

EP13.16: IR-AEs Under Treatment With 1st-Line Chemo-Immunotherapy for ES-SCLC Correlates With Improved Outcomes

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INTRODUCTION

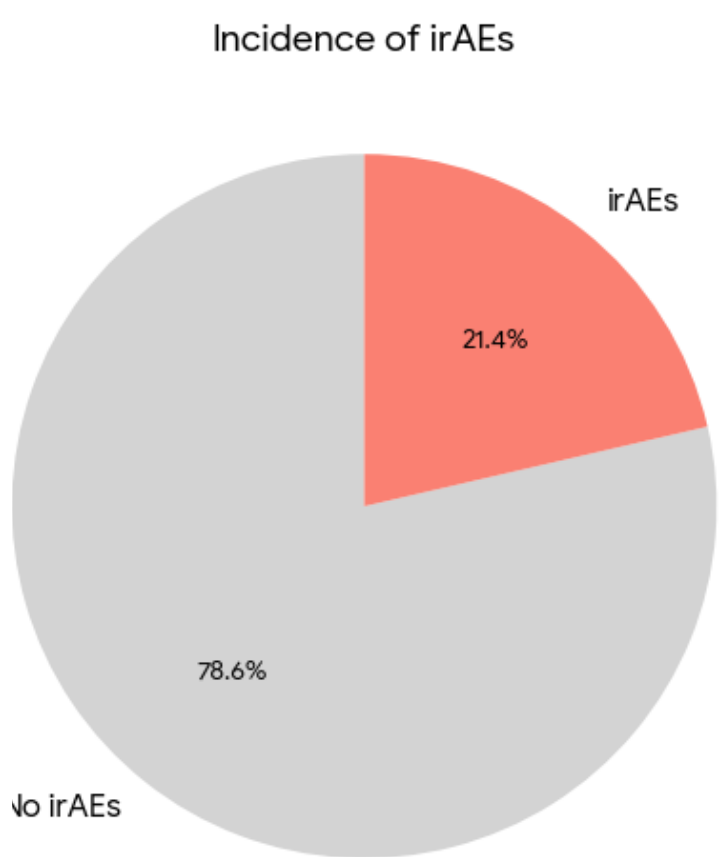
Extensive-stage small-cell lung cancer (ES-SCLC) continues to carry poor prognosis despite incorporation of chemo-immunotherapy as standard first-line treatment. Immune-related adverse events (irAEs) have emerged as potential surrogate markers of treatment benefit across several tumor types, but real-world evidence in ES-SCLC remains limited. We evaluated clinical outcomes and the association between irAE in a multicenter real-world cohort treated with first-line platinum-etoposide-atezolizumab.

DISCUSSION AND CONCLUSION

- In this real-world ES-SCLC cohort treated with first-line chemo-immunotherapy, the development of irAE was associated with significantly longer PFS and OS, supporting the role of irAE as a potential surrogate of treatment activity.
- These findings reinforce the prognostic relevance of immune-mediated toxicity and highlight the need for prospective validation in larger datasets.

RESULTS (updated from abstract)

Characteristic	Value
Sample size (N)	118
Age at diagnosis (years)	Median: 68.0 (Range: 29.0 - 87.0)
ECOG PS at diagnosis	ECOG 0/1/2/3/4: 39.8%/39.8%/13.6%/5.9%/0.8%
Sex	Male/female: 67.8%/32.2%
Smoking habit	Smokers 98.3%; Heavy smokers (PYI ≥ 30): 83.1%
Tumor burden (extrapulmonary sites)	Median: 2.0 (Range: 0 - 6)
Development of IR-AEs	21.4%
Median follow-up	31.0 months
Median Progression-Free Survival (mPFS)	With IR-AEs 9.8m Without IR AEs 7.1m
Median Overall Survival (mOS)	With IR-AEs 17.9m without IR-AEs 12.9m



