

Patient-reported outcomes and time to symptomatic progression from PAPILLON: amivantamab plus chemotherapy vs chemotherapy as first-line treatment of *EGFR* exon 20 insertion-mutated advanced NSCLC

Luis Paz-Ares, Remi Veillon, Margarita Majem, Caicun Zhou, Ke-Jing Tang, Sang-We Kim, Gary Richardson, Nicolas Girard, Rachel E. Sanborn, Aaron S. Mansfield, Keunchil Park, Julia Schuchard, Joris Diels, Jan Sermon, Archan Bhattacharya, Patricia Lorenzini, Honeylet Wortman-Vayn, Roland E. Knoblauch, Trishala Agrawal, Mahadi Baig, Akira Ono, Joshua K. Sabari,

Background

Epidermal growth factor receptor (*EGFR*) exon 20 insertions (Ex20ins) are the third most common type of *EGFR* mutation, occurring in up to 12% of *EGFR*-mutated non-small cell lung cancers (NSCLC). Ex20ins-mutated NSCLC can be resistant to most approved tyrosine kinase inhibitors (TKIs). The Phase III PAPILLON trial (NCT04538664) demonstrated that amivantamab plus chemotherapy significantly improves progression-free survival (PFS) compared to chemotherapy alone, leading to its approval as a first-line treatment for patients with Ex20ins NSCLC. PAPILLON further evaluated patient-reported outcomes (PROs) and time to symptomatic progression (TTSP).

Method

The open-label, multicenter trial randomized 308 treatment-naïve patients with advanced or metastatic NSCLC harboring Ex20ins to receive either amivantamab plus carboplatin-pemetrexed (n = 154) or chemotherapy alone (n = 154). TTSP was defined as the time to onset or worsening of lung cancer-related symptoms necessitating treatment change or clinical intervention, or death. PROs were assessed using the PROMIS PF8c and EORTC QLQ-C30.

Results

At 12 months, 77 % of patients in the amivantamab-chemotherapy arm remained free of symptomatic progression versus 60 % in the chemotherapy arm (HR, 0.67; 95 % CI, 0.46–0.98; p = 0.04). Physical functioning and global health status PROs were maintained in both arms, with a higher proportion of patients treated in the amivantamab-chemotherapy arm reporting stable or improved quality of life at 6 and 12 months.

Conclusion

Amivantamab plus chemotherapy significantly delays symptomatic progression without compromising health-related quality of life, reinforcing its role as a first-line treatment for Ex20ins-mutated NSCLC