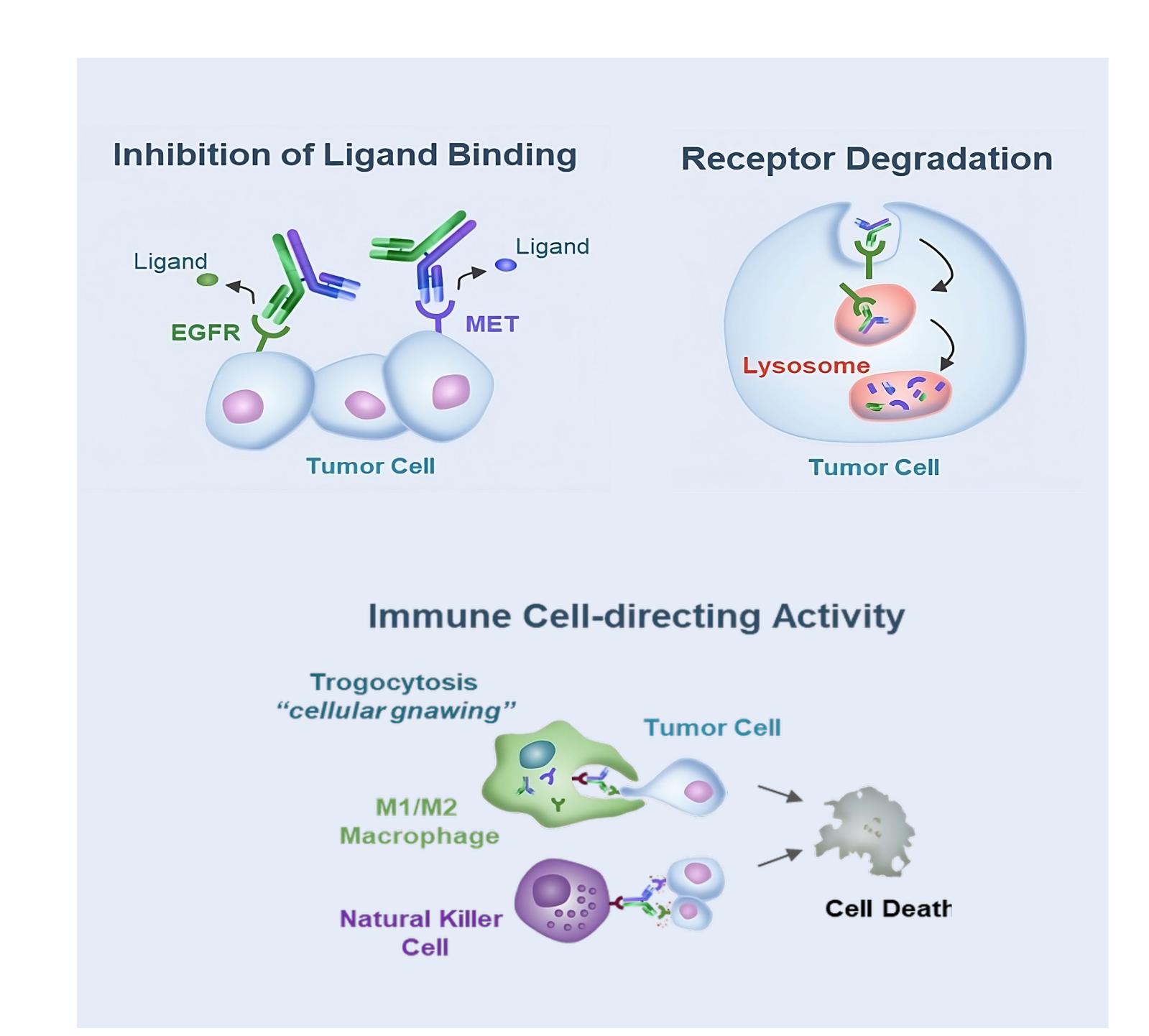


Figure 1. Mechanism of action of AMI and L. Cho, et al. ASCO 2021 (adapted).

