Anti-PD1 immunotherapies such as Nivolumab and Pembrolizumab are a revolution for their efficacy in the care of oncology pathology. In clinical trials, they shown to be safe and well tolerated.

**BACKGROUND**

**OBJECTIVES**

We wanted to define and compare the tolerance profile of these two treatments in real-life setting.

**METHODS**

We performed a retrospective study including all the patients treated with Nivolumab or Pembrolizumab from January 2015 to February 2021. For each patient, the data about undesirable effects (UE) were collected from the reports of the oncology one-day hospitalization, gathered in the patient computerized record. A Fisher test was conducted for the statistical analysis.

**RESULTS**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Undesirable Effects Identified</th>
<th>Patients</th>
<th>Side Effects</th>
<th>Significative difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nivolumab</td>
<td>331</td>
<td>148</td>
<td>15% no side effects</td>
<td>p = 0.007</td>
</tr>
<tr>
<td>Pembrolizumab</td>
<td>192</td>
<td>131</td>
<td>28% no side effects</td>
<td>p = 0.0066</td>
</tr>
</tbody>
</table>

Pain (29%)

Severe asthenia (27%)

Alteration of the general state (21%)

Immune or infectious pneumopathy (18%)

Anorexia (15%)

Dermal toxicity (13%)

Immune-mediated diarrhea (10%)

| Grade 4 adverse effects | 44                  | 33                  |

**CONCLUSION**

Anti-PD1 has proved a huge benefice in term of efficacy and tolerance compared to the conventional chemotherapies. However, as shown in our real-life study, adverse effects which can be major still occurred. Their harmfulness seems to be underestimate and require to promote awareness among the prescribers to improve the patient care.