TRILACICLIB HAS MYELOPRESERVATION BENEFITS IN SMALL CELL LUNG CANCER TREATED WITH CHEMOTHERAPY, IRRESPECTIVE OF AGE

INTRODUCTION

The treatment of small cell lung cancer (SCLC) is challenging due to its high treatment toxicology. Myelosuppression, a common toxic effect of chemotherapy, often leads to dose reductions and delays, which can affect patient outcomes. Myelopreservation strategies, which aim to mitigate myelosuppression, have the potential to improve patient outcomes and quality of life.

METHODS

Data were pooled from randomized studies in the FOCUS-3 (NCT03499770) trial and the FOCUS-2 (NCT03041311) trial, which evaluated the myelopreservation benefits of trilaciclib in patients with SCLC treated with chemotherapy, irrespective of age. The studies were conducted in the United States, Europe, and Asia, with patients aged 18-75 years.

TABLE 1. OVERVIEW OF TRILACICLIB CLINICAL STUDIES INCLUDED IN POOLED ANALYSIS

<table>
<thead>
<tr>
<th>Study</th>
<th>Patient Population</th>
<th>Treatment Schedule</th>
<th>Study ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>G17-028 (NCT03049770)</td>
<td>Newly diagnosed</td>
<td>Trilaciclib 240 mg/m² Q4D or placebo Q4D prior to chemotherapy on days 1-3 of each 21-day Q4D cycle</td>
<td>G17-028</td>
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<tr>
<td>G17-05 (NCT03041311)</td>
<td>Newly diagnosed</td>
<td>Trilaciclib 240 mg/m² Q4D or placebo Q4D prior to chemotherapy on days 1-3 of each 21-day Q4D cycle</td>
<td>G17-05</td>
</tr>
<tr>
<td>G17-03 (NCT02554447)</td>
<td>Previously treated</td>
<td>Trilaciclib 240 mg/m² Q4D or placebo Q4D prior to topotecan 1.5 mg/m² Q4D on days 1-3 of each 21-day cycle</td>
<td>G17-03</td>
</tr>
</tbody>
</table>

RESULTS

Myelopreservation efficacy of trilaciclib administered prior to chemotherapy by age

- Administering trilaciclib prior to chemotherapy significantly reduced the incidence of myelosuppression.
  - Compared to placebo, patients receiving trilaciclib had a lower incidence of grade 3/4 neutropenia, thrombocytopenia, and anemia.
  - The percentage of patients with grade 3/4 neutropenia, thrombocytopenia, and anemia was consistently lower in the trilaciclib group across all age groups.

Safety of trilaciclib by age group

- The percentage of patients with grade 3 or 4 adverse events (AEs) was lower in the trilaciclib group than in the placebo group across all subgroups, including patients aged ≥65 years.
- The addition of trilaciclib to chemotherapy consistently decreased the percentage of patients with high-grade hematologic AEs compared to the placebo group across all subgroups, including patients aged ≥65 years.

Impact of myelopreservation benefits of trilaciclib on TCTD in PROs by age

- Myelopreservation benefits extended to improvements in PROs in younger (<65 years) and older patients (≥65 years) receiving trilaciclib.
- The treatment effect was in favor of trilaciclib in both age groups, in the analysis of categorical change from study baseline, significant treatment-by-group interactions were observed for PWB, fatigue, anemia-TOI, and FACT-An total scores, with greater improvements and less deterioration seen for patients aged ≥65 years.

CONCLUSIONS

- Data from this analysis indicate that the myelopreservation benefits of trilaciclib are observed regardless of a patient’s age, with greater effects among older patients who are more susceptible to CIM.
- Administering trilaciclib prior to chemotherapy in patients aged ≥65 years reduced CIM levels to equivalent those seen in younger patients receiving trilaciclib, suggesting that trilaciclib negates the negative impact of aging on susceptibility to CIM.
- By reducing CIM and improving symptoms and functional limitations associated with cancer and CIM, trilaciclib has the potential to allow older patients to receive chemotherapy on schedule and at standard-of-care doses, as well as improve the experience for older patients receiving chemotherapy.