

1. The role of angiogenesis inhibitors associated with tyrosine kinase inhibitors in the first-line treatment for EGFR-mutated advanced lung cancer

El papel de los inhibidores de la angiogénesis asociados con los inhibidores de la tirosina quinasa en el tratamiento de primera línea para el cáncer de pulmón avanzado con mutación EGFR

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LINK: <https://pubmed.ncbi.nlm.nih.gov/38346461/>

REVISTA: Review Crit Rev Oncol Hematol. 2024 Feb 10:104294. doi: 10.1016/j.critrevonc.2024.104294. Online ahead of print.

ABSTRACTO: Tyrosine kinase inhibitors (TKIs) are the standard treatment for epidermal growth factor receptor mutant (EGFRm) advanced non-small cell lung cancer (NSCLC). Combining TKIs with an angiogenesis inhibitor has shown promise in pre-clinical studies. A systematic search of clinical trials found that combining erlotinib (a first-generation TKI) with bevacizumab or ramucirumab (angiogenesis inhibitors) improved progression-free survival (PFS) in EGFRm advanced NSCLC patients compared to TKI alone. However, no significant benefit in overall survival (OS) was observed in trials. Similar efficacy was seen in patients with specific EGFR mutations. Third generation TKIs were used as second-line therapy for patients with the T790M mutation. The combination treatment was associated with a higher incidence of severe adverse events. Overall, combining erlotinib or another TKI with an angiogenesis inhibitor is a safe and effective alternative for first-line treatment in EGFRm advanced NSCLC, particularly in countries without access to osimertinib and for patients with the EGFR L858R mutation.

2. CNS Efficacy of Osimertinib With or Without Chemotherapy in Epidermal Growth Factor Receptor-Mutated Advanced Non-Small-Cell Lung Cancer

Eficacia del osimertinib en el SNC con o sin quimioterapia en el cáncer de pulmón de células no pequeñas avanzado con mutación del receptor del factor de crecimiento epidérmico

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ABSTRACTO: Purpose: We report CNS efficacy of first-line osimertinib plus chemotherapy versus osimertinib monotherapy in patients with epidermal growth factor receptor (EGFR)-mutated advanced non-small-cell lung cancer (NSCLC) from the phase III FLAURA2 study according to baseline CNS metastasis status. Methods: Patients were randomly assigned to osimertinib plus platinum-pemetrexed (combination) or osimertinib monotherapy until disease progression or discontinuation. Brain scans were performed in all patients at baseline and progression and at scheduled assessments until progression for patients with baseline CNS metastases; scans were assessed by

neuroradiologist CNS blinded independent central review (BICR). Results: On the basis of baseline CNS BICR, 118 of 279 (combination) and 104 of 278 (monotherapy) randomly assigned patients had \geq one measurable and/or nonmeasurable CNS lesion and were included in the CNS full analysis set (cFAS); 40 of 118 and 38 of 104 had \geq one measurable target CNS lesion and were included in the post hoc CNS evaluable-for-response set (cEFR). In the cFAS, the hazard ratio (HR) for CNS progression or death was 0.58 (95% CI, 0.33 to 1.01). In patients without baseline CNS metastases, the HR for CNS progression or death was 0.67 (95% CI, 0.43 to 1.04). In the cFAS, CNS objective response rates (ORRs; 95% CI) were 73% (combination; 64 to 81) versus 69% (monotherapy; 59 to 78); 59% versus 43% had CNS complete response (CR). In the cEFR, CNS ORRs (95% CI) were 88% (73 to 96) versus 87% (72 to 96); 48% versus 16% had CNS CR. Conclusion: Osimertinib plus platinum-pemetrexed demonstrated improved CNS efficacy compared with osimertinib monotherapy, including delaying CNS progression, irrespective of baseline CNS metastasis status. These data support this combination as a new first-line treatment for patients with EGFR-mutated advanced NSCLC, including those with CNS metastases.

1. Evaluation of a risk-sharing agreement for atezolizumab treatment in patients with non-small cell lung cancer: a strategy to improve access in low-income countries

Evaluación de un acuerdo de reparto de riesgos para el tratamiento con atezolizumab en pacientes con cáncer de pulmón de células no pequeñas: una estrategia para mejorar el acceso en países de bajos ingresos

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ABSTRACTO: Background: Using immune checkpoint inhibitors (IO) is a promising approach to maximize clinical benefits for patients with non-small cell lung cancer (NSCLC). PD-L1 expression serves as a predictive factor for treatment outcomes with IO. However, the high cost of this treatment creates significant barriers to access. Substantial evidence demonstrates the sustained clinical benefits experienced by patients who respond to immunotherapy. While IOs show promise in NSCLC treatment, their high cost poses access barriers. Aim: This study focused on a prospective cost analysis conducted at a high-specialty health facility to assess the economic implications of implementing a risk-sharing agreement (RSA) for atezolizumab in NSCLC. Methods: The study included 30 patients with advanced NSCLC, with the pharmaceutical company funding the initial cycles. If patients responded, a government program covered costs until disease progression. Results: A median progression-free survival of 4.67 months across populations, rising to 9.4 months for responders. The 2-year overall survival rate for the response group was 64%, significantly higher than for non-response. Without an RSA, a total treatment cost of \$881 859.36 (\$29 395.31/patient) was reported, compared to \$530 467.12 (\$17 682.24/patient) with an RSA, representing a 40% cost reduction. In responders, the average cost per year of life per patient dropped by 22%. Risk-sharing, assessed through non-parametric tests, showed a statistically significant difference in pharmacological costs ($P < .001$). Conclusion: Implementing RSAs can optimize resource allocation, making IO treatment more accessible, especially in low-income countries.