Small cell lung cancer represents approximately 15% of the cases of lung cancer in the United States. Patients with limited-stage small cell lung cancer (LS-SCLC) chemotherapy follow-up trials have shown a 5-year survival rate of 20-30% and a 3-year survival rate of 15-25%, with a median survival of 12 to 18 months. Elderly patients, defined as age ≥ 70 years, treated with chemoradiotherapy for LS-SCLC are at higher risk of adverse events, lower chemotherapy completion rates, and decreased survival compared to younger patients. To better understand the impact of age on the treatment outcomes of patients with LS-SCLC, a study was conducted comparing the outcomes of elderly (age ≥ 70 years) and younger patients (age < 70 years). The study included 1,303 patients enrolled in 11 trials which enrolled patients from 1993 to 2005, with IPD from 1,303 patients enrolled in 11 trials which enrolled patients from 1993 to 2005. The primary objective of the study was to compare the OS, PFS, and adverse events (AEs) for patients age ≥ 70 years to those age < 70 years. Univariate and multivariable frailty Cox Models were fitted to calculate hazard ratios (HR) and 95% confidence intervals (CI) were tested by log rank test for categorical variables and Kruskal wallis test for continuous variables. The median survival observed on phase 3 clinical trials was 25 months. Elderly compared to younger patients completed treatment less often and discontinued treatment due to adverse events, refused further treatment, and died during treatment more frequently (Table 4).

Results

Table 1: Clinical trials included in the analysis

Table 2: Characteristics of patients at baseline

Table 3: The rate of non-hematologic and hematologic grade ≥ 3 AEs with a frequency ≥ 10% in elderly and younger patients

Table 4: OS and PFS were evaluated by Kaplan-Meier estimates and were compared using a chi-square test for p-values

Figure 1: Overall Survival

Figure 2: Progression-Free Survival

Adverse Events Analyses

References

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