



P1.231: Updated Peri-R-02: Outcomes of Neoadjuvant ICI-Based Therapy versus Chemotherapy in Resectable Driver-Negative NSCLC

Hua Zhong¹, Qian Chu², **Bo Zhang¹**, Yanwei Zhang¹, Ruiting Tan¹, Fangfang Liu², Jiajun Teng¹, Rong Qiao¹, Mengwei Li¹, Yanbin Kuang¹, Lei Cheng¹, Shuyuan Wang¹

¹Department of Respiratory and Critical Care Medicine, Shanghai Chest Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, 200030, China.

²Department of Oncology, Tongji Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, 430030, China.

Correspondence: zb1063253078@163.com



IASLC 2026 World
Conference on Lung Cancer

SEPTEMBER 12 - 15, 2026
SEOUL, REPUBLIC OF KOREA

INTRODUCTION

- Real-world evidence comparing neoadjuvant ICI-based therapy versus chemotherapy alone in resectable driver-gene negative NSCLC is limited, and factors associated with EFS in ICI-treated patients remain unclear¹⁻⁴.
- This study compared outcomes between the two neoadjuvant approaches and explored EFS-related factors in the ICI-based cohort.

METHODS

- This was an updated analysis of the Peri-R-02 study (NCT06610240) that included patients with stage I -III NSCLC who underwent radical surgery after receiving neoadjuvant therapy at two Chinese centers.
- Patients with driver gene mutations or insufficient follow-up were excluded.
- The primary endpoint was EFS; secondary endpoints included pCR, ORR, and DFS.

RESULTS

Patients

- From January, 2020 to February, 2026, 422 patients were included (**Figure 1**).
- Baseline characteristics were balanced between cohorts (**Table 1**).

