

P1.314: An Asian Multi-Centre, Real-World Study of Treatment Patterns and Outcomes in Asian Patients With Advanced ALK-rearranged NSCLC

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INTRODUCTION

- Anaplastic Lymphoma Kinase (ALK) rearrangements occur in 2-5% of non-small cell lung cancer (NSCLC) with multiple ALK tyrosine kinase inhibitors (TKIs) therapeutic options available.
- Although real-world data (RWD) on ALK+ NSCLC from U.S. database has been reported, those from the Asia-Pacific region are limited with a small sample size.
- This study aims to fill this gap by characterizing the epidemiology, treatment patterns and outcomes in patients with ALK-rearranged NSCLC in the Asia-Pacific region.

METHODS

- We conducted a retrospective study of ALK+ patients from 18 institutions in five countries from 1 Jan 2018 to 31 Dec 2024.
- Eligibility criteria included ALK-rearranged advanced NSCLC treated with a first line ALK TKI outside a clinical trial.
- Outcomes included progression-free survival (PFS), overall survival (OS), objective response rate (ORR), intracranial PFS, frequency of dose reduction and treatment discontinuation.
- Subgroup analyses were performed based on type of ALK TKI and brain metastases (BM) status at diagnosis.

Figure 1. Participating institutions



ACKNOWLEDGEMENT

The study was funded by Pfizer which had no role in the study design, data collection or data analysis.

RESULTS

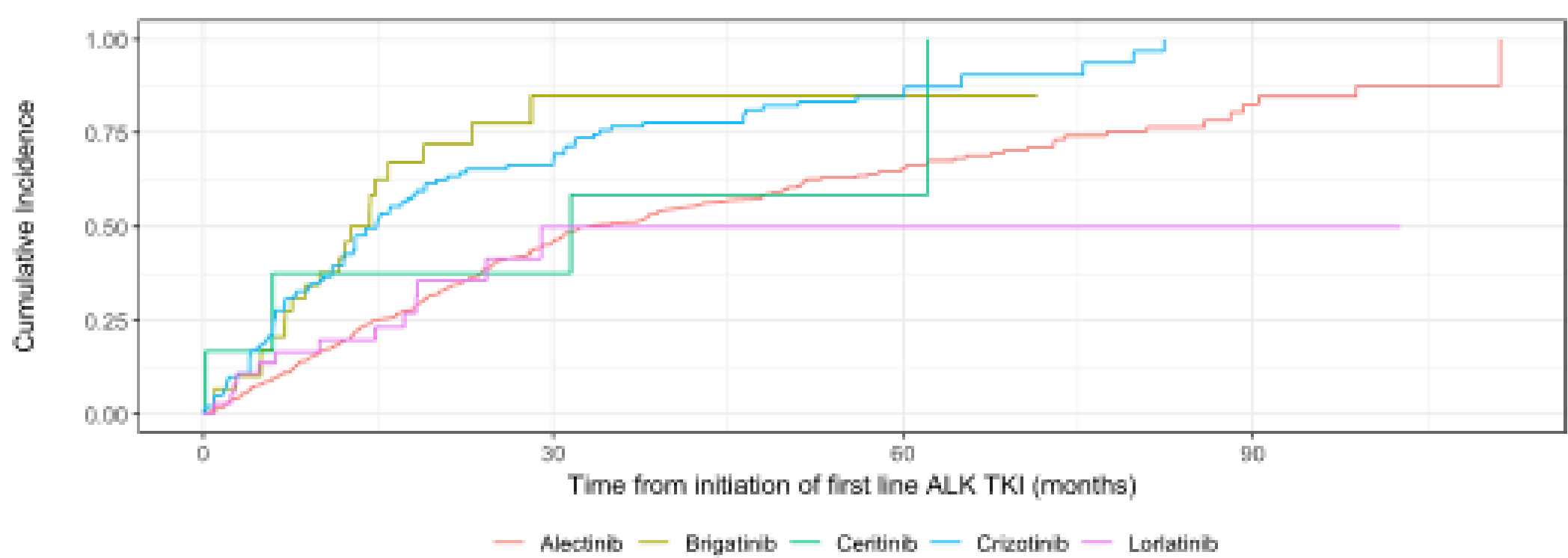
- Patient characteristics were comparable to those in previous phase III trials, except for a small proportion of patients with ECOG PS 3 or worse.

