CORRELATION BETWEEN IMMUNE-RELATED ADVERSE EVENTS AND EFFICACY IN NON-SMALL-CELL LUNG CANCER TREATED WITH NIVOLUMAB


BACKGROUND AND IMPORTANCE

Nivolumab, an immune checkpoint inhibitor, has shown a relationship between immune-related adverse events (irAEs) and efficacy in different studies, although these are not very consistent.

AIM AND OBJECTIVES

To assess the association between irAEs and the efficacy of nivolumab in adults with locally advanced or metastatic non-small cell lung cancer (mNSCLC) after prior chemotherapy.

MATERIALS AND METHODS

Restrospective observational study

- Data collected: demographic (age, sex) and clinical (histology, smoking habit, performance status (ECOG), line of treatment, response to previous chemotherapy and irAEs).
- Overall survival (OS) and progression-free survival (PFS) analysis was performed using Kaplan Meier. The association between irAEs and OS were analyzed by Cox Regression.

RESULTS

- 67 patients (88% men)
- Median age at the beginning of treatment: 67 years (IQR: 59-75)
- ECOG 0-1: 52%
- Second line treatment: 73%
- Histology squamous: 40%
- Disease Control Rate: 78%
- Former smokers/Smokers/Non-smokers: 53%/39%/8%

<table>
<thead>
<tr>
<th>irAEs type</th>
<th>N=28 irAEs (22 patients)</th>
<th>HR (95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonitis</td>
<td>10</td>
<td>0.62 (0.3-1.3)</td>
<td>0.2</td>
</tr>
<tr>
<td>Endocrine</td>
<td>6</td>
<td>0.23 (0.1-0.7)</td>
<td>0.014</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>6</td>
<td>0.59 (0.2-1.6)</td>
<td>0.3</td>
</tr>
<tr>
<td>Skin</td>
<td>6</td>
<td>0.2 (0.1-0.7)</td>
<td>0.008</td>
</tr>
</tbody>
</table>

CONCLUSION AND RELEVANCE

- In this study our data suggest a relationship between irAEs and increased OS, specially endocrine and skin.
- As our study was observational, other features as sex, ECOG or smoking habit that could bias results were not balanced between the study groups.

No conflict of interest

Abstract number: 4CPS-088