

EP12.14: Survival Outcomes of First-Line Alectinib in Advanced ALK-Positive Non-Small Cell Lung Cancer: A Single-Center Study from Indonesia

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INTRODUCTION

ALK-positive NSCLC accounts for approximately 7.8% of NSCLC cases in Indonesia. Alectinib is a second-generation ALK tyrosine kinase inhibitor that has been covered by Indonesia's National Health Insurance program since 2023 and is therefore used as a first-line treatment for advanced ALK-positive NSCLC in Indonesia. However, Indonesian real-world data on survival outcomes with first-line alectinib remain scarce.

Aim

To evaluate overall survival and progression-free survival in patients with advanced ALK-positive NSCLC treated with first-line alectinib at a single center in Indonesia.

METHODS

Design and Population

A retrospective cohort study using medical records of patients diagnosed with advanced ALK-positive NSCLC who received first-line alectinib.

Setting and Period

Persahabatan National Respiratory Center Hospital, Jakarta, Indonesia. Patients who initiated alectinib between September 2023 and August 2025 were included, ensuring a minimum follow-up of one year. The final follow-up date was September 3, 2026.

Variables and Analysis

Demographic and clinical characteristics were analyzed descriptively. Treatment response was evaluated using Response Evaluation Criteria in Solid Tumors (RECIST) version 1.1 to assess objective response rate (ORR) and disease control rate (DCR). Progression-free survival (PFS) and overall survival (OS) were estimated using the Kaplan–Meier method.

REFERENCES & ACKNOWLEDGEMENTS



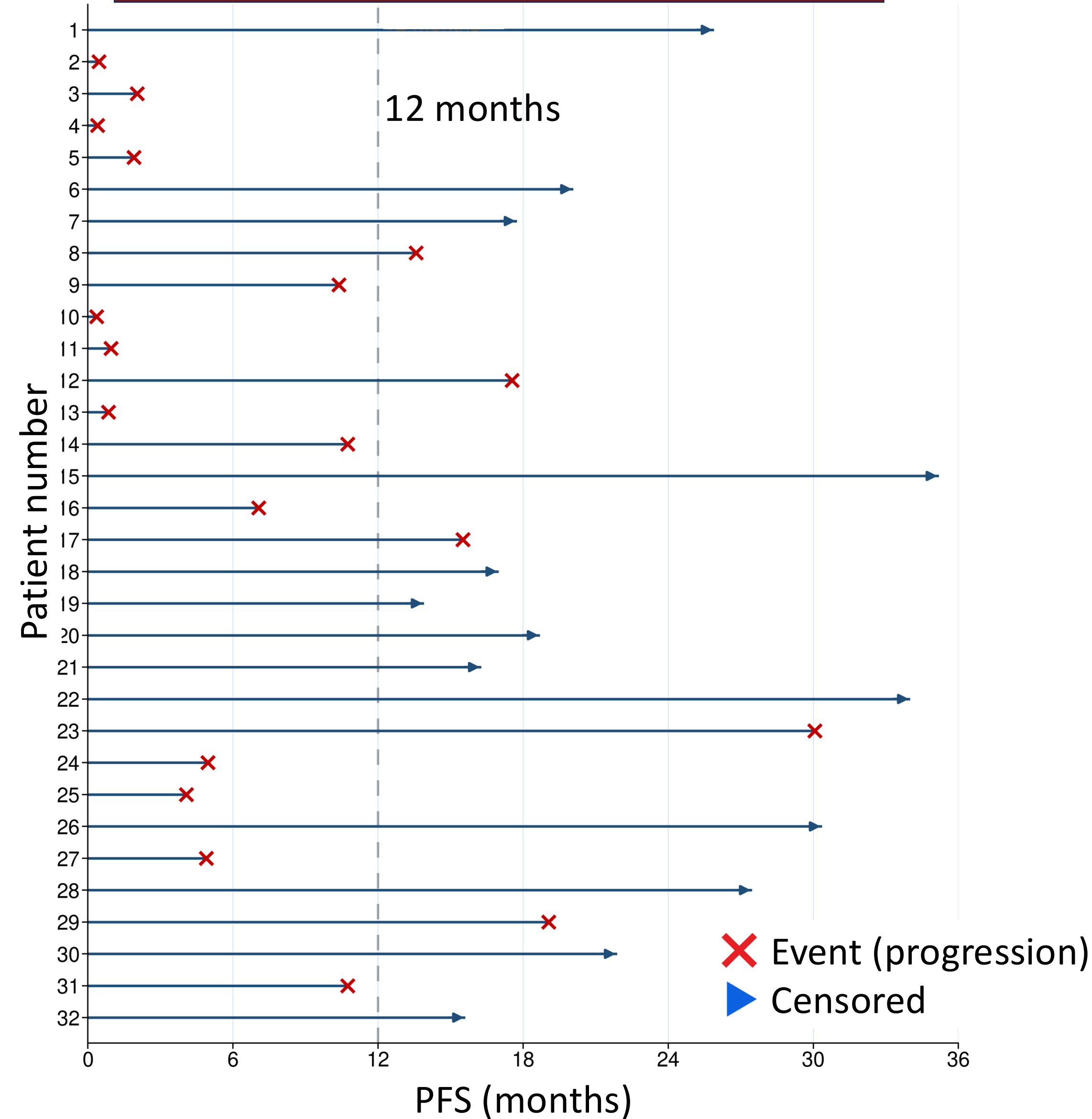
AI Use Disclosure: AI was used solely to assist with the visual design and presentation of this poster. All study data, statistics, and scientific interpretations were generated and verified by the authors.

