



P3.327: Efficacy and Safety of Consolidative Thoracic Radiotherapy After First-Line Chemoimmunotherapy in ES-SCLC: A Phase II Trial

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INTRODUCTION

- Chemoimmunotherapy is the standard first-line treatment for extensive-stage small cell lung cancer (ES-SCLC).¹
- Prospective evidence supporting the efficacy of consolidative thoracic radiotherapy (cTRT) remains sparse.²
- We evaluated the efficacy and safety of cTRT plus maintenance immunotherapy after first-line chemoimmunotherapy in a phase II trial (NCT05552846).

METHODS

Eligibility

- Age 18–80 years
- ECOG PS 0–1
- Treatment-naïve ES-SCLC
- Measurable disease (RECIST v1.1)

Platinum–etoposide + PD-1/PD-L1 Inhibitor (4-6 cycles)

Disease Control (CR / PR / SD)

cTRT (45 Gy/15 fractions) & maintenance immunotherapy

N=70

Endpoints

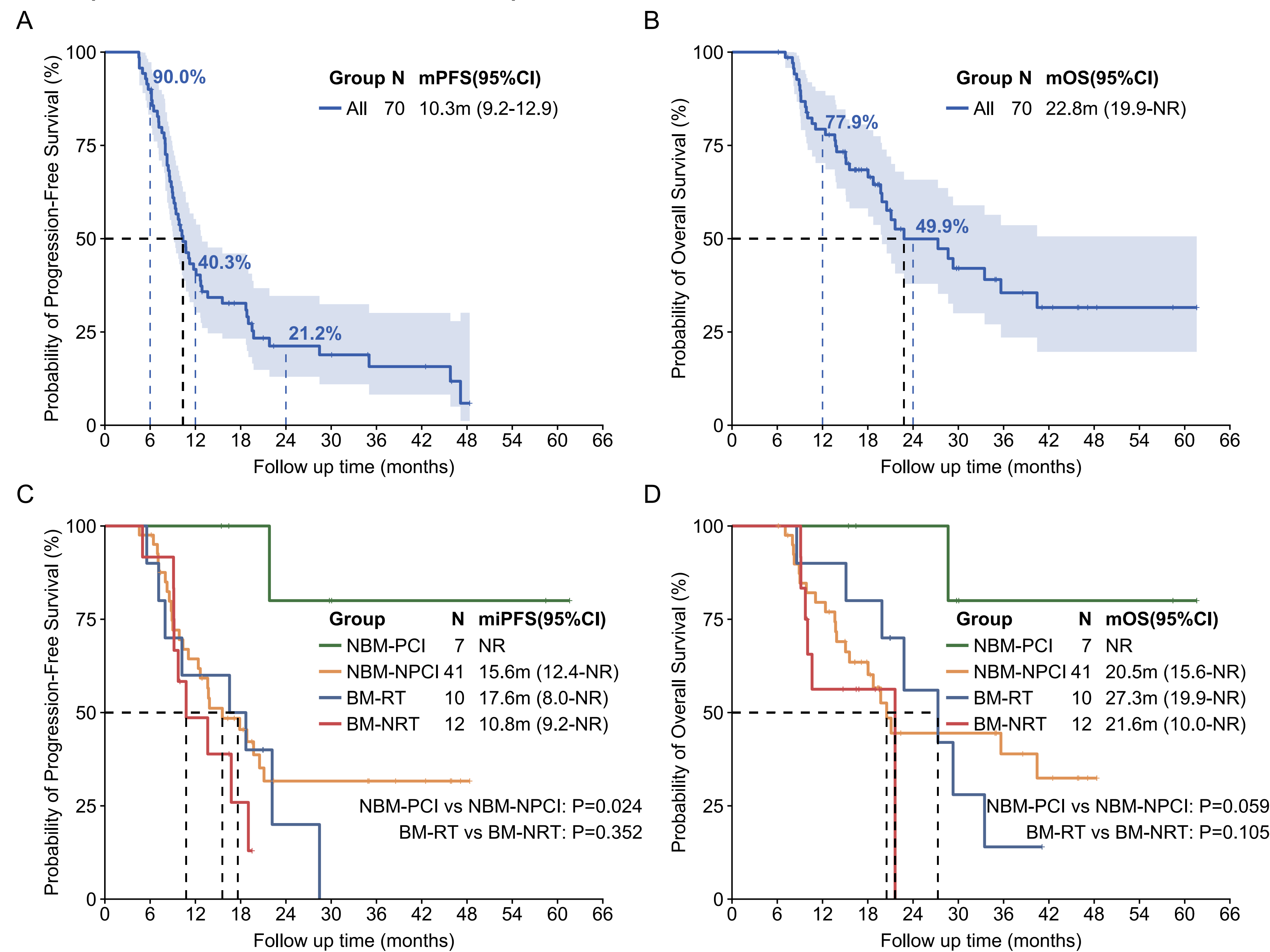
Primary: 1-year PFS rate
Secondary: 1-year OS rate, median PFS, median OS, safety

- Asymptomatic brain metastases were allowed; brain radiotherapy was given at the radiation oncologist's discretion. Prophylactic cranial irradiation (PCI) was permitted in patients without brain metastases.
- PFS and OS were measured from the initiation of first-line chemoimmunotherapy.

RESULTS

Figure 1A–B. Overall efficacy: 1-year PFS and OS rates were 40.3% and 77.9%; median PFS and OS were 10.3 and 22.8 months.