Figure 1. Patient flow and treatment patterns

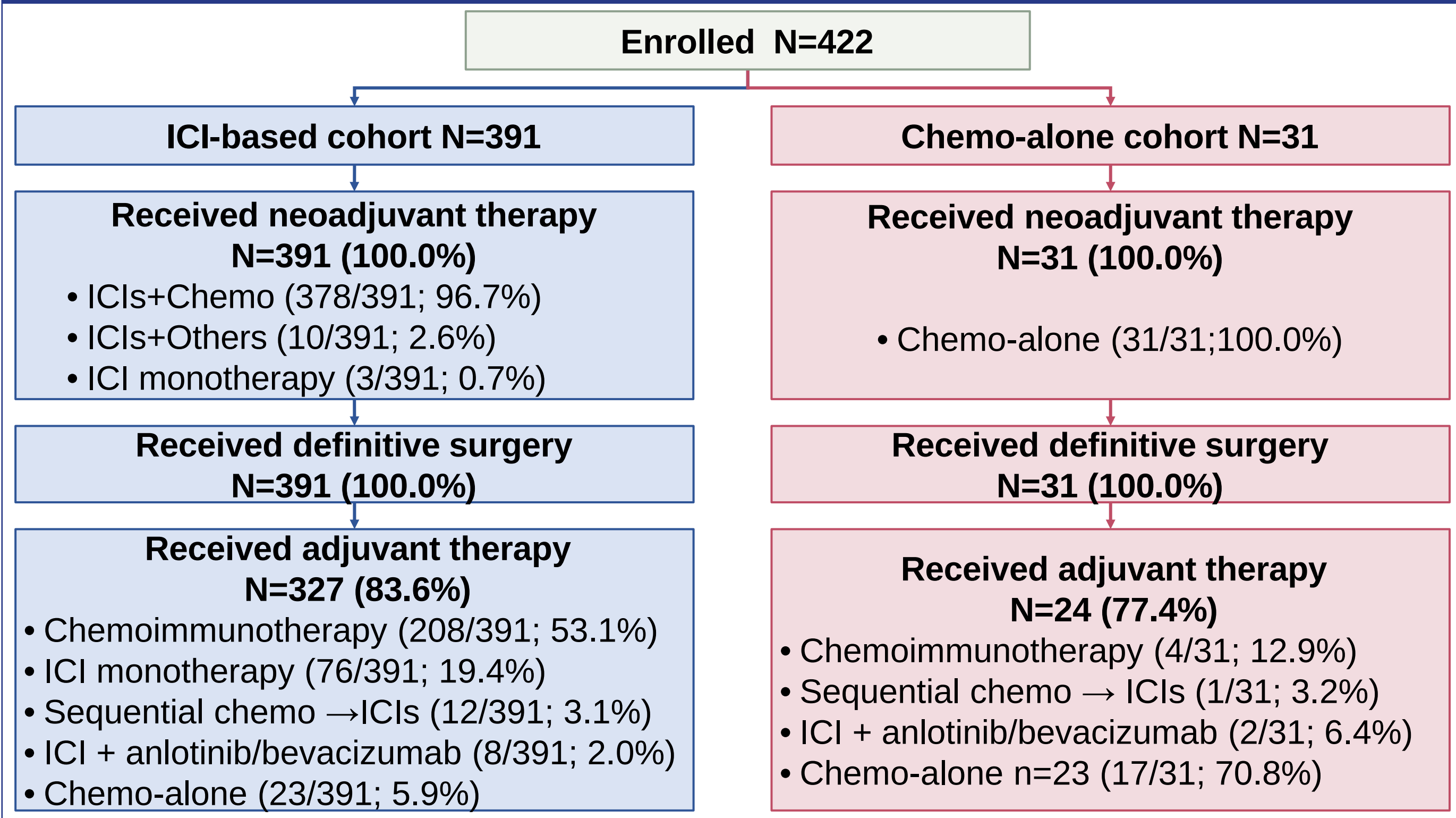


Table 1. Patient characteristics

	ICI-based cohort (N=391)	Chemo-alone cohort (N=31)
Age ≤65 years, n (%)	226 (57.8)	14 (45.2)
Male, n (%)	373 (95.4)	26 (83.9)
Never smoker, n (%)	250 (63.9)	23 (74.2)
ECOG performance status, n (%)		
0	93 (23.8)	1 (3.2)
1	298 (76.2)	30 (96.8)
TNM stage, n (%)		
I - II	56 (14.3)	3 (9.7)
III	335 (85.7)	28 (90.3)
Squamous histology, n (%)	284 (72.6)	20 (64.5)
PD-L1 expression, n (%)		
<1%	79 (20.2)	11 (35.5)
1-49%	113 (28.9)	8 (25.8)
≥50%	83 (21.2)	5 (16.1)
Unknown	116 (29.7)	7 (22.6)

