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Background

The addition of atezolizumab to carboplatin/etoposide (A-CE) for patients with extensive stage SCLC (ES-SCLC) has been recently established as standard first-line treatment on the basis of the IMpower133 trial¹. Unfortunately, efficacy and safety data of this combination in the real-world setting is lacking.

Methods

We retrospectively evaluated consecutive patients diagnosed with ES-SCLC and treated with A-CE between January 2020 and September 2021 in eight centers in the UK. Demographic and clinicopathological data was collected and analysed.

Results

- A total of 235 patients were included. Baseline clinical characteristics are summarized in **Table 1**. Most of the patients (74,4%) received four cycles of A-CE; median number of doses of atezolizumab was 7 (range 1-20).
- At a median follow-up of 15 months, median progression-free survival (PFS) and overall survival (OS) were 6,3 (**Figure 1**) and 9,4 months (**Figure 2**), respectively.
- Fifty-nine (25%) patients received prophylactic cranial irradiation and seventy-one (30,2%) consolidation thoracic radiotherapy.
- Eighty-one (34,5%) patients received at least one subsequent treatment. Most frequent subsequent treatment used was topotecan (36,3%) followed by re-challenge with platinum/etoposide (31,3%) and VAC (21,3%) (**Figure 3**).
- Treatment-related adverse events (AEs) of any grade were reported in 153 (65%) patients, G_{≥3} (CTCAE v5) in 60 (25%) patients. Treatment discontinuation was reported in 57 patients (24,3%).

Conclusions

- Data from our series show comparable PFS but inferior OS than those reported in the IMpower133 trial.
- Negative prognostic factors such as performance status ≥ 2 and presence of brain metastasis at diagnosis were more common in our cohort compared with IMpower133 and may have determined a shorter OS.
- Real-world data in this setting could help to optimize clinical management of these patients.

	UK Real-world data cohort (n=235)	Impower 133 (n=201)
Median age – years (range)	66 (35-85)	64 (28-90)
Sex – no. (%)		
Male	125 (53,2)	129 (64,2)
Female	110 (46,8)	72 (35,8)
Smoking status – no. (%)		
Never	10 (4,3)	9 (4,5)
Current	82 (34,9)	74 (36,8)
Former	136 (57,9)	118 (58,7)
Unknown	7 (2,9)	0 (0)
ECOG PS – no. (%)		
0-1	211 (89,4)	201 (100)
2-3	24 (10,6)	0 (0)
Brain metastases – no. (%)	36 (15,3)	17 (8,5)

