**Background**

The high cost of immunotherapy makes it necessary to evaluate the results in real life, the study of costs and economic evaluation can be useful tools to guide clinical decisions.

**Objectives**

To make an incremental cost-effectiveness ratio (ICER) analysis among the different available immune checkpoint inhibitor to treat non-small cell lung cancer (NSCLC) as second-line monotherapy.

**Material and methods**

**Outcomes collected:**
- Treatment start and end date
- Administered dose
- Number of cycles
- Drug costs: notified price - 7.5% discount + 4% VAT
- Indirect cost: treatment administration in Day Hospital
- Cost/cycle
- Overall cost (mean number of cycles administered multiplied by pharmacological and associated costs) were calculated.

**Endpoint:**
- Overall survival (OS) with Kaplan-Meier

**Results**

<table>
<thead>
<tr>
<th>Therapy</th>
<th>OS (95% CI)</th>
<th>Overall Cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nivolumab</td>
<td>6.4 months (2.81-9.98)</td>
<td>42.887</td>
</tr>
<tr>
<td>Pembrolizumab</td>
<td>8 months (3.05-12.94)</td>
<td>49.640</td>
</tr>
<tr>
<td>Atezolizumab</td>
<td>6.33 months (4.4-9.1)</td>
<td>28.678</td>
</tr>
</tbody>
</table>

**Conclusion**

The need to promote efficiency in the selection of treatments is one more reason to carry out an exhaustive comparative drug evaluation that includes the economic one. The effectiveness in terms of OS was greater for pembrolizumab, however, the cost analysis showed a greater benefit for atezolizumab.