RESULTS

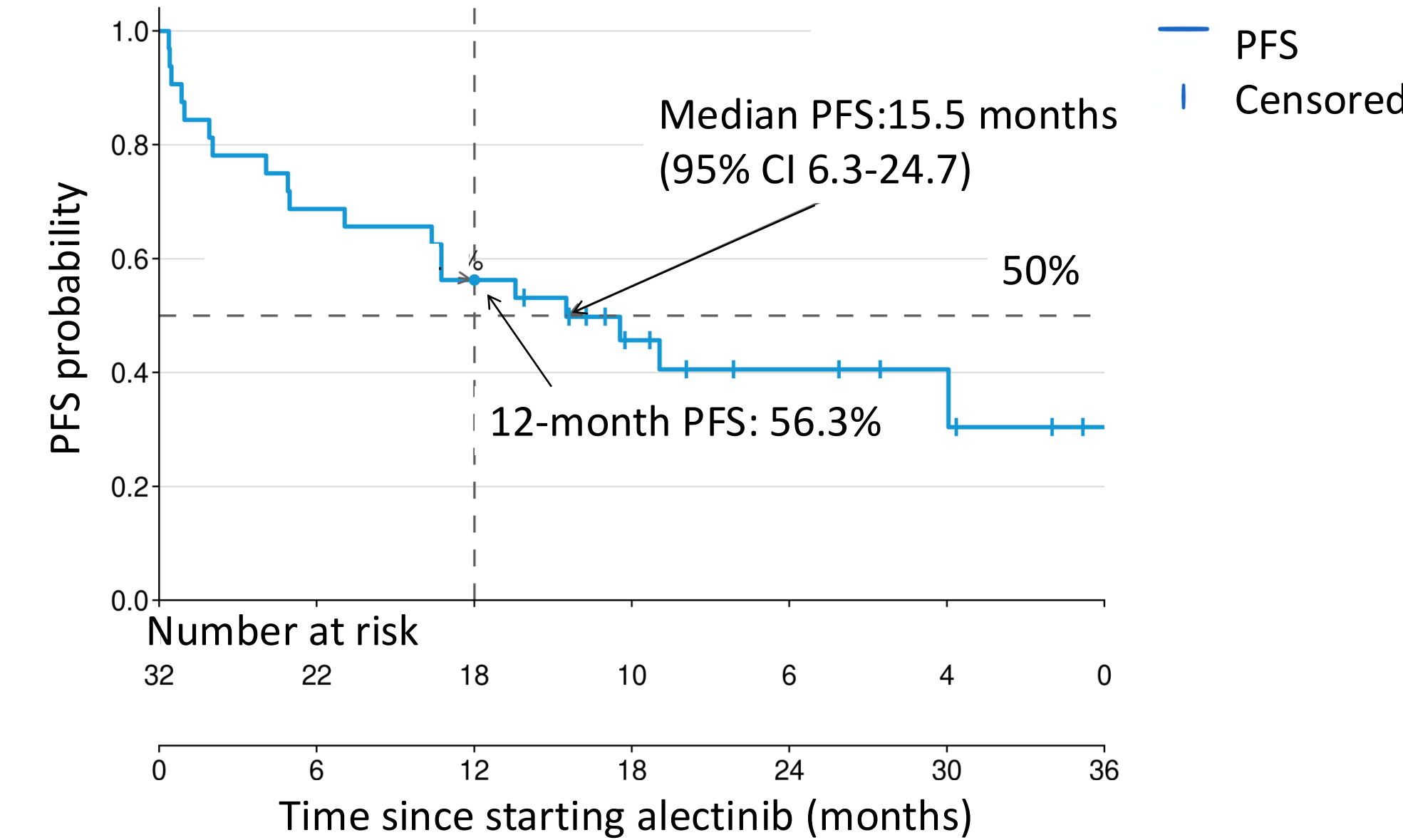
Table 1. Patient Characteristics

	Total N=32 mean±SD / n(%)
Status at Cutoff (Sept 3, 2026)	
Alive	13 (40.6)
Deceased	15 (46.9)
Lost to Follow-Up	4 (12.5)
Age (years)	54.4±11.3
Female	21 (65.6)
Non-smoker	19 (59.4)
ALK diagnostic method	
Tissue IHC (Ventana ALK [D5F3] CDx, Roche)	29 (90.6)
Liquid biopsy (Plasma ctDNA, Oncomine Lung cfTNA, KalGen)	3 (9.4)
Stage	
IIIB	1 (3.1)
IVA	25 (78.1)
IVB	6 (18.8)
Metastasis sites	
Pleura	25 (78.1)
Bone	9 (28.1)
Contralateral lung nodules	9 (28.1)
Brain	8 (25)
Liver	7 (21.9)
Cervical/axillary lymph node	6 (18.8)
Pericardial	3 (9.4)
Best Overall Response per RECIST v1.1	
Partial Response (PR)	8 (25)
Stable Disease (SD)	16 (50)
Progressive Disease (PD)	0
Non-Evaluable (NE)	8 (25)
Objective Response Rate (ORR)	8 (25)
Disease Control Rate (DCR)	24 (75)
Median follow up duration (months)	21.9 (95% CI 12.5-31.0)