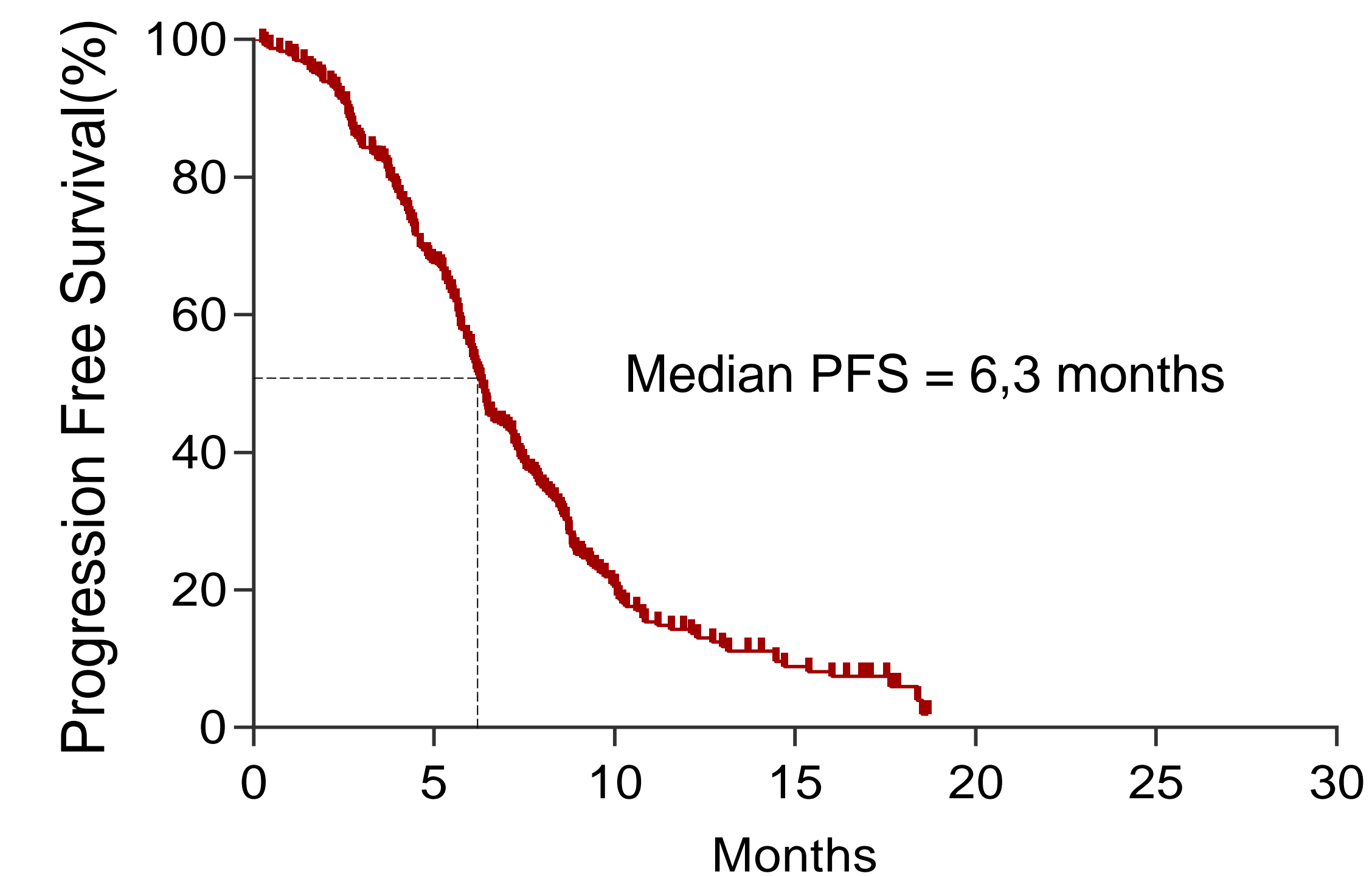


Figure 1: Progression-free survival, using Kaplan-Meier method for estimation of survival probability.

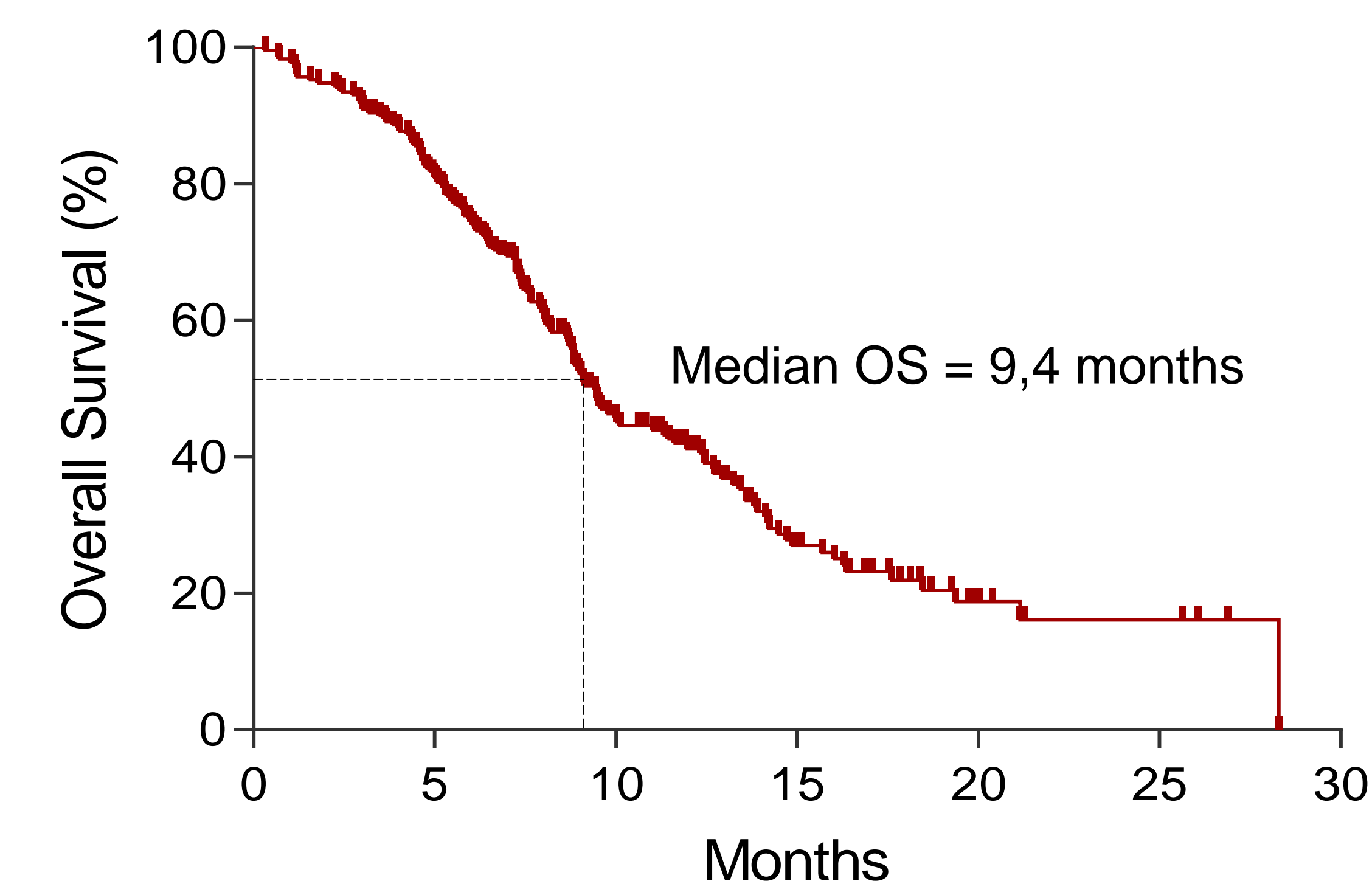


Figure 2: Overall survival, using Kaplan-Meier method for estimation of survival probability.