Table 1. Patient characteristics

N=776		Histology	
Age, years		Adenocarcinoma	720 (93%)
mean (SD)	56 (14)	Squamous cell carcinoma	11 (1%)
Sex		Undifferentiated	15 (2%)
Male	301 (39%)	Others	29 (4%)
Female	474 (61%)	Not reported	1 (0.1%)
Not reported	1 (0.1%)	Brain metastases	
ECOG Performance Status		No	557 (72%)
0	326 (42%)	Yes	198 (25%)
1	375 (48%)	Not reported	21 (3%)
2	40 (5%)	Methods for testing ALK-rearrangements	
3	18 (2%)	FISH	247 (32%)
4	3 (0.4%)	IHC	426 (55%)
Not reported	14 (2%)	NGS	92 (12%)
Smoking status		Others	7 (0.9%)
Active	43 (5%)	Not reported	5 (0.6%)
Former	200 (26%)	First line ALK TKI	
Never	531 (68%)	Alectinib	541 (70%)
Not reported	2 (0.3%)	Brigatinib	38 (5%)
		Certitinib	16 (2%)
		Crizotinib	142 (18%)
		Lorlatinib	39 (5%)

- Dose reductions in first-line ALK TKI occurred in 21% of patients: 18% for crizotinib, 18% for brigatinib, 31% for ceritinib, 20% for alectinib and 49% for lorlatinib.
- The proportion of treatment discontinuations for reasons other than disease progression was 6.8% with alectinib, 11.5% with brigatinib, 0% with ceritinib, 10.2% with crizotinib, and 28.6% with lorlatinib. Specific reasons were not collected.

Figure 2. Incidence of treatment discontinuation



CONCLUSION

- In the largest multi-centre Asian RWD of advanced ALK+ NSCLC, ALK TKIs are effective, with a 5-year OS rate of 71%.
- Clinical outcomes from this study were largely within expectations of previously reported randomized trials.

