Neutropenia, anemia, and thrombocytopenia are complications borne by these patients and the health care system. This retrospective observational study used structured data from the US Oncology Network’s iKnowMed (iKM).

OBJECTIVES

To describe the prevalence and frequency of myelosuppression, treatment patterns, and supportive care utilization among patients with ES-SCLC treated with chemotherapy in the US community oncology setting.

METHODS

Data Source

- This retrospective observational study used structured data from the US Oncology Network’s iKnowMed (iKM) electronic health record system.
- Patients diagnosed with ES-SCLC during the study period were identified.
- The study period was defined as January 1, 2015, through December 31, 2019.
- Patients were selected for the study if they had a diagnosis of ES-SCLC during the study period and met the following criteria:
  - Age ≥ 18 years at ES diagnosis
  - ESCAPE criteria
  - On treatment with chemotherapy for ES-SCLC with or without cranial irradiation
  - Least 8 weeks since last chemotherapy

Data were supplemented with vital status from the Social Security Administration’s Limited Access Death Master File and health care resource utilization data from the US Department of Health and Human Services.

Study Population

- Adult patients with ES-SCLC who initiated chemotherapy between January 1, 2015, and December 31, 2019, were identified. Data of chemotherapy initiation was considered the index date (Table 1).
- Patients were included in the study if they had a diagnosis of ES-SCLC within the 12 months prior to diagnosis.
- Patients who were followed from index date through December 31, 2020, the date of last visit, or date of death, or subsequent occurrence were included.
- Patients enrolled in clinical trials or diagnosed with other primary tumors during the study period were excluded.

Investigational agents

- Myelosuppressive events were identified using iKM for laboratory values based on the Common Terminology Criteria for Adverse Events (CTCAE) Version 5.0 US. Department of Health and Human Services.

OUTCOME AND ANALYSIS

- Prevalence and frequency of myelosuppression (by dose and grade), treatment patterns, and supportive care utilization were reported.

RESULTS

- Grade 3 or higher myelosuppressive events were identified. Date of chemotherapy initiation was considered the index date (Table 1).
- Among the 1126 patients who experienced grade ≥ 3 myelosuppressive events, 32% experienced ≥ 1 grade 3 or higher myelosuppressive event in ≥ 2 lineages, and 95 (6.0%) had ≥ 1 grade 3 or higher myelosuppressive event in any lineage, 454 (28.8%) had ≥ 1 grade 3 or higher myelosuppressive event in 2 lineages, and 105 (6.7%) had ≥ 1 grade 3 or higher myelosuppressive event in 3 lineages (Figure 3).

TREATMENT PATTERNS

- Close to one third (31.0%) of patients received ≥ 4 chemotherapy cycles of the index treatment (Table 2).
- A typical 52% of the patients had a treatment hold defined as gap in treatment in ≤ 45 days (Table 2).
- One third (32.7%) of patients had treatment delay of > 45 days to 90 days (Table 2).
- Close to two thirds (64.1%) of patients received WHO chemotherapy and 31.6% received suboptimal chemotherapy (64.1% weakness in immunology: chemotherapy integration therapy, 53.9% in combination with immunology: as in the index regimen (Figure 4).
- Following chemotherapy index treatment, more than half (58.8%) of patients did not receive any further treatment.

SUPPOR TER C CARE UTILIZATION AND MANAGEMENT

- More than half (57.1%) of patients received IV hydration and 21.3% of patients were referred to blood transfusion units (Table 2).
- A typical 75% of patients received a G-CSF after chemotherapy initiation (Table 2).
- 11% of patients received a dose reduction of index treatment (Table 2).
- Among chemotherapy-naive patients, 50% received a G-CSF within 3 days after chemotherapy initiation (Table 2).
- Approximately two thirds of patients received pegfilgrastim (60.4%) or lenograstim (36.7%) (Table 2).

- More than 16% of patients received an ESA after chemotherapy initiation (Table 2).

CONCLUSIONS

- Emerging data indicate that supportive care measures are critical for the management of ES-SCLC.
- Patient outcomes and health care resource utilization in the inpatient setting were not captured.
- Excluding patients who received ≥ 4 chemotherapy cycles from the index treatment may underestimate the overall prevalence of patients who received ≥ 4 chemotherapy cycles.