

INTRODUCTION

Background:

CCRT followed by consolidation remains the evidence-based standard for fit patients with unresectable stage III NSCLC. However, many older or frail patients cannot complete definitive chemoradiation.

Objective:

Evaluate upfront EGFR TKI-based treatment without planned radiotherapy and explore outcomes against a historical CCRT cohort.

METHODS

Design: ulticenter retrospective cohort study across 9 Korean institutions (KCSG-LU25-04)

Study population:

- Unresectable stage IIIA-IIIC EGFR-mutant NSCLC
- EGFR TKI initiated in 2017-2024
- No prior chemotherapy or definitive radiotherapy
- Selective local therapy after TKI initiation was permitted.
- Comparator: Historical CCRT cohort treated in 2013-2018.

Endpoints & Analysis:

- Primary: PFS
- Secondary: OS, ORR, DCR, failures
- Data cutoff 1 Dec 2025.
- Between-cohort comparisons were exploratory and unadjusted.

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- Upfront EGFR TKI was associated with longer PFS and OS and markedly fewer distant and intracranial failures, despite an older and less fit cohort.

Clinical Interpretation

- CCRT followed by consolidation osimertinib remains standard for fit patients.
- Upfront EGFR TKI may be a pragmatic complementary strategy when CCRT is unsuitable or declined.
- More locoregional recurrence with TKI (33.0% vs 20.9%; p=0.089) suggests a potential role for selective local consolidation.

Future Direction for Research

- Prospective studies should define patient selection and the optimal timing of local therapy with EGFR inhibition.

REFERENCES & ACKNOWLEDGEMENTS

References:

- Lu S, et al. N Engl J Med. 2024;391:585-597 (LAURA).
- Kim H, et al. Cancer Res Treat. 2022;55:498-505.
- Xing L, et al. Int J Radiat Oncol Biol Phys. 2021;109:1349-1358 (RECEL).

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Artificial Intelligence (AI) Use Disclaimer

ChatGPT (OpenAI) was used to improve language clarity and readability during manuscript preparation. Codex (OpenAI) assisted in adapting author-provided text and figures to this poster layout. The authors reviewed all content and retain full responsibility for the material. AI did not generate or alter the study data, analyses, or figures.

RESULTS

Characteristics (TKI vs CCRT)

- 176 patients (n=109 vs 67)
- Median age: 74 vs 60 years
- ECOG PS $\geq$ 2: 17.4% vs 0%
- Stage IIIA: 29.4% vs 3.0%

Clinical Outcomes (TKI vs CCRT)

- Median PFS: 27.0 vs 9.9 months; HR 0.39 (95% CI 0.27-0.56), p<0.001
- Median OS: 104.6 vs 59.2 months, p=0.013
- Distant failure: 22.9% vs 76.1%
- ORR: 81.5% vs 92.5%, DCR: 99.1% vs 97.0%
- 91.2% of CCRT patients later received EGFR TKI treatment.