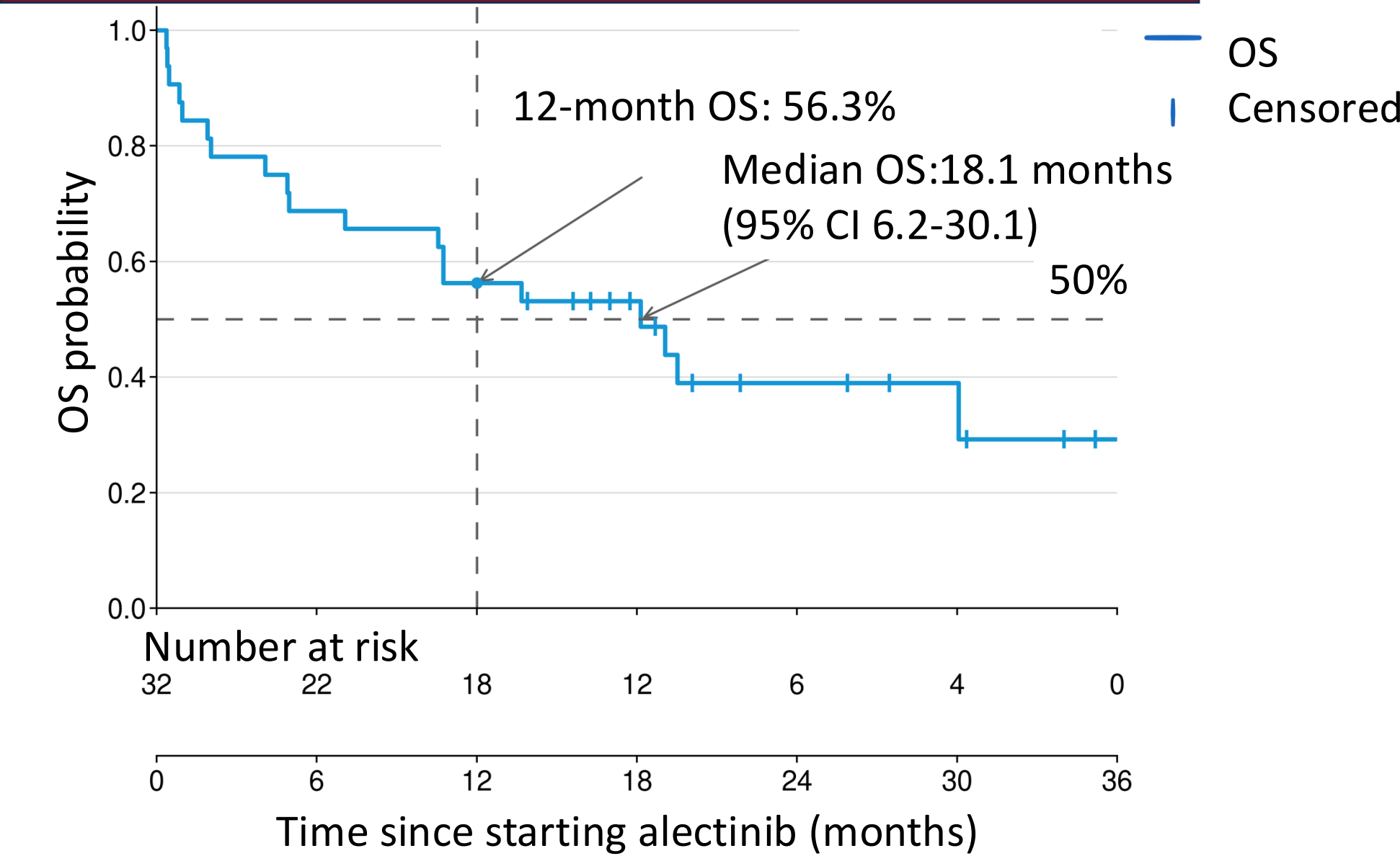
Progression-Free Survival Timeline



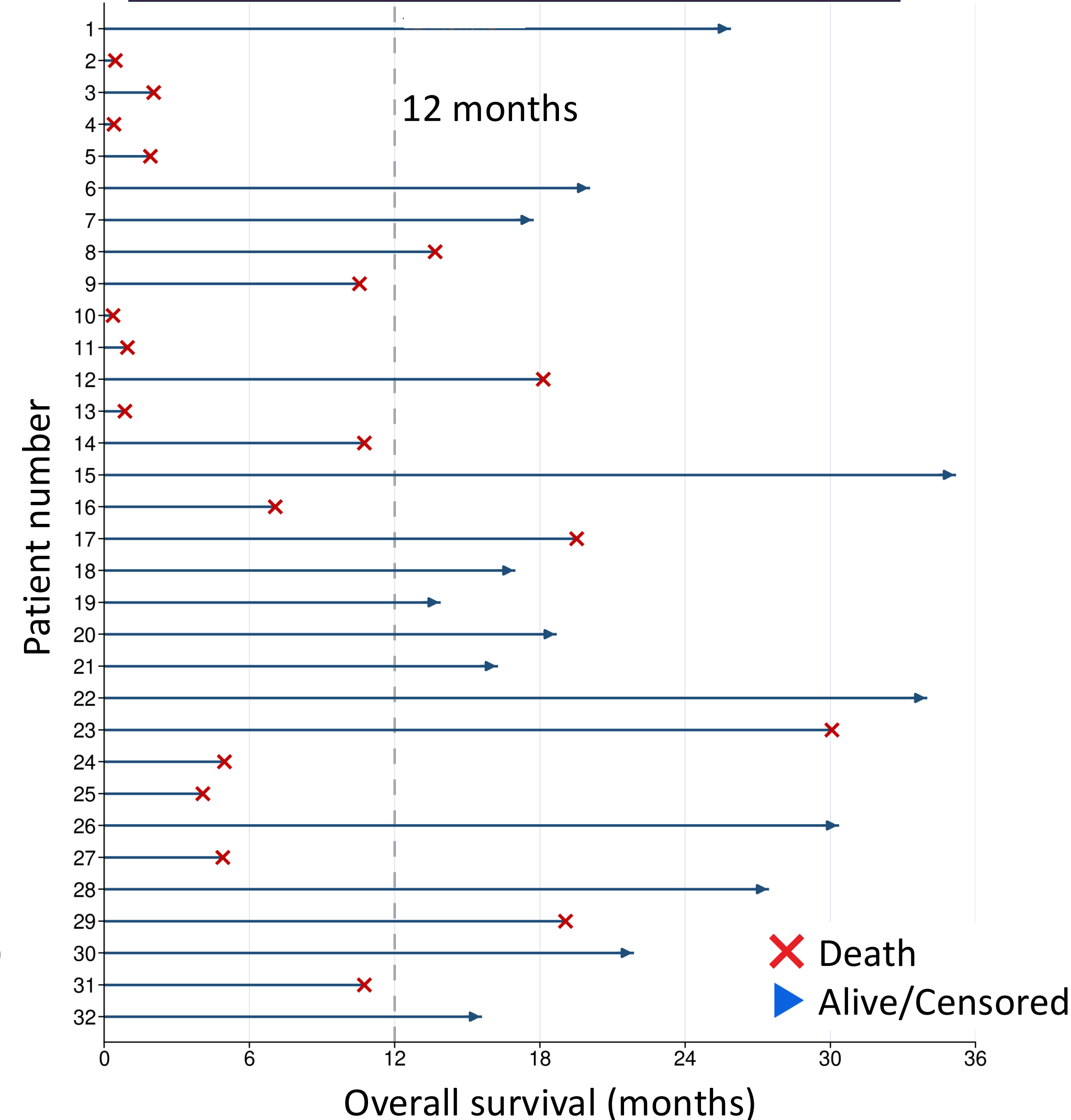
Kaplan Meier Curve for PFS



Kaplan Meier Curve for OS



Overall Survival Timeline



DISCUSSION & CONCLUSION

Key findings

- ✓ The cohort had a mean age of 54.4±11.3 years, with female predominance (65.6%), and the majority were non-smokers (59.4%)
- ✓ ALK testing was done by tissue IHC Ventana in 90.6% and by liquid biopsy in 9.4%. ALK fusion was detected but variant type could not be specified due to assay limitation.
- ✓ Most patients presented at stage IVA (78.1%). The most common metastatic site was pleura (78.1%), with brain metastasis in 25.0% of patients.
- ✓ Alectinib achieved a high disease control rate (75%) with no progressive disease observed as best overall response
- ✓ Median PFS was 15.5 months (95% CI: 6.3–24.7), with a 12-month PFS rate of 56.3%; median OS was 18.1 months (95% CI: 6.2–30.1)
- ✓ Median follow-up duration was 21.9 months (95% CI: 12.5–31)

Limitations

- Retrospective single center design with small sample size of 32 patients so generalizability is limited
- Molecular testing gap. Comprehensive NGS for fusion variant V1 versus V3 and resistance mutation was not available
- Routine brain MRI at baseline and RANO BM assessment for central nervous system response were not feasible

Conclusion

In this single-center cohort of advanced ALK-positive NSCLC, first-line alectinib demonstrated high disease control (DCR 75.0%, ORR 25.0%) with median PFS 15.5 months and median OS 18.1 months, despite limited molecular profiling for fusion variants

Future direction

Multicenter validation is warranted. We advocate for expanded public reimbursement to cover comprehensive NGS (tissue and liquid biopsy) for ALK fusion variant identification and routine CNS imaging per RANO-BM criteria, enabling molecular stratification (V1 vs V3) and standardized intracranial response evaluation in resource-limited settings.