

EP12.17: Factors Associated with One-Year Survival in EGFR-Mutant Lung Adenocarcinoma on EGFR-TKI

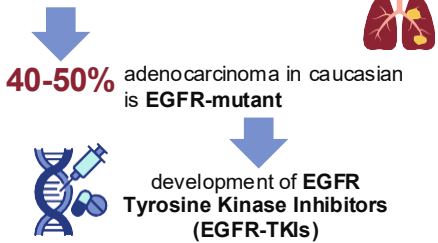
Juwita ND¹, Faisal HKP¹, Samoedro E¹, Putra AC¹, Andarini SL¹, Zaini J¹, Syahrudin E¹

¹Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, Universitas Indonesia, Persahabatan Hospital, Jakarta, Indonesia

Correspondence: nourmadara@gmail.com

INTRODUCTION

Lung cancer remains the leading cause of cancer-related mortality worldwide



real-world data regarding the survival rates and clinical outcomes specifically within the Indonesian demographic remains limited

METHODS

Design:

A retrospective cohort study between May 30, 2024, and March 5, 2026

Inclusion Criteria:

- Histologically confirmed of lung adenocarcinoma with EGFR-mutation
- Initiated treatment with any generations of EGFR-TKI

Exclusion Criteria:

- Incomplete medical records
- Dual primary malignancies

Data Collection:

- Comprehensive clinical data were retrospectively extracted from EMR

Statistical Analysis:

- Survival analysis: Kaplan–Meier survival curves at 6, 9, and 12 months
- Prognostic factors: cox proportional hazards regression model

RESULTS



A total of **32 patients** were included in the cohort.

Mean age

59.65 ± 8.88 years

Gender

56.3% female

Smoking

59.4% non-smoker

Performance status

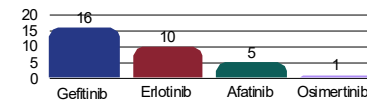
1.00 (0.00 – 2.00)

EGFR Mutation

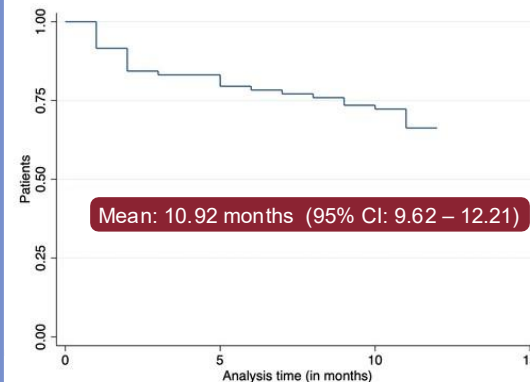
Exon 21 L858R
50%

Exon 19 deletion
50%

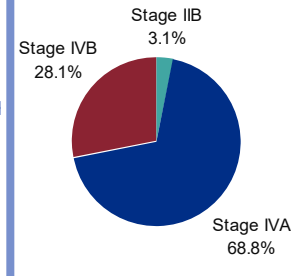
EGFR-TKIs



Overall survival



Lung cancer stage



Metastasis

96.9% present with metastasis

28 pleural, 6 liver, 1 brain

Prognostic Factors

Variables	OR (95%CI)	P-value
Age	1.003 (0.872-1.153)	0.966
Gender	0.349 (0.011-10.611)	0.545
Smoking history	0.111 (0.003-4.893)	0.255
Metastasis	0.768 (0.000-∞)	1.000
Lung cancer stage	0.635 (0.053-7.646)	0.720
Type of EGFR-TKI	0.452 (0.087-2.359)	0.346
EGFR mutation type	1.337 (0.071-25.183)	0.846

CONCLUSION

Patients with EGFR-mutant lung adenocarcinoma receiving EGFR-TKIs showed **favorable one-year survival (mean 10.92 months)**, with **no significant predictors of survival identified**.



DISCUSSION

Demographic Patterns

females (56.3%) → “asian phenotype” of EGFR-non-smokers (59.4%) mutant lung adenocarcinoma



majority presented with **advanced-stage, metastatic disease**

Heavy Tumor Burden

96.9% metastatic rate
68.8% stage IVA

TKI Efficacy

cohort achieved an **84.4% one-year survival rate**

clinical efficacy of targeted therapy for EGFR-mutant

Absence of statistically significant prognostic factors

Uniform therapeutic benefit

Socioeconomic & Insurance Realities

Only **3.1% usage of 3rd-generation osimertinib**

Limitation of Indonesian national health insurance (BPJS)

EGFR-TKIs in Indonesia

Gefitinib (250 mg daily)
Erlotinib (150 mg daily)
Afatinib (40 mg daily)



Osimertinib indications

- Patients with progression on 1st/2nd-generation EGFR-TKIs
- Confirmed T790M mutation

Study Limitations

- Small sample size (N = 32)
- Brief observation window (12 months)
- Retrospective nature of the study