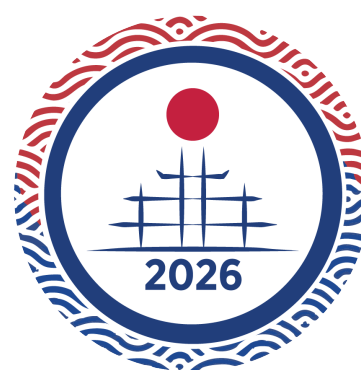
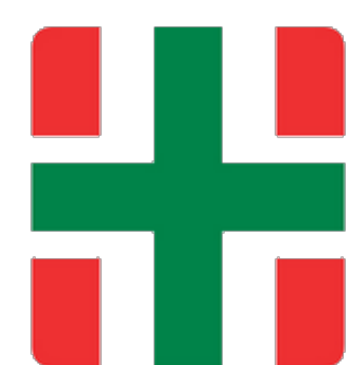




INTRODUCTION

Activating mutations in the epidermal growth factor receptor (EGFR) are present in 15–20% of non-small cell lung cancer (NSCLC), most commonly exon 19 deletions and exon 21 L858R. Osimertinib has improved outcomes and is standard first-line treatment. However, most patients develop resistance mechanisms. Real-world evidence from Latin America remains limited, particularly regarding access to molecular reassessment after progression. This study evaluated clinical outcomes, resistance mechanisms, and access to post-progression management.

METHODS

Design:

- Retrospective
- Patients with advanced EGFR-mutated NSCLC treated with osimertinib at a single tertiary center in Argentina.
- Clinical characteristics, resistance mechanisms, access to re-biopsy, and subsequent treatments were collected.
- Survival outcomes included progression-free survival (PFS), overall survival (OS), and second progression-free survival (PFS2), estimated using Kaplan-Meier methods

DISCUSSION AND CONCLUSION

Efficacy outcomes

In this single cohort, outcomes with osimertinib were consistent with prior reports.

Access to re-biopsy and subsequent therapy

after progression was limited, with a low proportion of patients receiving second-line treatment.

PFS2

This was associated with a short PFS2, underscoring the need to improve access to molecular reassessment and post-progression treatment strategies in routine clinical practice

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RESULTS

- 93 patients were included.
- Median age was 71 years (IQR 65-78); 74% were female, 70% were people with no smoking history, and 97% had ECOG 0-1.
- EGFR alterations included exon 19 deletions (56%) and exon 21 L858R (38%).
- Brain metastases were present in 30% at diagnosis.
- Median PFS was 18 months and median OS was 24 months.
- Disease progression occurred in 60% of patients (n=56). Among them, 45% (n=22) underwent re-biopsy.
- Identified resistance mechanisms included small cell transformation (n=2), on-target EGFR mutations (n=3), MET amplification (n=1), HER2 amplification (n=1), KRAS G12C (n=1), and BRAF mutation (n=1). Only 34% (n=19) of patients received second-line treatment. Most received chemotherapy; one patient with small cell transformation received chemoimmunotherapy. Two patients were enrolled in clinical trials.
- Median PFS2 was 5 months

Acquired Resistance Mechanisms at Progression on Osimertinib

