Capmatinib for METex14 non-small cell lung cancer patients: results of a real-world study

Marlon Ferreira1, Laurent Greillier1, Aurélie Swafluz2, Annie-Claire Toffart1, Judith Rainbold1, Valérie Gounant1, Sebastien Couraud2, Gonzague De Chadoff2, Sylvie Friard2, José Hureaux2, Luc Odier1, Marie Wilsz3, Pascale Missy4, Franck Morin5, Virginie Westeel1, Alexis B. Cortot5,6

1CHRU Tours, Tours, France; 2Assistance Publique–Hôpitaux de Marseille, Am Marseille University, Marseille, France; 3Department of Medical Oncology, Centre Lucien Bebert, Lyon, France; 4Pulmonology Unit, Grenoble University Hospital, Grenoble, France; 5Department of Medical Oncology, ICD-Centre René Gauducheau, St-Herblain, France; 6Gastroenterology and Digestive Surgery Department, Clinique Pasteur. Data on file; 7Lyon Sud Hospital, Papa-Mère France; 9Centre Hospitalier de l'Est de l'Indre et Loire, Tours, France; 10Centre Hospitalier de l'Est de l'Indre et Loire, Tours, France; 11Centre Hospitalier de l'Est de l'Indre et Loire, Tours, France; 12Centre Hospitalier de l'Est de l'Indre et Loire, Tours, France.

Background

MET exon 14 skipping (METex14) mutations are detected in 3% of non-small cell lung cancer (NSCLC) patients. A recent clinical trial reported robust activity of capmatinib, a new generation MET tyrosine kinase inhibitor, in METex14 NSCLC (Wolf et al, N Engl J Med, 2020). Nevertheless, its efficacy and safety need to be confirmed in the real-world setting.

Methods

We conducted a retrospective multicenter study including all NSCLC patients who received at least one dose of capmatinib as part of the French expanded access program (EAP). In this EAP, capmatinib was given to patients who had failed or were not eligible to standard treatments. Patients for whom METex14 was a mechanism of acquired resistance to other targeted therapies were excluded.

Study flowchart

Baseline characteristics

Previous lines of treatment

Brain metastasis

Safety

Efficacy of capmatinib: TTF

Crizotinib exposure before capmatinib

Performance status

Conclusions

This real-world study confirms effectiveness of capmatinib in METex14 NSCLC patients, including those who have been pretreated, with poor PS or brain metastasis. These results highlight the need for early detection of METex14 mutations, given the availability of potent targeted therapies.

*Corresponding author: marlon.ferreira@chu-tours.fr

Study sponsored by IFCT

Collaboration/Funding: Novartis

ClinicalTrials.gov Identifier: NCT01514344

1106P-ESMO 2022