#### STUDY HYPOTHESIS

In the first-line setting, the triplet regimen of AMI, combined with the 3rd generation irreversible TKI L, and P will improve progression-free survival (PFS) compared to historical controls, with an acceptable safety profile.

#### METHODS

- LACOG 0821 AMIGO 1 (NCT05299125) is a single-arm, phase 2, multicenter trial.
- Recruitment began in May 2023 in 11 research sites in Brazil (Figure 2). By September 2023, 20 patients have been included.

18-month PFS **Primary Endpoint:** 

Secondary Endpoints: ORR, OS, 24-month PFS, PFS after first subsequent therapy, Performance Status at PFS1 and PFS2,

Post-progression Therapies, Intracranial PFS, Patient-reported Outcomes, Safety and Toxicity

Predictive biomarkers of response/survival **Exploratory Endpoints:** 

#### **ELIGIBILITY CRITERIA**

- Age ≥ 18 Years
- NSCLC, histologically confirmed
- Recurrent/metastatic disease
- Treatment-naïve
- EGFR mutations (exon 19 deletion or exon 21 L858R)

(N=49)

## CYCLE 1 (21-days)

## **Amivantamab**

1400 mg (1750 mg if  $\ge$  80 kg)

on day 1, 8 and 15

## Lazertinib

240 mg PO daily

## Pemetrexed

500 mg/m<sup>2</sup> IV on day 1

## Amivantamab

1400 mg (1750 mg if ≥ 80 kg) IV on day 1

CYCLE 2

(21-days)

### Lazertinib

240 mg PO daily

## Pemetrexed

500 mg/m<sup>2</sup> IV on day 1

## CYCLES 3 + (21-days)

### **Amivantamab**

1750 mg (2100 mg if ≥ 80 kg) IV on day 1

## Lazertinib

240 mg PO daily

Pemetrexed

500 mg/m<sup>2</sup> IV on day 1 Until PD or unacceptable toxicity

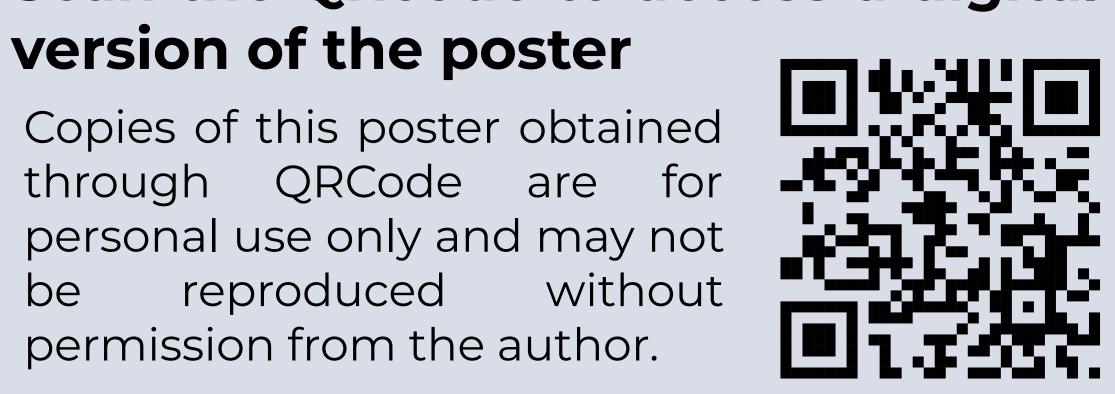
Figure 2. Study recruitment sites.

**LACOG 0821** AMIGO-1

Sites

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#### Statistical Considerations

 A one-group chi-square test with a type I error of 0.1 (one-sided) will have 80% power to detect the difference between the null hypothesis (18m-PFS of 50%, achieved with OSI alone) and the alternative hypothesis (18m-PFS of 65%) with a sample size of 49.

#### Conclusions

- AMIGO-1 is the first study to assess the triplet regimen of lazertinib, amivantamab, and pemetrexed as first-line treatment for NSCLCs with EGFR mutations.
- AMIGO-1 will provide benchmark results to be contrasted with the present standard of care and treatment combinations under development in phase 3 trials (eg. FLAURA2, MARIPOSA).