

Utilization and Outcomes of Adjuvant Atezolizumab Therapy for Postoperative Locally Advanced Lung Cancer: a single-institutional study

Momoko Soda, Takafumi Kabuto, Kaito Kitahori, Naohisa Chiba, Masaki Ikeda, Masashi Ishikawa
Japanese Red Cross Wakayama Medical Center, Department of Thoracic Surgery

INTRODUCTION

Atezolizumab has recently been approved as adjuvant therapy after complete resection of non-small cell lung cancer (NSCLC). However, its use in real-world practice may be limited by patient characteristics and comorbidities.

We evaluated the real-world utilization and clinical outcomes of adjuvant atezolizumab after complete resection at our institution.

METHODS

Design:

- Retrospective, single-center cohort study
- 75 eligible patients with pathological stage II–III NSCLC after complete resection without neoadjuvant therapy (May 2022–March 2025); 15 with major EGFR mutations excluded, 60 analyzed
- Atezolizumab group vs. Conventional therapy group (platinum-based chemotherapy or observation)
- Outcomes: recurrence-free survival (RFS) and overall survival (OS)
- Multivariable Cox model for 2-year RFS (atezolizumab therapy, age, pathological stage, preoperative performance status)

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- Adjuvant atezolizumab was confirmed as an independent favorable prognostic factor for RFS (HR 0.10, 95% CI 0.01–0.75; $p=0.03$), consistent with prior randomized trial evidence. However, it was administered in only 20% of eligible patients, underscoring a gap between trial evidence and real-world implementation.

Future Direction for Research

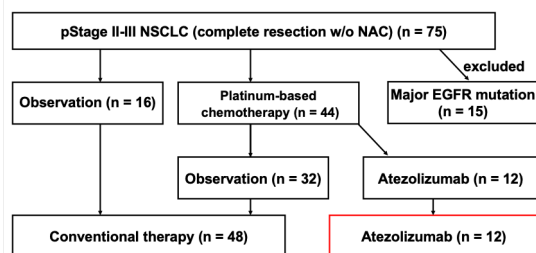
- Low PD-L1 expression (33%) and interstitial lung disease (25%) were the leading reasons for withholding therapy, limiting access under current selection criteria. Further research is needed to optimize patient selection and expand the eligible population for adjuvant atezolizumab.

REFERENCES & ACKNOWLEDGEMENTS

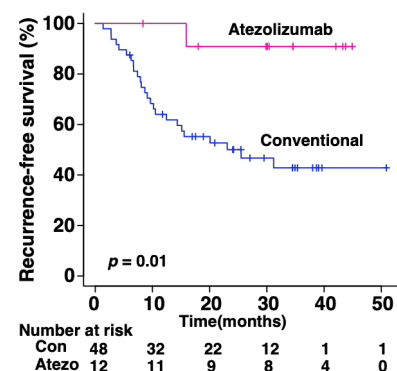
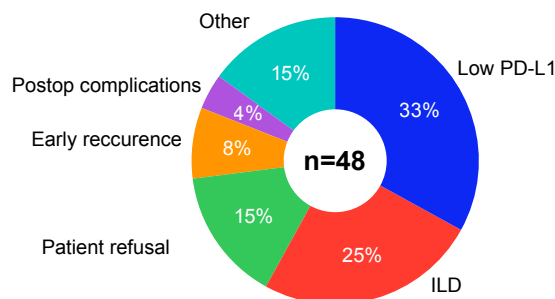
- Felip E, et al. Lancet. 2021 (IMpower010: Atezolizumab)

RESULTS

Patient Flow



Reasons for not receiving atezolizumab



Patient characteristics

	Atezolizumab (n=12)	Conventional (n=48)	p-value
Age (years, median(range))	73(49-85)	73(51-83)	0.860
Sex			0.435
- Male	11(92%)	38(79%)	
- Female	1(8%)	10(21%)	
Pathological stage			0.340
- Stage II	9(75%)	28(58%)	
- Stage III	3(25%)	20(42%)	
Histology			0.042
- Adenocarcinoma	6(50%)	28(58%)	
- Squamous cell carcinoma	2(17%)	17(35%)	
- Others	4(33%)	3(6%)	
PD-L1 TPS			<0.001
≥ 50%	10(83%)	13(27%)	
1-49%	2(17%)	9(19%)	
<1% / unknown	0(0%)	26(54%)	

Multivariable Cox Analysis for RFS

Variables	HR (95% CI)	p-value
Atezolizumab	0.097 (0.012-0.751)	0.025
Age	0.972 (0.915-1.031)	0.344
pStage	1.199 (0.549-2.621)	0.649
Preoperative PS	0.933 (0.207-4.198)	0.928
Postoperative complications	0.772 (0.301-1.979)	0.590

