



EP12.32: Predictive factors for early dose reduction of Lazertinib in EGFR-mutant advanced NSCLC: A prospective multicenter study

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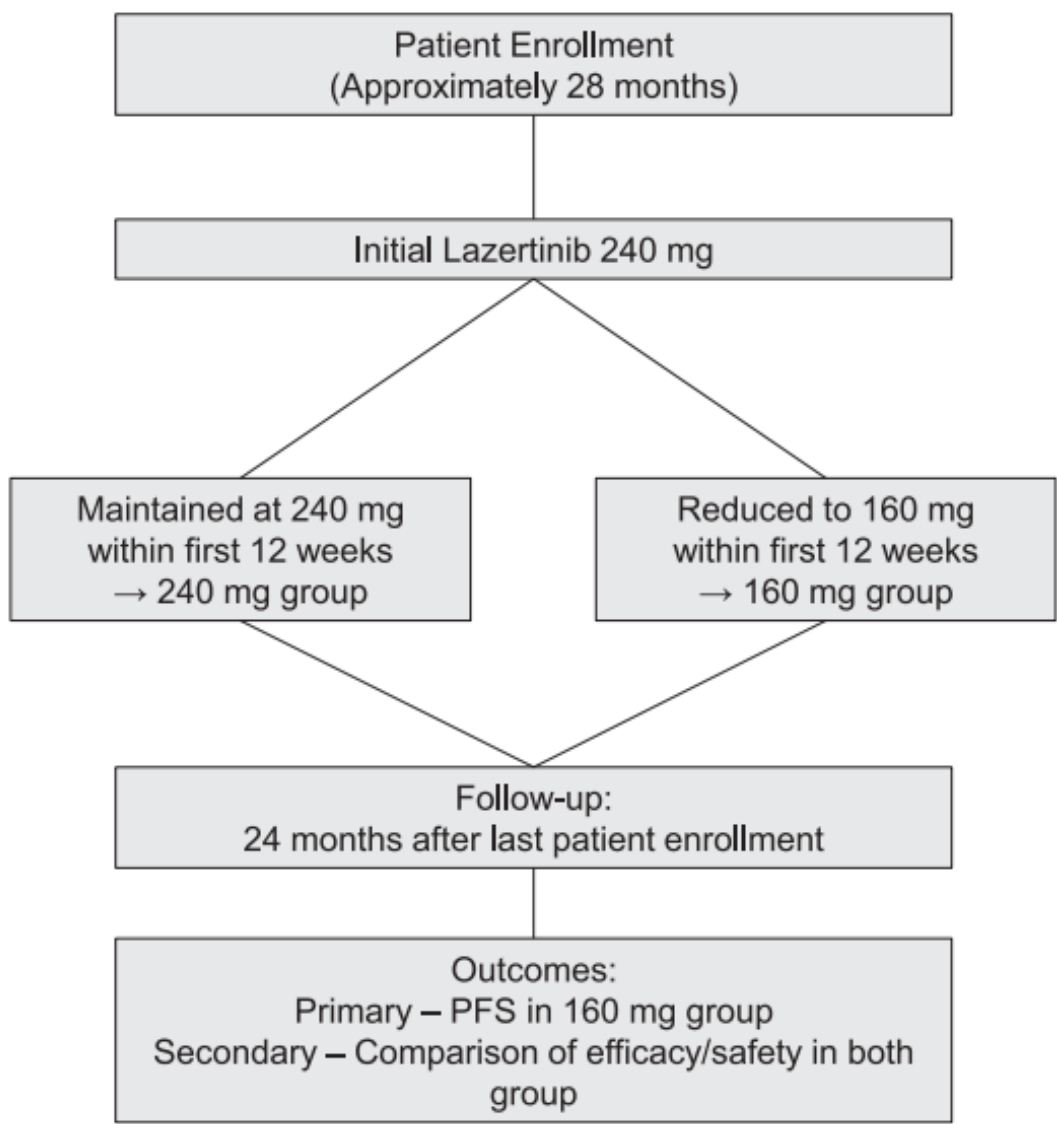
INTRODUCTION

- Dose reduction of lazertinib is frequently required in clinical practice; however, clinical factors associated with early dose reduction remain poorly defined.
- We aimed to identify predictors of early dose reduction and evaluate its clinical implications in a prospective multicenter cohort.