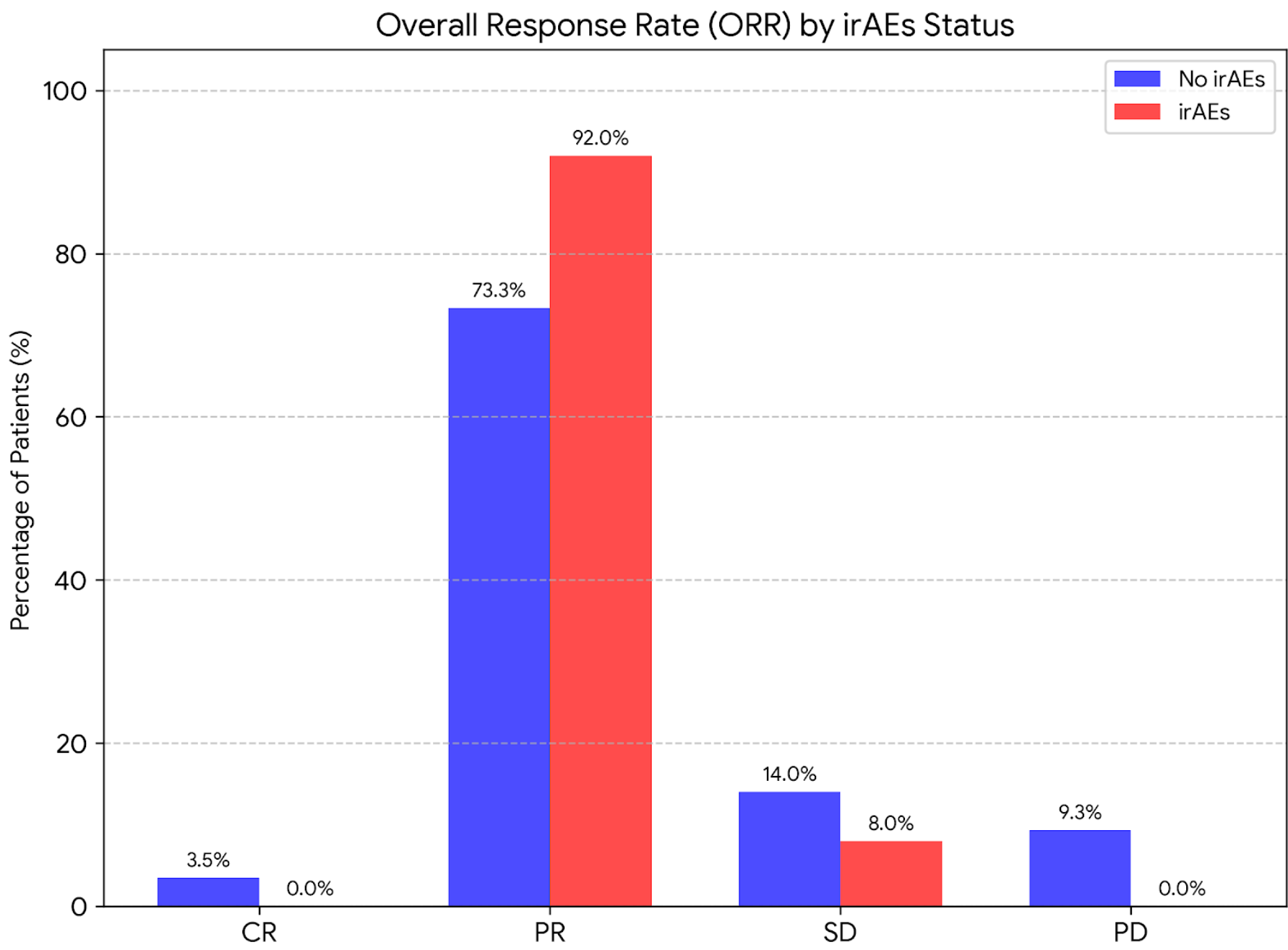
There were no statistical differences on IR-AEs appearance between age groups of <65 or ≥65 years

Age Group	No irAEs	irAEs
<65 years	75.0% (n=27)	25.0% (n=9)
≥65 years	80.2% (n=65)	19.8% (n=16)

Fisher's exact test p-value: 0.6258

Response Category	No irAEs (n = 86)	irAEs (n = 25)
Complete Response (CR)	3.5% (n = 3)	0.0% (n = 0)
Partial Response (PR)	73.3% (n = 63)	92.0% (n = 23)
Stable Disease (SD)	14.0% (n = 12)	8.0% (n = 2)
Progressive Disease (PD)	14.0% (n = 12)	0.0% (n = 0)
Overall ORR (CR + PR)	76.7% (n = 66)	92.0% (n = 23)

Fisher's exact test comparing ORR (CR+PR) vs. Non-responders (SD+PD) between the two groups yields a p-value of 0.1517.



METHODS

We retrospectively analyzed patients from two institutions treated in 1st line with platinum-etoposide-atezolizumab. Demographics, staging, metastatic burden, and laboratory variables were captured at baseline. PFS and OS were calculated from treatment initiation. Progression was defined radiologically or clinically. Survival outcomes by Kaplan-Meier method. irAEs were captured across eight predefined categories; any grade of immune-related toxicity (CTCAE criteria G1-4) was classified as IRAE-positive. Comparisons between irAE-positive and irAE-negative subgroups were performed using a manually computed log-rank test.

REFERENCES & ACKNOWLEDGEMENTS

All authors contributed equally to study design and data acquisition, abstract redaction and poster creation and approval
Corresponding author also performed statistical analyses, database depuration and final submission

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Google Gemini and Perplexity were utilized strictly for statistical processing, generating graphics, and English language editing. All clinical interpretations and medical judgments were made independently by the authors.

Patients experiencing immune-related adverse events (irAEs) demonstrated a statistically significant improvement in both progression-free survival ($p=0.0247$) and overall survival ($p=0.0116$).

