Background Previous real-world studies of first-line (1L) atezolizumab+carboplatin+etoposide for ES-SCLC in the US community oncology setting showed similar treatment durations (medians: 4.9–5.7 months) as in the IMpower133 trial (median: 4.7 months) although the real-world populations had higher proportions of patients with poor ECOG performance status (PS) and brain metastases.1,2 This study measured treatment duration in an older ES-SCLC population initiating 1L atezolizumab+carboplatin+etoposide and the impact of ECOG PS and brain metastases at baseline on treatment duration.

Methods This retrospective cohort study utilized the 100% sample of Medicare Fee-For-Service enrollment and Parts A/B claims from January 1, 2018 to June 30, 2021. Beneficiaries with ≥2 claims with an ICD-10-CM code for lung cancer and claims for atezolizumab+carboplatin+etoposide were identified. Index was 1L treatment initiation occurring between October 11, 2018 to December 31, 2019. ECOG PS at baseline was approximated using a claims-based measure that classifies individuals as good (ECOG 0-1) or fair/poor (ECOG ≥2) based on healthcare utilization in the 12-month pre-index period.3 Baseline brain metastases were identified from diagnosis to 30 days post-index based on ICD-10-CM codes. 1L treatment duration was measured from index to a gap in treatment claims of ≥60 days, initiation of a new anti-cancer regimen or death. Kaplan-Meier curves were utilized to examine the differences for patients stratified by brain metastases (Y/N) and binary ECOG PS.

Results A total of 2,470 patients older than 65 years (median age: 73 years) were included in the study with a median follow-up of 8.4 months. 62% had a proxy for fair/poor ECOG PS and 22% had baseline brain metastases. Median 1L duration for the full cohort was 5.4 months (95% CI: 5.2–5.6). Median 1L duration treatment was 5.1 months for patients with poor/fair ECOG PS (95% CI: 5.1–5.3) and 5.8 months (95% CI: 5.6–6.0) for patients with good ECOG PS (figure 1) (Log-Rank p<0.0001). Median 1L treatment duration for patients with brain metastases was 5.0 months (95% CI: 4.6–5.3) and 5.5 months (95% CI: 5.3–5.7) for patients without brain metastases (figure 2) (Log-Rank p=0.2488).

Conclusions Despite the older age of the study population and the worse baseline ECOG PS and brain metastases status, 1L treatment duration with atezolizumab+carboplatin+etoposide was similar to those observed in IMpower133 and in previous real-world community oncology studies. Based on descriptive comparisons, treatment duration was longer in patients with a proxy for good ECOG PS (statistically significant) and patients without brain metastases (not statistically significant).

Acknowledgements Shambhavi Kumar for statistical analysis.

REFERENCES