Evaluating the Effectiveness of Amivantamab Plus Lazertinib in CHRYSALIS-2 vs EGFR-TKI Monotherapy in a Matched Real-World Cohort of Patients With Atypical *EGFR*-Mutant Advanced NSCLC

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WHAT DO THESE RESULTS MEAN FOR INDIVIDUALS WITH NON-SMALL CELL LUNG CANCER (NSCLC)?

Individuals with NSCLC and atypical mutations in the epidermal growth factor receptor (*EGFR*) gene lived and remained on treatment longer when their first treatment was amivantamab plus lazertinib versus when they received EGFR-TKI treatments

WHAT WAS THE PURPOSE OF THIS STUDY?

- This study assessed clinical outcomes with amivantamab plus lazertinib as a first treatment compared with real-world EGFR-TKI treatments for patients with atypical *EGFR* mutations

WHO WAS IN THE STUDY AND HOW WAS IT CARRIED OUT?

- Outcomes from Cohort C (NSCLC with atypical *EGFR* mutations) of the CHRYSALIS-2 (NCT04077463) study of amivantamab plus lazertinib were compared with real-world outcomes of patients who received physician-selected EGFR TKIs. Statistical methods were used to help make the 2 populations more similar and allow for more balanced comparisons

Figure 1: Study design and participant characteristics

All study participants/real-world patients:

- ✓ Had advanced or metastatic NSCLC with an atypical *EGFR* mutation
- ✓ Had an ECOG PS score of 0 or 1
- ✓ Received an EGFR TKI or amivantamab plus lazertinib as their first treatment for NSCLC

Outcomes evaluated:
- Overall survival
- Time to treatment discontinuation

	Number of participants/ real-world patients	Median age	Percentage with spread of tumor to the brain at study start
Real-world cohort: EGFR TKI (after statistical balancing)	46	60 years	35%
CHRYSALIS-2 Cohort C: amivantamab + lazertinib	49	60 years	27%

ECOG PS, Eastern Cooperative Oncology Group performance status; EGFR, epidermal growth factor receptor; NSCLC, non-small cell lung cancer; TKI, tyrosine kinase inhibitor.

Before statistical balancing, the real-world cohort had 69 patients that received an EGFR TKI, with **osimertinib (49%)** and **afatinib (41%)** being the most common

WHAT WERE THE RESULTS?

Participants who received amivantamab plus lazertinib as their first treatment lived longer and stayed on their treatment longer before switching compared with real-world patients who received EGFR-TKIs 41% of participants treated with an EGFR TKI in the real-world setting died before receiving a second treatment, indicating a need for improved initial treatments

Figure 2: Longer overall survival

>70%

Participants who received amivantamab plus lazertinib lived longer and were >70% less likely to die compared with real-world patients who received EGFR TKIs

Percentage alive at 24 months

77% Amivantamab + lazertinib

EGFR TKIs

41% Osimertinib

55% Afatinib

EGFR, epidermal growth factor receptor; NSCLC, non-small cell lung cancer; TKI, tyrosine kinase inhibitor.

Figure 3: Longer time to treatment discontinuation

Participants who received amivantamab plus lazertinib were 4 times more likely to stay on treatment after 2 years compared with EGFR TKIs

41% Amivantamab + lazertinib

EGFR TKIs

3% Osimertinib

17% Afatinib

EGFR, epidermal growth factor receptor; TKI, tyrosine kinase inhibitor.

Glossary of terms

Atypical *EGFR* mutations	Changes in the *EGFR* gene that occur in only 5% to 10% of cases; mutations in the *EGFR* gene are common in NSCLC and can affect how the cancer responds to treatment	**Eastern Cooperative Oncology Group performance status (ECOG PS)**	A rating scale used to assess the extent of a patient's disease	**EGFR TKI**	A targeted treatment used to treat NSCLC by inhibiting the EGFR protein, which is involved in the growth and spread of cancer cells

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*AI was used in the preparation of these summaries.