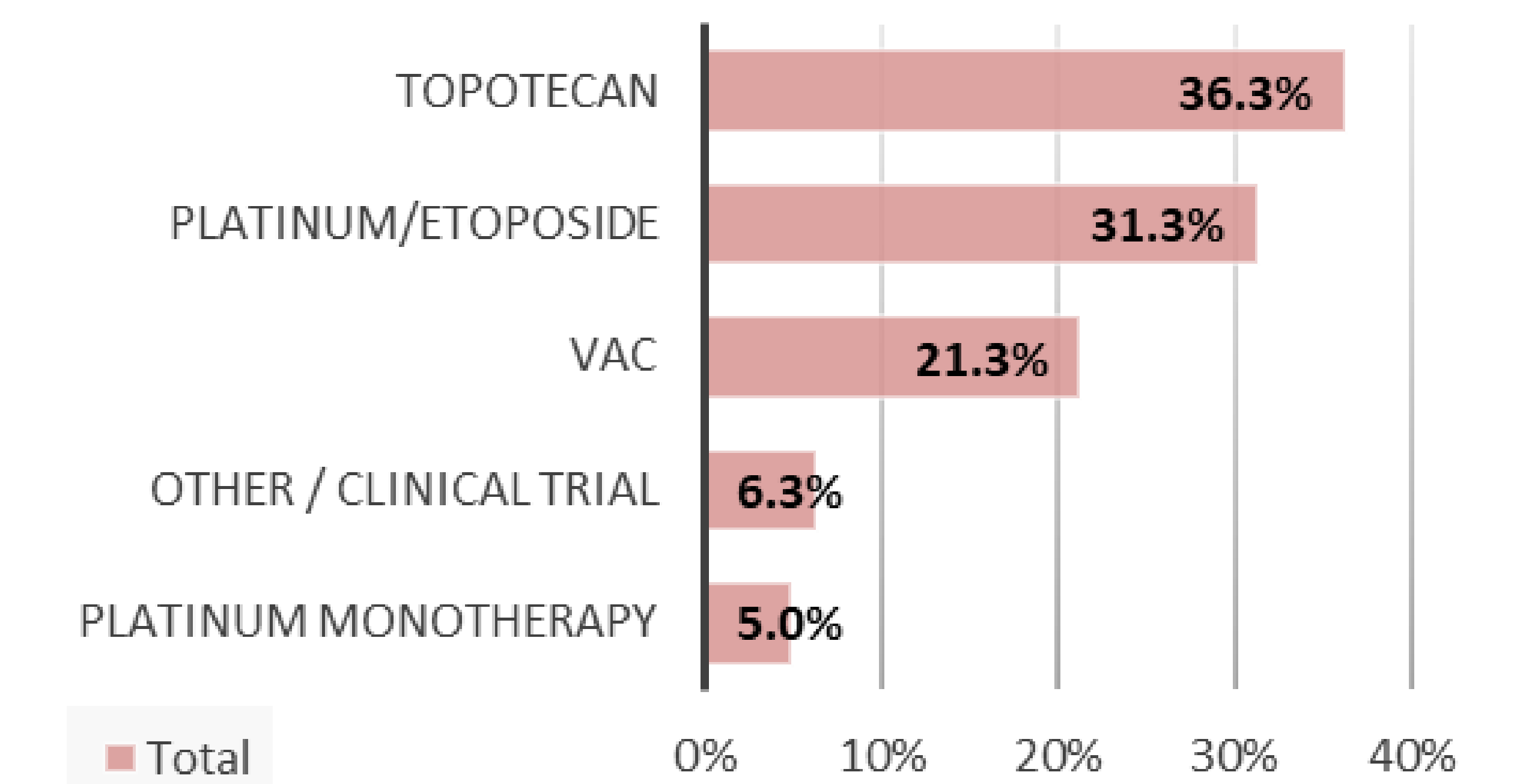


Figure 3: Subsequent systemic treatments after progression to A-CE. VAC, Vincristine, doxorubicin and cyclophosphamide.

1. Horn L, et al. First-Line Atezolizumab plus Chemotherapy in Extensive-Stage Small-Cell Lung Cancer. N Engl J Med 2018;379:2220-9.