

## EFFECTIVENESS AND SAFETY OF OSIMERTINIB IN EGFR MUTATION-POSITIVE NON-SMALL-CELL LUNG CANCER WITH BRAIN METASTASES : A RETROSPECTIVE OBSERVATIONAL STUDY

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### Background and importance

Non-small cell lung cancer (NSCLC) represents 80-90% of all lung malignancies. Osimertinib has demonstrated significant antitumor activity in treatment of advanced NSCLC harbouring EGFR mutations (1). However, real-world data are limited.

### Results

The study included 54 patients; 67% were women. The mean age was 71 years (range 60-78). 83% of patients were stage IV at diagnosis and 81% of study subjects showed metastatic disease at baseline, of which 35% (19 patients) had developed brain metastases.

The overall population and subgroup with brain metastases had the same median PFS of 4 months while they had an OS of 16 months and 21 months, respectively ( $p < 0.001$ ).

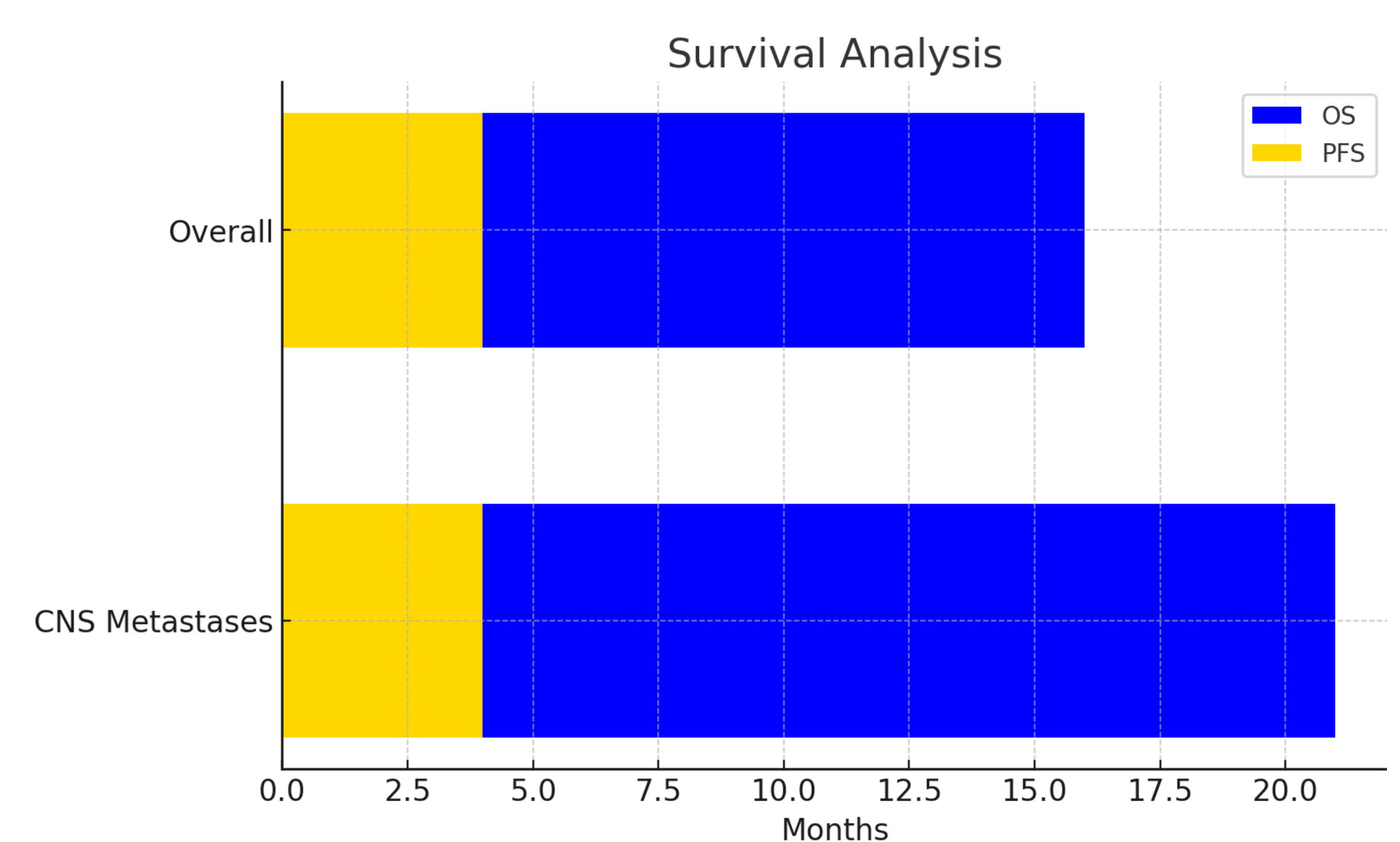
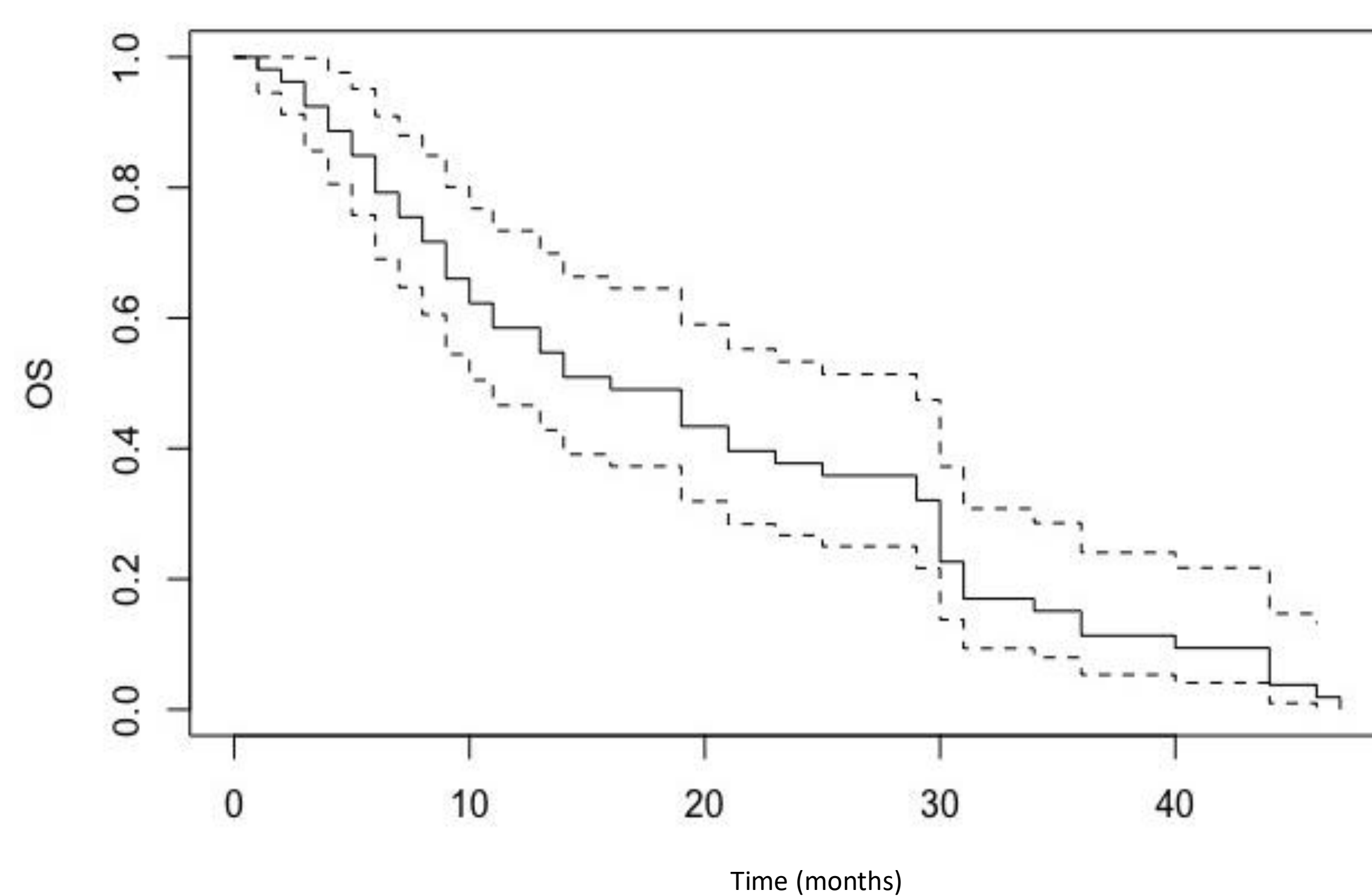
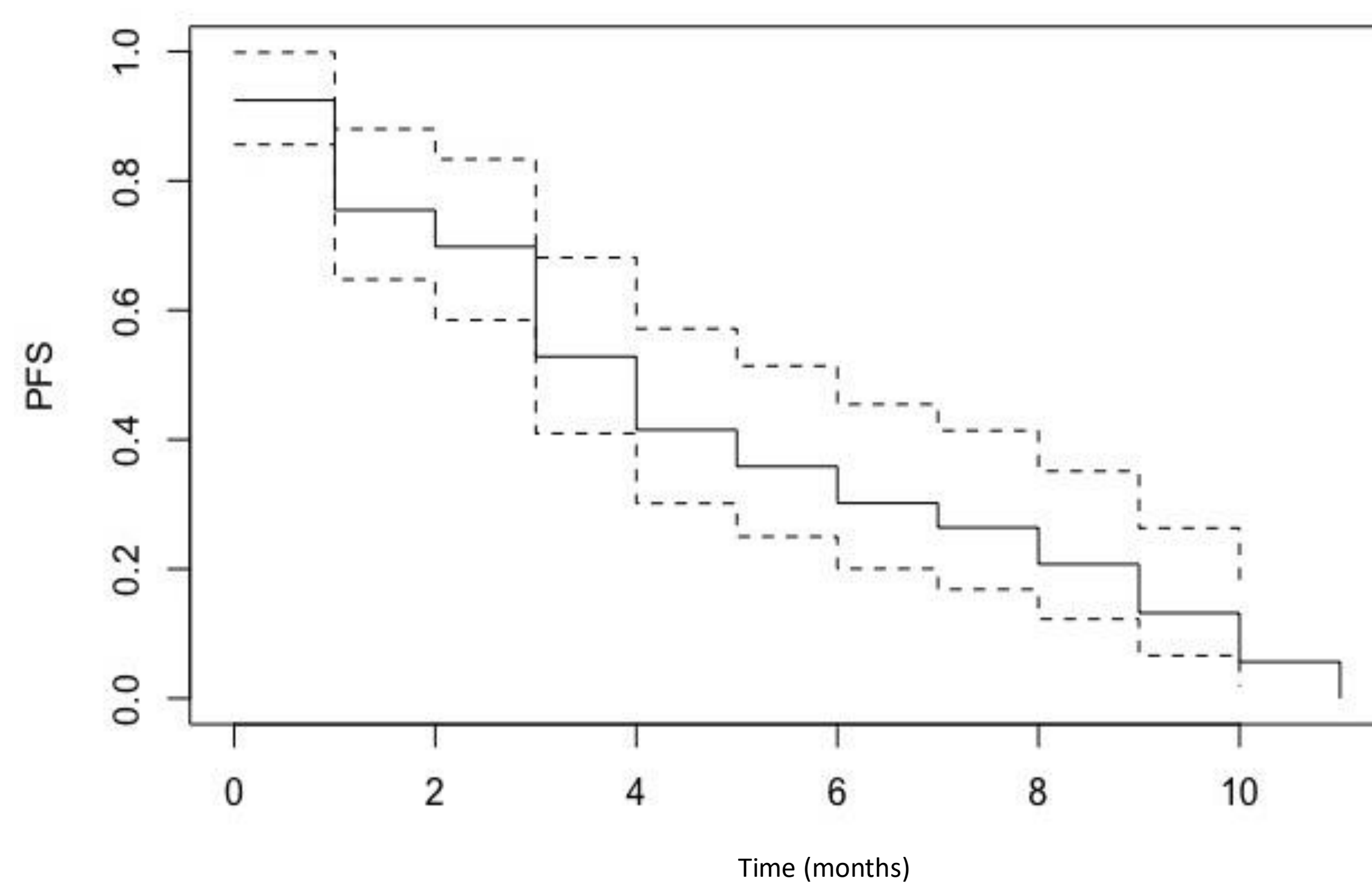
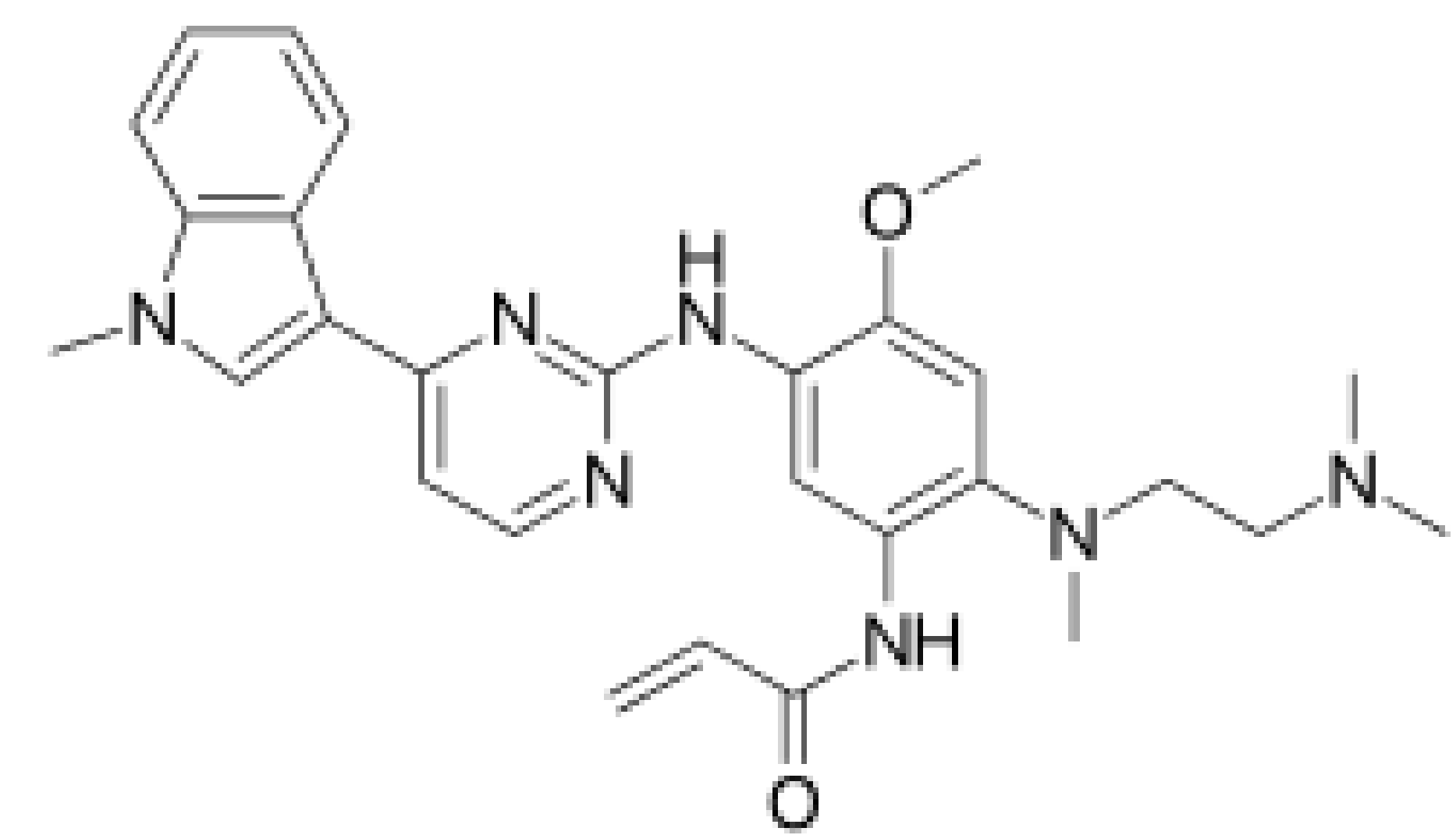
Furthermore, 64% of patients exhibited an ECOG performance status of grade 0, 30% grade 1, 4% grade 2, and 2% grade 3. Of the 54 patients, 9% exhibited a complete response, 63% demonstrated a partial response, 15% displayed stable disease, 5.6% exhibited disease progression, and 7.4% were not evaluable. ORR was 72%. Adverse effects were observed in 31% of patients. The most common adverse effects