RESULTS

Figure 3. Survival outcomes in overall population, and by 1st line ALK TKI

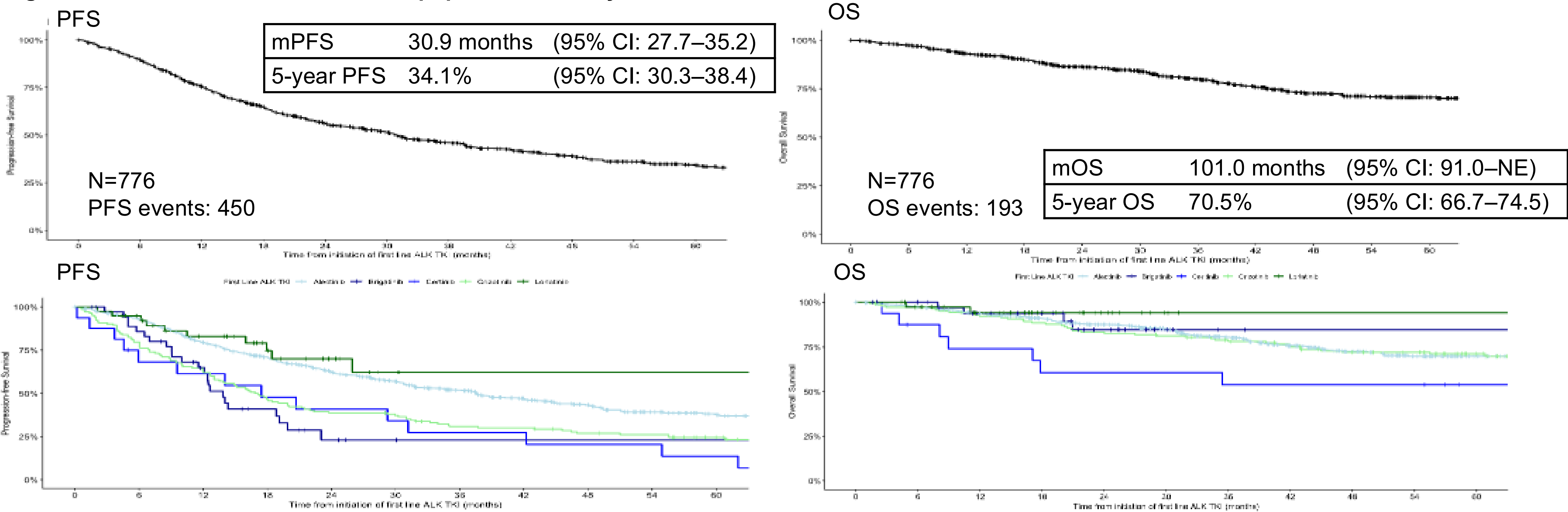


Figure 4. Survival outcomes by brain metastases

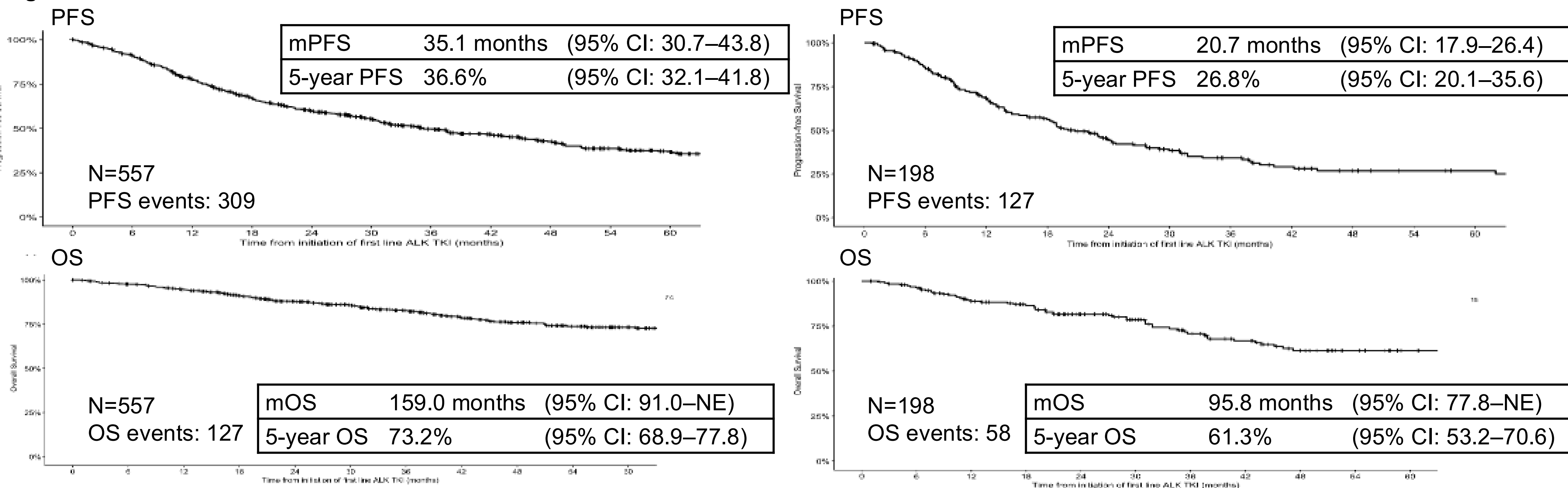


Figure 5. Cumulative incidence of intracranial progression

