First-Line Amivantamab-Chemotherapy vs Chemotherapy in NSCLC With *EGFR* Exon 20 Insertions: Overall Survival From PAPILLON

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

Combining the drug amivantamab with chemotherapy helped individuals with NSCLC whose tumors contained epidermal growth factor receptor (*EGFR*) exon 20 insertion mutations live longer compared with chemotherapy alone, with a median overall survival of 34.3 months. This is the longest median overall survival reported to date for individuals with NSCLC with *EGFR* exon 20 insertion mutations. Before amivantamab, median overall survival for individuals with this specific type of lung cancer was about 16 to 24 months

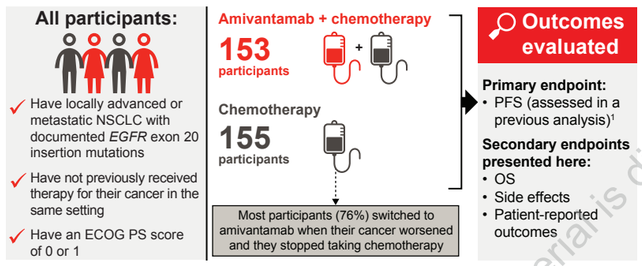
WHAT WAS THE PURPOSE OF THIS STUDY?

- This study aimed to find out if the combination of amivantamab plus chemotherapy worked better than chemotherapy alone for treating individuals who had NSCLC with a specific mutation known as *EGFR* exon 20 insertion
- Researchers wanted to determine whether this combination helped participants live longer and improved their quality of life compared with the usual treatment for this condition

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

- PAPILLON (NCT04538664) was conducted by randomly assigning participants to 1 of 2 groups: the first group received a combination of amivantamab plus chemotherapy and the second group received only chemotherapy
- The main goal of the analysis presented was to evaluate the overall survival of participants who received amivantamab plus chemotherapy compared with chemotherapy alone
- Participants in the chemotherapy group who stopped treatment when their cancer worsened could switch to receiving amivantamab

Figure 1: PAPILLON study design



ECOG PS, Eastern Cooperative Oncology Group performance status; EGFR, epidermal growth factor receptor; NSCLC, non-small cell lung cancer; OS, overall survival; PFS, progression-free survival.

WHAT WERE THE RESULTS?

The study found that amivantamab plus chemotherapy helped participants live longer compared with chemotherapy alone and delayed the worsening of their cancer symptoms. Side effects with amivantamab plus chemotherapy were consistent with prior reports,[1] with no new side effects observed. Amivantamab plus chemotherapy demonstrated the longest median overall survival reported to date for individuals with NSCLC with *EGFR* exon 20 insertion mutations

Figure 2: Overall survival

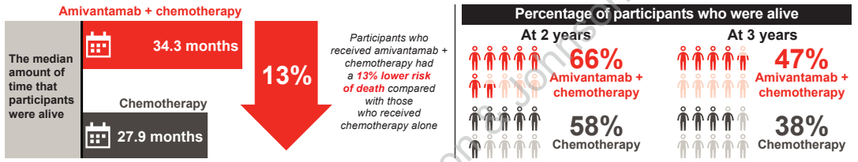


Figure 3: Overall survival if participants in the chemotherapy group did not go on to receive amivantamab after their cancer worsened

76% of participants in the chemotherapy group who stopped treatment because their cancer worsened switched to amivantamab

Figure 4: Most common side effects with amivantamab + chemotherapy

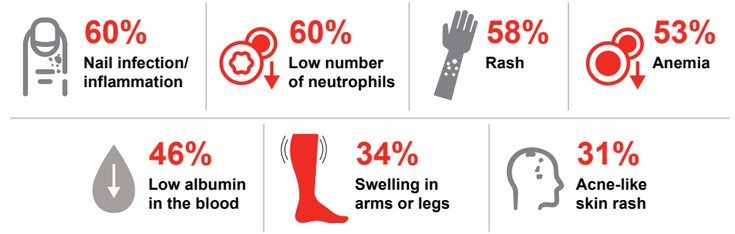


Figure 5: Patient-reported outcomes

Cancer symptoms took longer to worsen with amivantamab + chemotherapy compared with chemotherapy alone

Glossary of terms

ECOG PS	A rating scale used to assess the effect a patient's disease has on daily activities; a score of 0 or 1 shows good daily functioning	**EGFR**	A protein that relays chemical signals that tell the cell to grow, divide, spread, and survive; mutations in the gene for this protein can cause uncontrolled cell growth and may lead to cancer	**Exon 20 insertion**	An alteration to the DNA sequence of *EGFR* that changes the function of the protein. In the case of exon 20 insertion mutations, DNA was inserted in the part of the *EGFR* gene called exon 20	**Locally advanced or metastatic**	Cancer that has grown and progressed in one place or has spread
Median	The middle value in a set of numbers	**Neutrophil**	A white blood cell that helps fight infection	**OS**	The length of time after starting treatment that a participant is alive	**PFS**	The length of time after starting treatment that a participant lives without the cancer getting worse

REFERENCE:
1. Zhou C, et al. *N Engl J Med*. 2023;389(22):2039–2051.

***AI was used in the preparation of these summaries.**