Figure 1C–D. Intracranial outcomes: Brain radiotherapy showed a trend toward longer median intracranial PFS (miPFS) (17.6 vs. 10.8 months, P=0.352) and OS (27.3 vs. 21.6 months, P=0.105); Prophylactic cranial irradiation (PCI) was associated with significantly longer miPFS (NR vs. 15.6 months, P=0.024) and a trend toward longer OS (NR vs. 20.5 months, P=0.059).



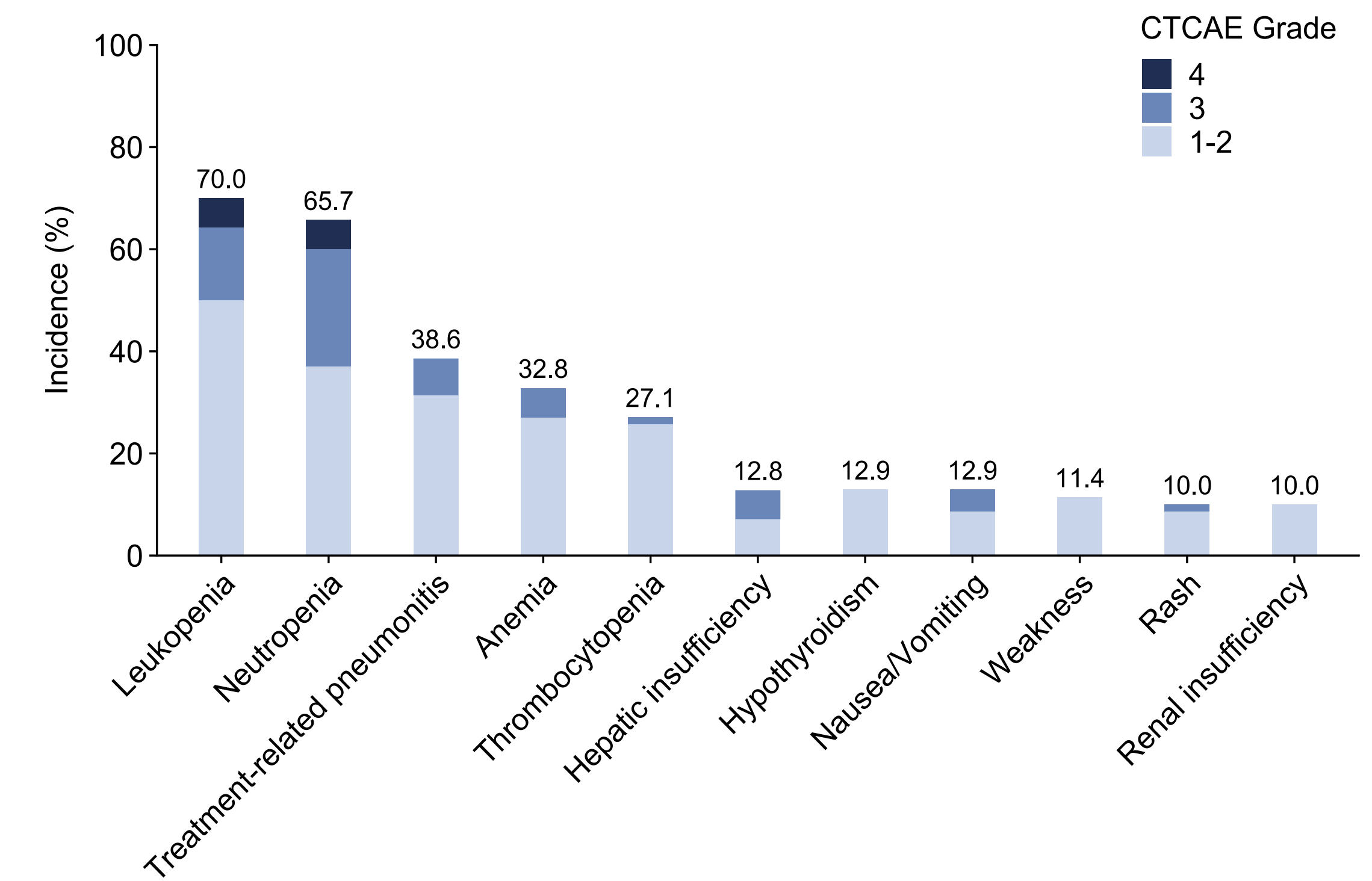
BM-RT, brain metastases with brain radiotherapy; BM-NRT, brain metastases without brain radiotherapy; NBM-PCI, no brain metastases with prophylactic cranial irradiation; NBM-NPCI, no brain metastases without prophylactic cranial irradiation.

Table 1. Treatment-related adverse events (TRAEs), in the study population: TRAEs were common, while the overall safety profile remained manageable.

Treatment-Related Adverse Events (TRAEs)	n (%)
TRAEs	68 (97.1%)
Grade ≥3 non-hematologic TRAEs	11 (15.7%)
Treatment-related pneumonitis	27 (38.6%)
Grade ≥3 treatment-related pneumonitis	5 (7.1%)
Treatment-related deaths	0

RESULTS

Figure 2. Most common TRAEs, showing the distribution across toxicity grades.



CONCLUSIONS

- In patients with ES-SCLC achieving disease control after first-line chemoimmunotherapy, the addition of cTRT demonstrated survival benefits and a manageable safety profile.
- Our findings support the integration of cTRT into the management of ES-SCLC in the era of chemoimmunotherapy. Notably, intracranial radiotherapy exhibited potential to enhance intracranial disease control.

REFERENCES & ACKNOWLEDGEMENTS

References

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Artificial Intelligence (AI) Use Disclosure

ChatGPT (OpenAI) was used for English-language editing. The authors take full responsibility for all content in this work.