Efficacy

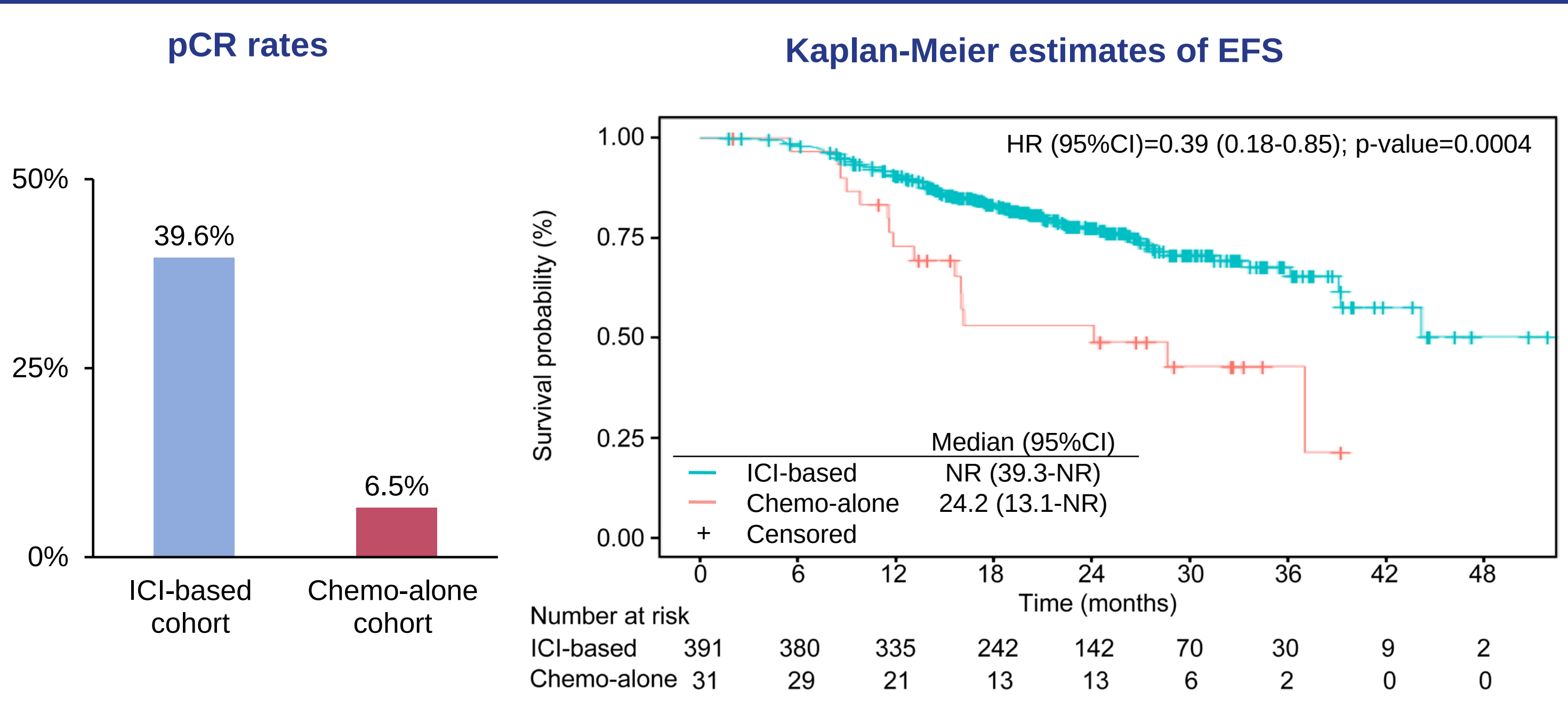
- R0 resection rates were 97.7% and 83.9% in the ICI-based and chemo-alone cohorts, respectively (**Table 2**).

Table 2. Surgical outcomes

	ICI-based cohort (N=391)	Chemo-alone cohort (N=31)
Surgical approach		
Open surgery	88 (22.5)	13 (41.9)
Minimally invasive surgery	285 (72.9)	18 (58.1)
Minimally invasive to thoracotomy	17 (4.3)	0
Unknown	1 (0.3)	0
Type of surgery		
Lobectomy	260 (66.5)	20 (64.5)
Bilobectomy	49 (12.5)	2 (6.5)
Pneumonectomy	19 (4.9)	4 (12.9)
Sleeve lobectomy	51 (13.0)	5 (16.1)
Other	12 (3.1)	0
Resection status		
R0 resection	382 (97.7)	26 (83.9%)
R1 resection	9 (2.3)	5 (16.1%)

