Metastatic Non-Small Cell Lung Cancer With EGFR Mutations: Treatment Patterns and Outcomes From a Systematic Literature Review

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PURPOSE
To identify and summarize the current treatment patterns and outcomes in EGFR-mutated NSCLC

CONCLUSIONS
Treatment options after third-generation EGFR TKIs remain limited, and, with no standard of care in later lines of therapy, patient outcomes are suboptimal.

- In the second-line setting, PBO- and POB-based regimens have only demonstrated an mPFS benefit of ~5 months.
- In the third-line setting, the benefit of salvage regimens (eg, chemotherapy regimens, other EGFR TKIs, bevacizumab + carboplatin + paclitaxel; pemetrexed; gemcitabine, ...) is ~6 months or less, with mPFS below 3 months.
- Safety findings were in line with what has been reported in literature, eg, EGFR TKIs generally have fewer serious adverse events than standard chemotherapy.

The poor outcomes seen in published trials, along with the current treatment patterns, have led to a need for new agents that may revolutionize the treatment of EGFR-mutated metastatic NSCLC.

ABSTRACT
EGFR TKIs are FDA-approved for the treatment of EGFR-mutated NSCLC, with increasing use emerging in the first-line setting with the emergence of IMT inhibitors. This review describes the current landscape of treatment options for patients with EGFR-mutated NSCLC in all lines of care, with a focus on the second and third lines of therapy.

METHODS
A 2-step process was employed to identify primary literature. In the first step, a title and abstract review of 1,619 records was conducted using a Delphi list of PICOTS eligibility criteria.

OUTLINE
1. Introduction
2. Methods
3. Results
4. Discussion
5. Conclusion

RESULTS (cont’d)

Figure 2: Geographic distribution of EGFRm studies (N = 134)

Table 3. Median progression-free survival in EGFRm NSCLC from RCTs and Observational studies

REFERENCES

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Figure 1: PRISMA flow diagram

Table 1. PCOIST eligibility criteria

Table 2: Patient characteristics by study type

Table 4. Discontinuation due to AEs in RCTs across regimens and all LOTs

Figure 3: Reported raw breakdowns in international RCTs

RESULTS

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