were diarrhoea (24.1%), asthenia (14.8%), nausea (9.3%) and anaemia (5.5%). Grade G3-G4 toxicity was observed in 3.7% of patients. No dose reduction or discontinuation was required.

### Aim and objectives

The objective of the study was to evaluate effectiveness and tolerability of Osimertinib in patients with EGFR mutation positive NSCLC.

### Material and methods

A retrospective analysis of the medical records of 54 patients treated with Osimertinib during the period between May 2018 and June 2023 was conducted. The outcomes considered were Best Response (BR), Progression Free Survival (PFS), Overall Survival (OS), Overall response rate (ORR) and toxicity. The variables considered were age, gender and performance status according to ECOG (Eastern Cooperative Oncology Group). The efficacy was assessed using the Kaplan-Meier method in terms of PFS and OS. Adverse effects were collected and classified in accordance with the Common Terminology Criteria for Adverse Events (CTCAE) scale v5.0.



### Conclusion and relevance

Osimertinib was demonstrated to be an effective and well-tolerated treatment for non-smallcell lung cancer, in the overall population and in the subpopulation with brain metastases.

### References and/or acknowledgements

(1) Popat S, Ahn MJ, Ekman S, Leighl NB, et al. Osimertinib for EGFR-Mutant Non-Small-Cell Lung Cancer Central Nervous System Metastases: Current Evidence and Future Perspectives on Therapeutic Strategies. *Target Oncol.* 2023 Jan