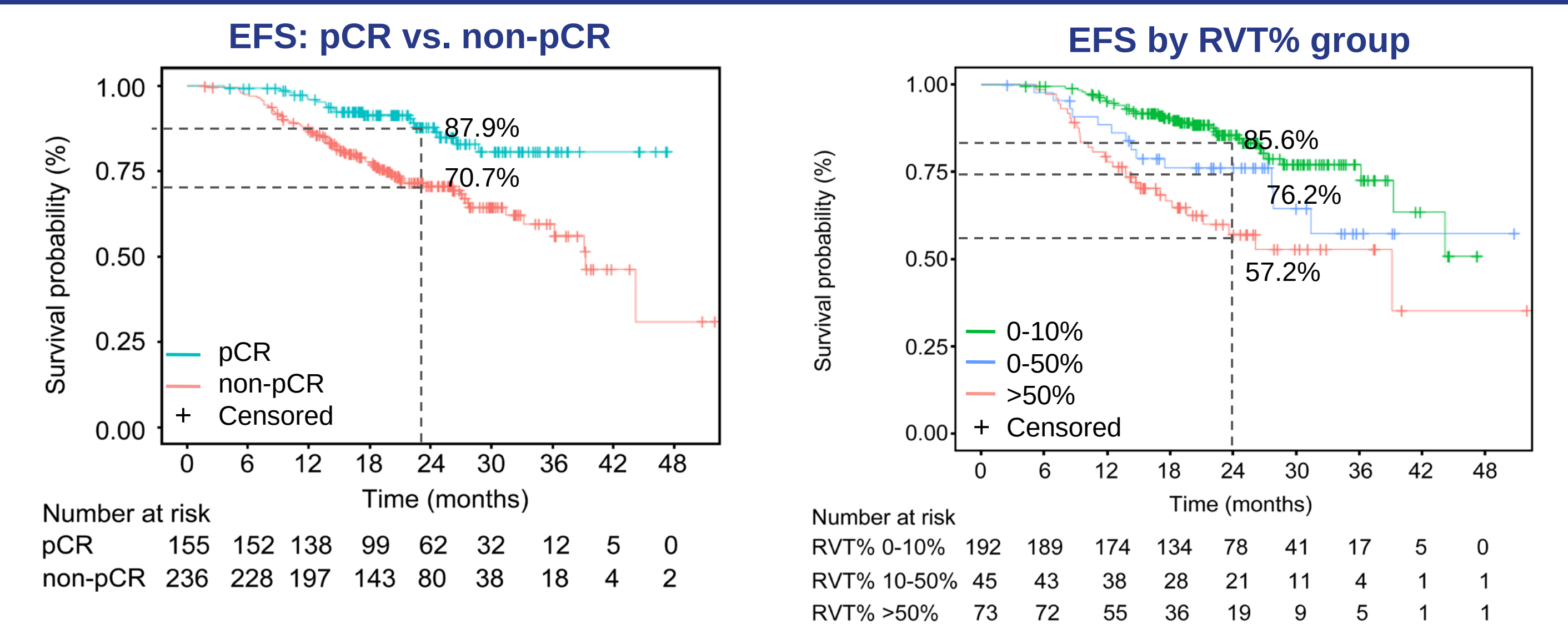
- Median follow-up was 26.1 months (range 1.9-57.6). The ICI-based cohort achieved higher pCR rates and superior EFS compared with the chemo-alone cohort (**Figure 2**).

