ANALYSIS OF REAL-LIFE DATA: OVERALL SURVIVAL AND PROGRESSION FREE SURVIVAL OF NIVOLUMAB AND ATEZOLIZUMAB IN NOT SMALL CELLS LUNG CANCER

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Background and importance

Nivolumab and atezolizumab are indicated in the treatment of the not small cells lung cancer (NSCLC) in patients who have previously received a chemotherapy treatment.

Aim and objectives

This analysis aims to report the clinical outcome in terms of Overall Survival (OS) and Progression Free Survival (PFS) in selected cohorts of patients.

Materials and methods

- ✓ Analysis conducted between 17/05/2018 – 24/05/2021.
- ✓ 29 Patients treated with nivolumab (240 mg q2w fixed-dose).
- ✓ 41 Patients treated with atezolizumab (1200 mg q3w fixed-dose).
- ✓ Clinical data, as the expression of Programmed Death Ligand 1 (PDL-1) and the performance status (ECOG-PS), were evaluated.
- ✓ Adverse drug reactions (ADRs) were observed through the National Pharmacovigilance Network.
- ✓ The OS and PFS analysis were made with R Software version 4.0.3.

Results

This investigation showed preliminary results in the 70 patients (of which 84% are male).The median OS was 14.4 months in nivolumab group. The median PFS was 5.1 months in atezolizumab group. ADRs occurred in the 24% of patients treated with nivolumab. Moreover, any ADRs occurred in the patients treated with atezolizumab.

Characteristics	Number of patients (n=41)
Sex, Male (%)	75 (75.6)
Sex, Female (%)	24 (24.3)
Età (SD)	67.6 (9.2)
Metastasis, n (%)	
Brain	9 (9.7)
Liver	4 (4.8)
Lymphnodes	53 (53.6)
Bone	12 (12.1)
Lung	63 (63.4)
Adrenal	4 (4.8)
Other	9 (9.7)
PDL1 status (%)	
YES	92 (92.6)
NO	7 (7.3)
ECOG (%)	
0	29 (29.2)
1	70 (70.7)
Observation period (median in months)	5.1
Number of cycles (median)	4
Overall survival (median in months)	7.1
Survivors (%)	39 (39.0)
Patients still in treatment (%)	31 (31.7)

Table 1. Atezolizumab group

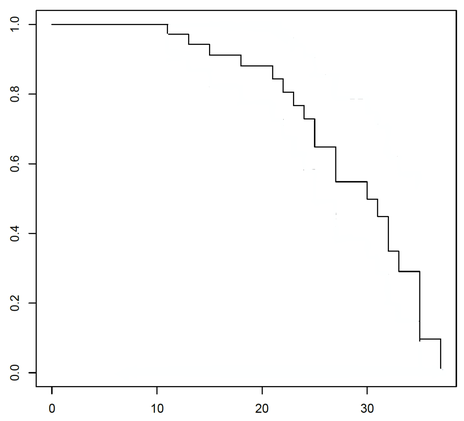

Fig 1. Atezolizumab OS

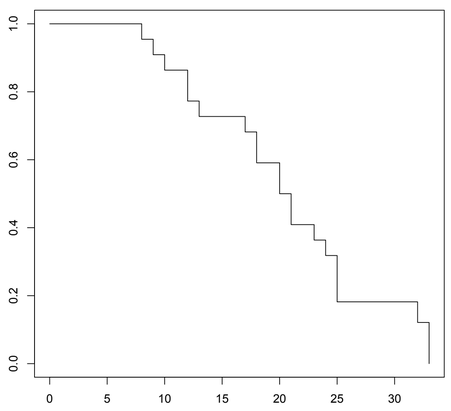

Fig 2. Atezolizumab PFS

Characteristics	Number of patients (n=29)
Sex, Male (%)	93 (93.1)
Sex, Female (%)	6 (6.8)
Age (SD)	73.2 (7.5)
Metastasis, n (%)	
Brain	13 (13.7)
Liver	10 (10.3)
Lymphnodes	51 (51.7)
Bone	24 (24.1)
Lung	65 (65.5)
Adrenal	13 (13.7)
Other	10 (10.3)
Weight (SD)	75.5 (11.5)
PDL1 status (%)	
< 1%	31 (31.0)
>= 1% e < 5%	13 (13.7)
>= 10%	6 (6.8)
Not determinable	10 (10.3)
NO	37 (37.9)
ECOG (%)	
0	13 (13.7)
1	86 (86.2)
Observation period (median in months)	3,84657
Number of cycles (median)	6
Overall toxicity (%)	24 (24.1)
Endocrinological toxicity (%)	28 (28.5)
Gastrointestinal toxicity (%)	28 (28.5)
Respiratory toxicity (%)	28 (28.5)
Other (%)	11 (11.1)
Overall survival (median in months)	14.4
Survivors (%)	24 (24.1)
Patients still in treatment (%)	17 (17.2)

Table 2. Nivolumab group

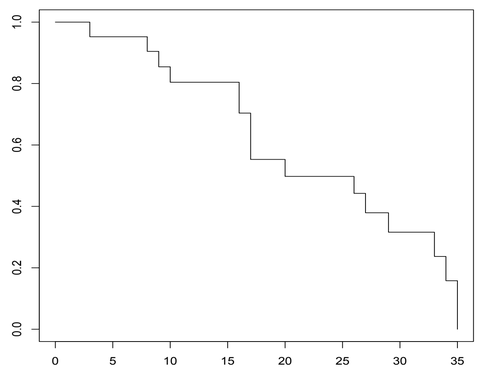

Fig 3. Nivolumab OS

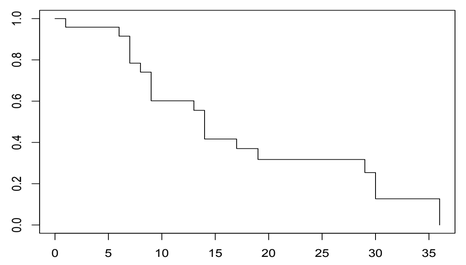

Fig 4. Nivolumab PFS

Conclusions and relevance

This analysis shows, through real-life data, the effectiveness of nivolumab and atezolizumab. Concerning nivolumab, the results of median OS (14.4 months) and PFS (3.8 months) were similarly estimated as the Phase III *CheckMate057* clinical trial *(*OS 12.2 months, PFS 2.3 months*)* [1]. Regarding atezolizumab, the results of median OS (7.2 months) and PFS (5.1 months) were similarly estimated as the Phase III *OAK* clinical trial (OS 13-8 months, PFS 2-8 months) [2].

References

1. Borghaei, H., et al., *Nivolumab versus Docetaxel in Advanced Nonsquamous Non-Small-Cell Lung Cancer.* N Engl J Med, 2015. 373(17): p. 1627-39.
2. Rittmeyer, A., et al., *Atezolizumab versus docetaxel in patients with previously treated non-small-cell lung cancer (OAK): a phase 3, open-label, multicentre randomised controlled trial.* Lancet, 2017. 389(10066): p. 255-265.

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