Association Between Immune-Related Adverse Events (irAE) and Atezolizumab Efficacy in Advanced NSCLC: Analyses From the Phase III Study OAK


Atezolizumab, an anti-programmed death ligand-1 (PD-L1) monoclonal antibody, preserved overall survival (OS) in the PD-L1–unselected intention-to-treat (ITT) co-primary endpoints: atezolizumab vs docetaxel in second- and third-line settings in patients with metastatic NSCLC. OAK (NCT02008227) is the first randomized Phase III study of atezolizumab following platinum-containing chemotherapy.

METHODS

Efficacy was evaluated in patients with and without irAE in the safety population (N = 1225) who received ≥ 1 dose of study treatment. Stratification factors were overall survival (OS) in the atezolizumab and docetaxel arms; the schema of irAE subgroups defined by PD-L1 expression status and in both non-squamous and squamous cell histologies.

RESULTS

- In this analysis, we characterize baseline factors for their association with irAE.
- PFS and objective response rates (ORR) were evaluated per RECIST v1.1 criteria.
- The median PFS was numerically longer in patients with vs without irAE; however, these results could have been confounded by variability in baseline characteristics.
- The median OS was not statistically different in patients with vs without irAE.
- The irAE profile was consistent with previously reported findings.

CONCLUSIONS

- irAE were observed due to non-selective activation of the immune system by PD-L1/PD-1 agents and impact their efficacy.
- Patients with irAE did not overall experience more symptomatic treatment-related adverse events; however, patients with irAE had a shorter time to irAE onset.
- The irAE profile was consistent with previously reported findings, and the safety profile of atezolizumab was maintained across irAE subgroups.

RELEVANCE

- The results of this analysis highlight the importance of irAE monitoring and management in clinical practice.
- Further studies are needed to determine the clinical significance of irAE in the context of treatment outcomes.

REFERENCES

- Dohme Corp, 2017.