METHODS

Design:

- Prospective, multicenter observational cohort study
- 11 institutions in South Korea
- Target enrollment: 200 patients



Primary outcome:

PFS in the 160 mg group

DISCUSSION AND CONCLUSION

Actionable Takeaway Message

✓ Early dose reduction is common

- 40.7% required dose reduction within the first 12 weeks

✓ Low-grade neurologic toxicities frequently drive dose reduction

- Mostly events were grade 1-2

✓ No clear adverse efficacy signal in the first-line setting

- Subsequent-line findings warrant caution
- Longer follow-up is needed

✓ One dose may not fit all

- Older age and female sex were independently associated with early dose reduction

REFERENCES & ACKNOWLEDGEMENTS

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Artificial Intelligence (AI) Use Disclaimer

ChatGPT (OpenAI) was used for language editing and refinement of the poster presentation. All scientific content and interpretations were independently reviewed and verified by the authors.

RESULTS

I. Baseline characteristics

	Overall N = 182	No early DR N = 108	Early DR N = 74	P-value
Age, year	67.7 ± 10.1	65.2 ± 10.0	71.4 ± 9.2	<0.001
Sex				<0.001
Male	77(42.3)	60(55.6)	17(23.0)	
Female	105(57.7)	48(44.4)	57(77.0)	
BMI (n=180)	24.0 ± 3.9	24.0 ± 4.3	23.9 ± 3.3	0.9381
ECOG PS				0.9361
0	76(41.8)	47(43.5)	29(39.2)	
1	92(50.6)	52(48.2)	40(54.0)	
2	11(6.0)	7(6.5)	4(5.4)	
3	2(1.1)	1(0.9)	1(1.4)	
unknown	1(0.5)	1(0.9)	0(0.0)	
Smoking history				0.0032
Never	112(61.6)	56(51.9)	56(75.7)	
Current	31(17.0)	25(23.1)	6(8.1)	
Ex-smoker	39(21.4)	27(25.0)	12(16.2)	
Brain metastasis ^a	66(36.3)	41(38.0)	25(33.8)	0.5646
EGFR mutation ^b				
E19del	89(48.9)	57(51.8)	34(46.6)	0.4873
L858R	89(48.9)	49(44.5)	39(53.4)	0.2391
T790M	3(1.6)	2(1.8)	1(1.4)	1.0000

- 182 evaluable patients
- 40.7% required early dose reduction to 160 mg
- Patients with early dose reduction were:
 - ✓ Older age
 - ✓ More frequently female sex
 - ✓ More frequently never-smokers

III. Predicted probability of early dose reduction by age and sex

Age (years)	Sex	Predicted probability (%)	95% CI
65	Female	68.36	36.73–88.94
	Male	30.90	11.36–60.95
70	Female	76.55	46.70–92.40
	Male	40.33	16.57–69.70
75	Female	83.15	56.08–95.02
	Male	50.53	22.86–77.88
80	Female	88.18	64.30–96.86
	Male	60.69	29.88–84.83

II. Clinical factors associated with early dose reduction of lazertinib

	Univariate OR (95% CI)	P value	Multivariate OR (95% CI)	P value
Age (yr)	1.074 (1.036–1.113)	< .0001	1.086 (1.040–1.134)	0.0002
Sex				
Female	4.191 (2.163–8.120)	< .0001	4.831 (1.710–13.651)	0.0030
Male	1	Reference		
ECOG PS				
≥2	0.897 (0.281–2.857)	0.8538	0.432 (0.101–1.840)	0.2561
0,1	1	Reference		
Treatment line				
First	0.564 (0.288–1.102)	0.0937	0.442 (0.194–1.004)	0.0511
Subsequent	1	Reference		
Smoking				
Ever	0.346 (0.180–0.664)	0.0014	0.884 (0.319–2.451)	0.8129
Never	1	Reference		
EGFR mutation				
L858R	1.321 (0.726–2.401)	0.3619	1.440 (0.686–3.023)	0.3353
E19del	1	Reference		
Brain metastases				
Yes	0.834 (0.449–1.548)	0.5648	0.838 (0.403–1.744)	0.6373
No	1	Reference		

IV. Clinical outcomes according to early dose reduction

