

# COST-MINIMISATION ANALYSIS OF LUNG CANCER PD-L1 POSITIVE TREATMENT

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## BACKGROUND

A Therapeutic Positioning Report published by the Spanish Agency for Medicines and Healthcare Products concludes that there are no differences in efficacy and safety between nivolumab, pembrolizumab and atezolizumab for patients with lung cancer and PD-L1 expression >1%. The treatment must be chosen according to efficiency criteria.

## PURPOSE

To perform a cost-minimisation analysis and a simulation on the real population.

## MATERIAL AND METHODS

Atezolizumab = 2312,63 € / vial 1200 mg  
 Nivolumab = 838,86 € vial 100 mg  
 Pembrolizumab = 1931,696 € vial 100 mg

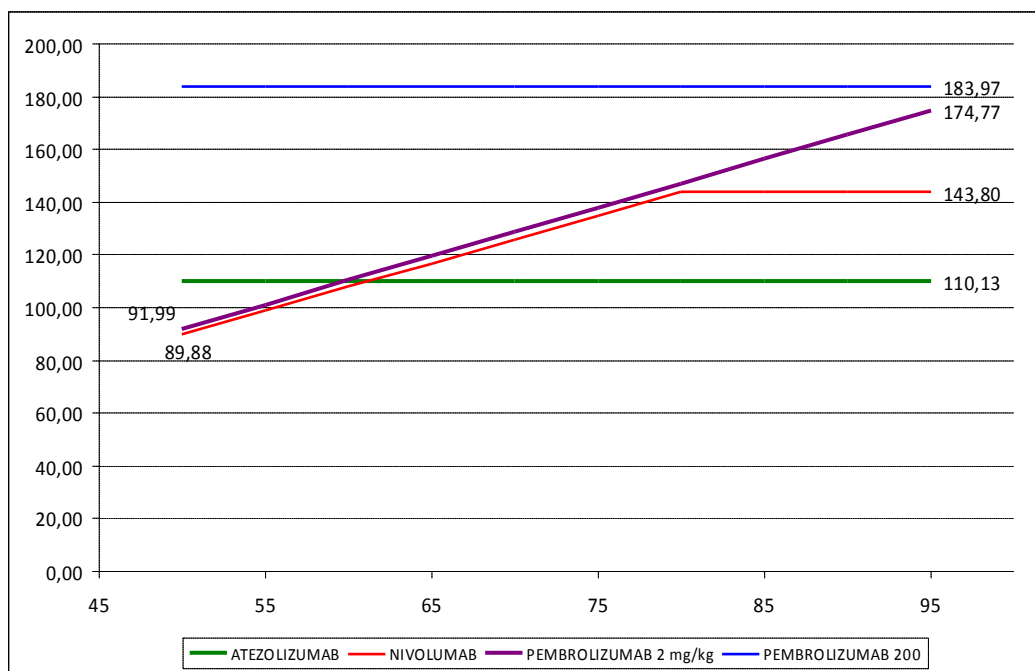
¿CTD = cost of treatment / day?

Atezolizumab 1200 mg/21 days  
 Nivolumab 3 mg/kg/14 days and  
 Nivolumab 240 mg/14 days for weight >80 kg  
 Pembrolizumab 2 mg/kg/21 days and  
 Pembrolizumab 200 mg/21 days

Simulation to patients with nivolumab treatment from april 2016 – july 2018

CTD and total treatment cost Atezolizumab vs Nivolumab (according weight and number of cycles)

## RESULTS



Average weight (kg)	82
Treatment cycles	4
CTD Nivolumab (€)	132,95
CTD Atezolizumab (€)	110,13
Total cost nivolumab (€)	285.191
Total cost atezolizumab (€)	231.263
<b>Difference (€)</b>	<b>-53.928</b>
<b>Difference (%)</b>	<b>-19%</b>

	50	55	60	65	70	75	80	85	90	95
Weight (kg)	50	55	60	65	70	75	80	85	90	95
ATEZOLIZUMAB	110,13	110,13	110,13	110,13	110,13	110,13	110,13	110,13	110,13	110,13
NIVOLUMAB	89,88	98,87	107,85	116,84	125,83	134,82	143,8	143,8	143,8	143,8
PEMBROLIZUMAB 2 MG/KG	91,99	101,18	110,38	119,58	128,78	137,98	147,18	156,38	165,57	174,77
PEMBROLIZUMAB 200 MG	183,97	183,97	183,97	183,97	183,97	183,97	183,97	183,97	183,97	183,97

## CONCLUSIONS

At current prices, atezolizumab is more efficient than nivolumab when the patient's weight is above 61.3 kg. In our population, with a much higher average weight, the use of atezolizumab instead of nivolumab would have meant a reduction of one-fifth in the costs of treatment.

