

Clinical Efficacy and Safety of Icotinib as Adjuvant Therapy
for Resected Stage IA Lung Adenocarcinoma: A Real-World Study

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DFS BENEFIT

100.0% vs 81.4%3-year DFS after PSM (Icotinib vs
Observation) P = 0.00083

KEY FINDING

HR 0.07

SAFETY SUMMARY

Grade ≥ 3 AE: 1.8%No treatment discontinuation
No dose modification
No interstitial pneumonia

STUDY HIGHLIGHT

Real-world cohort

Single center (2014–2024)

Propensity score matching yielded 84 well-balanced pairs

Median follow-up: 35.6 months

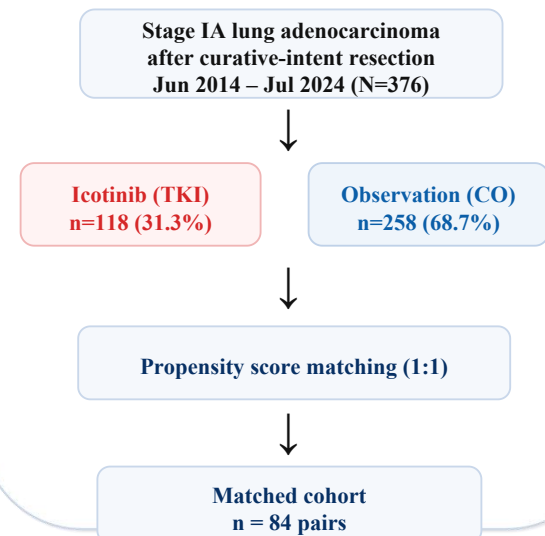
BACKGROUND

The clinical benefit of adjuvant therapy in patients with stage IA non-small cell lung cancer (NSCLC) remains uncertain. This real-world study assessed the effectiveness and safety of icotinib as postoperative adjuvant therapy in patients with stage IA lung adenocarcinoma.

METHODS

- Real-world study enrolled 376 patients with pathologically confirmed stage IA lung adenocarcinoma who underwent curative-intent complete resection from June 2014 to July 2024.
- 118 patients (31.3%) received postoperative icotinib; 258 patients (68.7%) underwent clinical observation.
- Propensity score matching (1:1) yielded 84 matched pairs.
- Primary endpoint: disease-free survival (DFS). OS was estimated using the Kaplan–Meier method.

STUDY POPULATION



RESULTS

Disease-Free Survival (DFS)

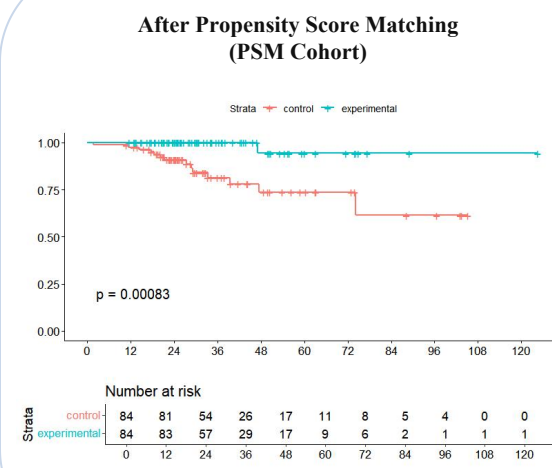
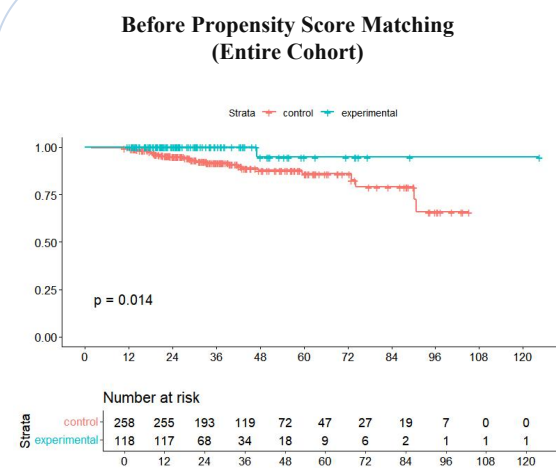


Table 1. Baseline Characteristics of Patients Before and After Propensity Score Matching

Characteristics	Entire CO (n=258)	Entire TKI (n=118)	P	PSM CO (n=84)	PSM TKI (n=84)	P
Age, years	56 (50,64)	57 (51,64)	0.7	59 (50,66)	57 (51,63)	0.6
Tumor diameter, cm	1.50 (1.00,2.00)	1.60 (1.20,2.20)	0.002	1.60 (1.30,2.00)	1.50 (1.20,2.10)	0.4
Female	162 (63%)	80 (68%)	0.4	56 (67%)	52 (62%)	0.6
Smoking history, Yes	33 (13%)	15 (13%)	>0.9	12 (14%)	12 (14%)	>0.9
Sublobectomy	79 (30%)	62 (53%)	<0.001	40 (48%)	38 (45%)	0.9
Pathological stage IA3	34 (13%)	34 (29%)	<0.001	18 (21%)	20 (24%)	0.9
Low differentiation	27 (10%)	23 (19%)	0.023	12 (14%)	12 (14%)	0.6
LVI, Yes	5 (1.9%)	5 (4.2%)	0.3	3 (3.6%)	4 (4.8%)	>0.9
STAS, Yes	11 (4.3%)	19 (16%)	<0.001	5 (6.0%)	6 (7.1%)	>0.9

Data are n (%) or median (IQR). CO, clinical observation; TKI, icotinib; PSM, propensity score matching; LVI, lymphovascular invasion; STAS, spread through air spaces.

RECURRENCE OUTCOMES (After PSM)

**Icotinib (n=84)
Recurrence
1 (1.1%)**

VS

**Observation (n=84)
Recurrence
14 (16.7%)****Icotinib significantly reduced recurrence risk compared with observation**

SAFETY / ADVERSE EVENTS

Table 2. Adverse Events of Icotinib Before PSM (TKI Group, n=118)

Adverse Events	Any grade n (%)	Grade 1–2 n (%)	Grade ≥ 3 n (%)
Total ^a	69 (60.5)	67 (58.8)	2 (1.8)
Rash	29 (25.4)	27 (23.7)	2 (1.8)
Diarrhea	10 (8.8)	10 (8.8)	0 (0.0)
Pain	3 (2.6)	3 (2.6)	0 (0.0)
Decreased appetite	4 (6.1)	4 (3.5)	0 (0.0)
Fatigue	3 (2.6)	3 (2.6)	0 (0.0)
Nausea	2 (1.8)	2 (1.8)	0 (0.0)
Oral ulcers	7 (6.1)	7 (6.1)	0 (0.0)
ALT increased	6 (5.3)	6 (5.3)	0 (0.0)
AST increased	3 (2.6)	3 (2.6)	0 (0.0)
Cough	2 (1.8)	2 (1.8)	0 (0.0)
Interstitial pneumonia	0 (0.0)	0 (0.0)	0 (0.0)

**69 patients
(60.5%)
AEs any grade****Only 2 patients
(1.8%)
grade ≥ 3 AEs****No discontinuation
or dose reduction
No ILD**

^aTotal patients with at least one AE; some patients had more than one AE. ALT, alanine aminotransferase; AST, aspartate aminotransferase.

CONCLUSIONS

Compared with clinical observation, adjuvant icotinib was associated with a significant improvement in DFS among patients with stage IA lung adenocarcinoma and exhibited a favorable safety and tolerability profile.