Figure 2. Efficacy results in the two cohorts



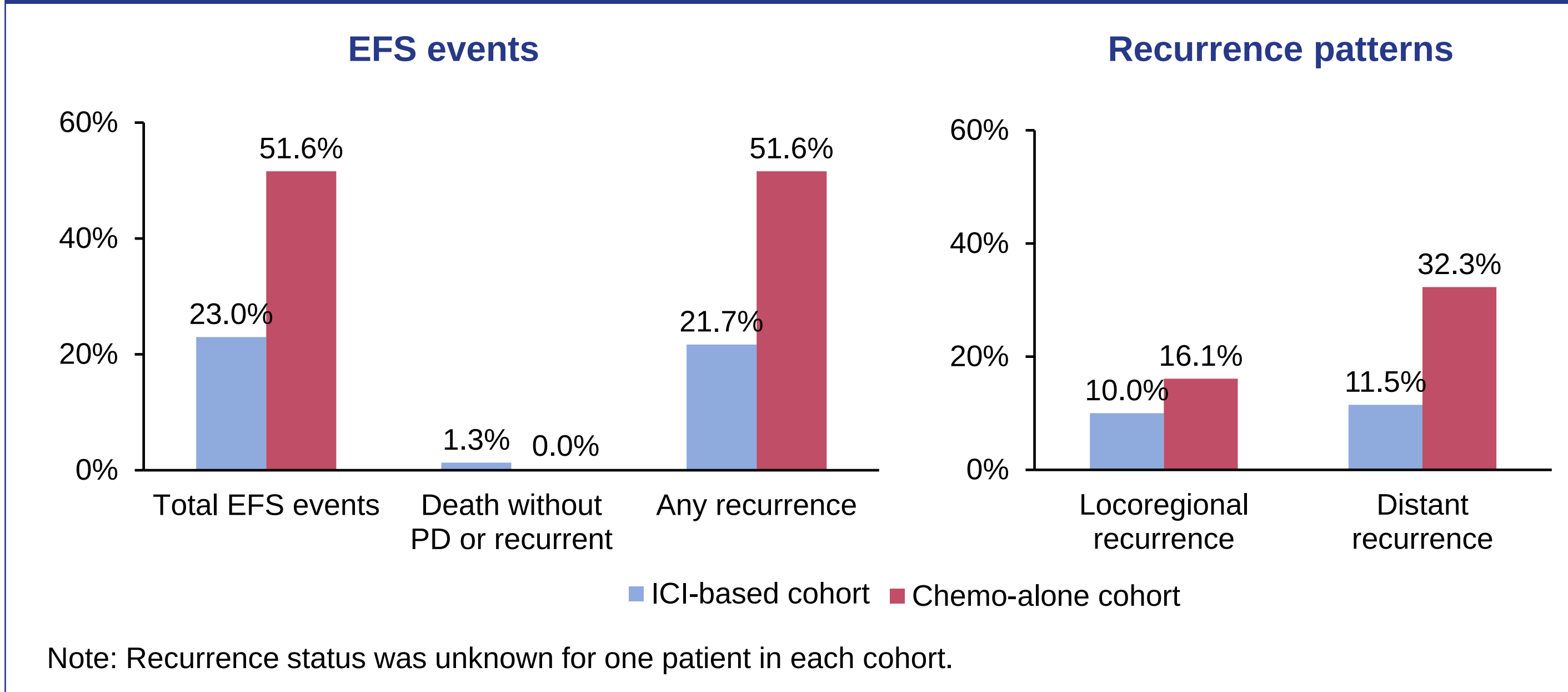
- Subgroup analyses within the ICI-based cohort were shown in **Figure 3**.
- Patients achieving pCR had an improved 24-month EFS rate, and outcomes worsened progressively with higher RVT% (**Figure 3**).

Figure 3. EFS in the ICI-based cohort



- Fewer EFS events occurred in the ICI-based cohort (**Figure 4**).
- Lower locoregional and distant recurrence rates were observed with ICI-based therapy (**Figure 4**).

Figure 4. EFS events and recurrence patterns in the two cohorts



- In the ICI-based cohort, EFS improved with increasing PD-L1 expression (24-month EFS rate: 65.9% for <1%, 76.1% for 1-49%, 82.6% for ≥50%).

ABBREVIATIONS

ICI, immune checkpoint inhibitor; NSCLC, non-small cell lung cancer; EFS, event-free survival; AJCC, American Joint Committee on Cancer; pCR, pathological complete response; ORR, objective response rate; DFS, disease-free survival; chemo, chemotherapy; ECOG, Eastern Cooperative Oncology Group; TNM, tumor node metastasis; CI, confidence interval; NR, not reached; HR, hazard ratio; RVT, residual viable tumor; vs, versus.

REFERENCES

- Desai A, et al. JAMA Netw Open. 2025;8(6):e2517953.
- Wang X, et al. Transl Lung Cancer Res. 2024;13(4):849-860.
- Dong Y, et al. JTO Clin Res Rep. 2024;6(1):100763.
- Liu Z, et al. Ann Thorac Cardiovasc Surg. 2022;28(2):111-120.

CONCLUSION

- In this real-world analysis of patients with resectable driver-gene negative NSCLC, neoadjuvant ICI-based therapy was associated with improved pCR rates, EFS, and recurrence patterns compared with chemotherapy alone.
- Within the ICI-based cohort, pathologic response, RVT%, and PD-L1 expression were correlated with EFS outcomes.
- These findings suggest a potential benefit of perioperative ICI-based strategies in this population, warranting further validation in prospective studies.