Figure 1

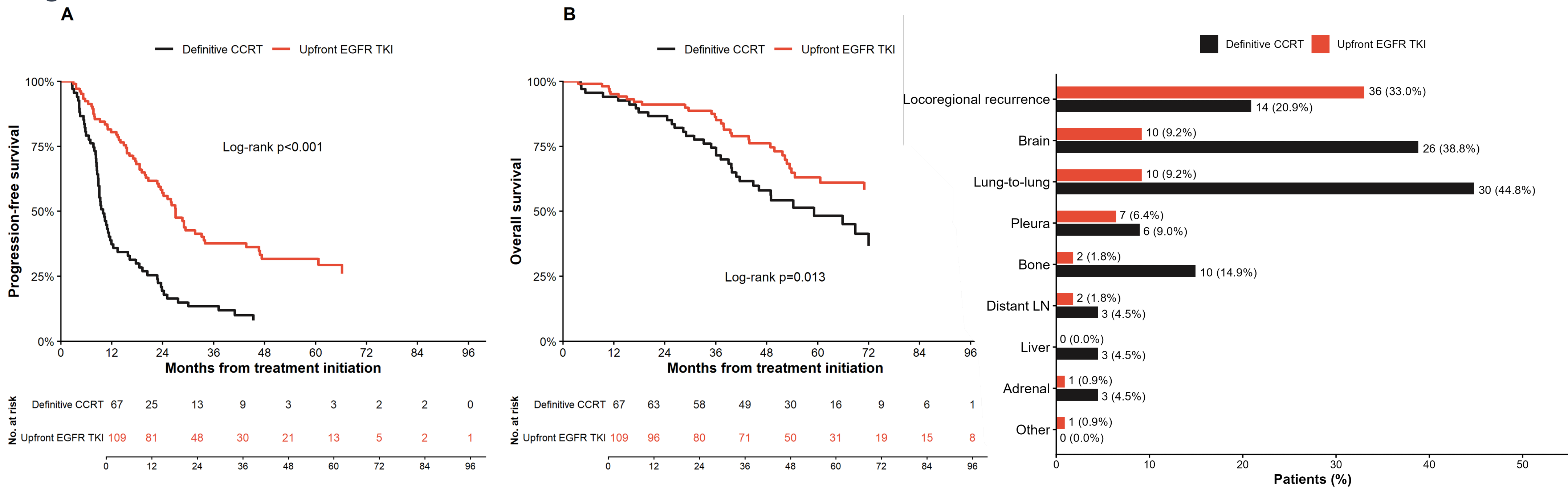


Figure 2

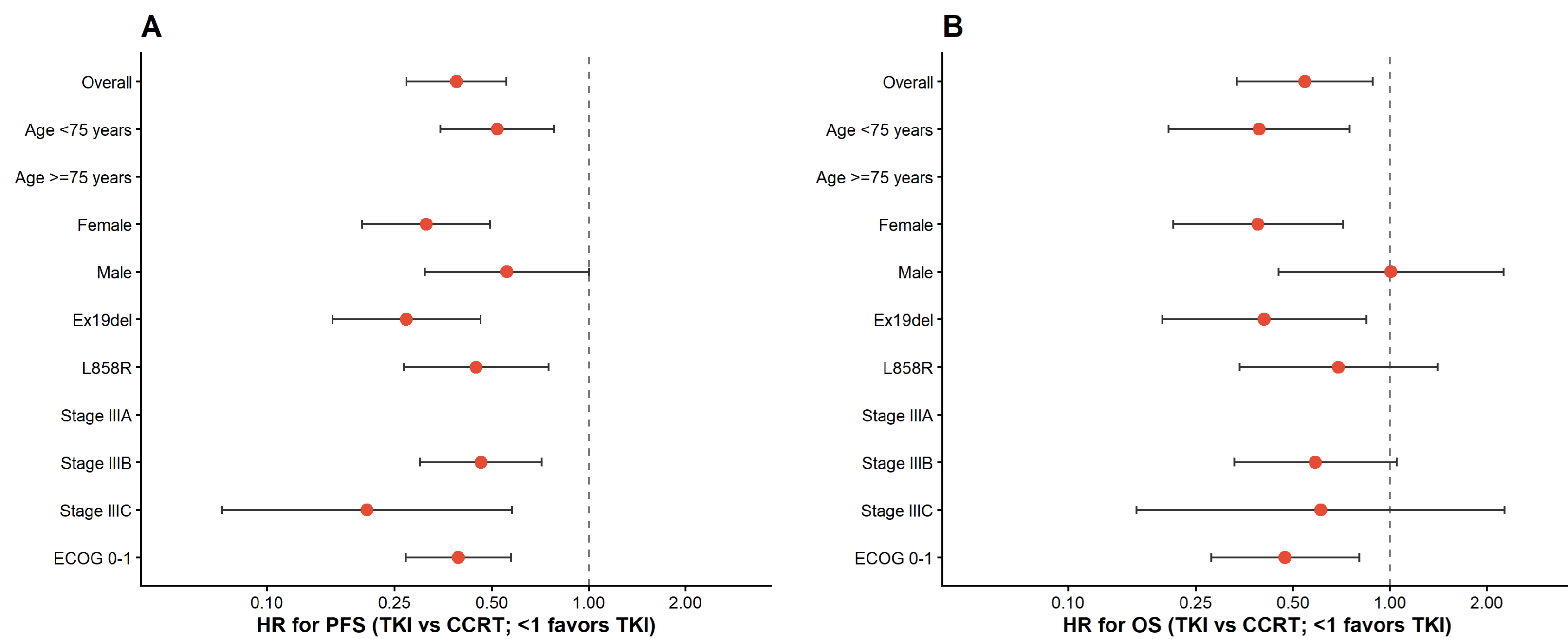


Figure 1. PFS and OS. Figure 2. The PFS association generally favored upfront EGFR TKI across estimable clinical subgroups; OS estimates were less precise. Comparisons are hypothesis-generating. Figure 3. Upfront TKI reduced distant, brain, and lung-to-lung failures; locoregional recurrence was numerically higher.