ADEQUACY OF NIVOLUMAB AND PEMBROLIZUMAB IN NON-SMALL-CELL LUNG CANCER

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Background
Between 2016 and 2017 the National Agency of Medicines and Medical Devices regulated the use of Nivolumab and Pembrolizumab for the treatment of non-small cell lung cancer (NSCLC).

In clinical trials conducted, patients with ECOG 0-1 and a life expectancy of at least 3 months were included since the benefit of immunotherapy can be delayed and even present a response after progression (pseudo-progression).

Objetives
To analyze characteristics of patients with NSCLC treated with nivolumab and pembrolizumab for less than 3 months at our center.

Material y Methods
Observational descriptive study was conducted.

- Which patients were included? Patients diagnosed with NSCL treated for ≤ 3 months (≤6 cycles of nivolumab and ≤4 cycles of pembrolizumab)
- Between what period of time? From the approval date of these drugs until October 2018.
- What data was collected? Age, sex, ECOG, histology, brain metastases, PDL-1 expression, number of previous lines, time elapsed since previous treatment if any, and reason for discontinuation.

Overall survival (OS) and progression-free survival (PFS) medians were calculated with SPSS 22.0 using Kaplan-Meier method.

Results

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<tr>
<th>Drug</th>
<th>PDL-1 Positive</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Pembrolizumab</td>
<td>100% positive</td>
<td>Medium age: 68 ± 9.7</td>
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<tr>
<td>Nivolumab</td>
<td>4,8% positive</td>
<td>75.4% non-squamous lung cancer</td>
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<td>14.5% brain metastases</td>
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62 patients

21 Nivolumab (PDL-1: 4.8% positive, 57,1% without determination)

41 Pembrolizumab (PDL-1 100% positive)

Previously treated: 75.8% (61.7% in less tan 3 months and 97.2% with < 3 previous lines)

Median treatment duration: 42 days (3-115)

7 patients discontinued due to drug toxicity

The global median OS and PFS were 209 and 47 days, with no statistically significant differences between both treatments (p=0.440 and p=0.221 respectively).

Conclusions
With the aim of improving the rational use of medicines and optimising results, this findings encourage us to carry out studies with a larger sample of patients in order to select the patients who would benefit most of these therapies.

The possible presence of pseudopropgression in those who did not reach at least 3 months of treatment constitutes a limitation to observe the possible clinical benefit.