#197 - Continuation treatment with immunotherapy beyond two years in patients with metastasic non-small cell lung cancer: retrospective analysis of optimal duration treatment.

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BACKGROUND:
Immunotherapy with antiPD1/PD-L1 antibodies has become a standard treatment for advanced non-small cell lung cancer, with higher efficacy in patients with PDL1+ tumors. However, optimal duration of treatment remains unknown. In pivotal trials, IT was given until disease progression or toxicity and others limited treatment to two years. This study aims to asses if continuation treatment with antiPD1/PDL1 therapies in NSCLC beyond two years is superior to shorter treatment.

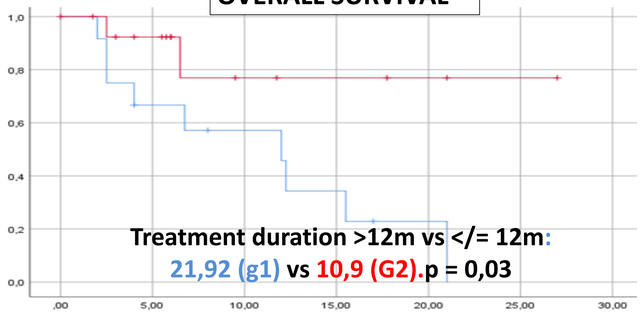
METHODS:
Retrospective study of patients treated with antiPD1/PDL-1 therapies for advanced NSCLC in a single institution. Two groups were performed: patients treated beyond two years (group1); patients who stopped treatment at two years or before due to toxicity (group2). To evaluate survival, Cox regression analysis and Kaplan Meier curves with log-rank were performed.

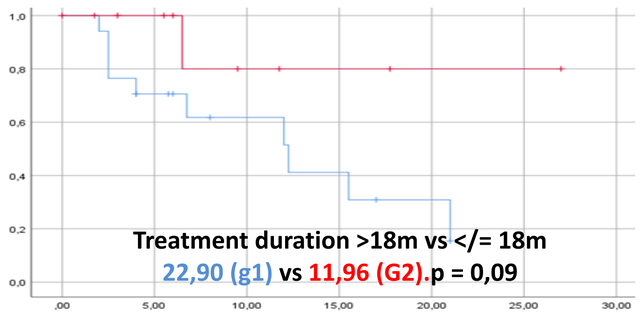
RESULTS:
Among the 112 patients with metastatic NSCLC treated with antiPDL1/PD1 therapies, 27 fulfill inclusion criteria: 7 patients (group1) and 20 patients (group2). The toxicities by which immunotherapy was suspended were pneumonitis (n=6), cutaneous (n=4), gastrointestinal (n=3), hypofisitis (n=2), hepatitis and queratitis (n=1). Median age 69 years old, 96% were current or former smoker and 81.5% adenocarcinomas; 15 patients (G1 = 2, G2 = 13) received immunotherapy as first and 11 (G1 = 5, G2 = 6) as second line of treatment. Three complete response, 13 partial responses and 11 stable disease were achieved. OS was 21.61 months (Group1) vs 11.78 months (Group 2), p=0.19. SLP were 15,23 months (Group1) vs 11,86 months (Group2), p=0.206. OS and PFS comparing treatment duration >1 vs ≤1 year were: OS: 21.96 vs 10.90 months, p=0.029; PFS 15.17 vs 10.67 months, p=0.978. OS and PFS for treatment duration >18 vs 18months: OS: 22.9 vs 11.97months, p=0.091; PFS 18.06 vs 11.67 months, p=0.413. Two patients from Group2 were treated with immunotherapy at progression, colitis and pneumonitis as immune-related adverse effects appeared requiring definitive suspension.

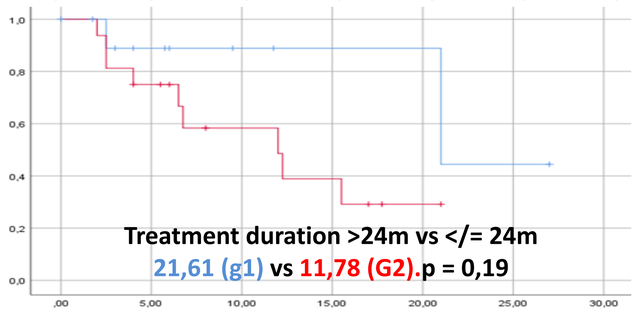
RESULTS:

PATIENTS CHARACTERISTICS	TOTAL (n)	%
Nº PATIENTS	27	100
AGE		
< 70y	13	48.1
≥ 70 y	14	51.9
GENDER		
MALE	17	63.0
FEMALE	10	37.0
HISTOLOGY		
ADENOCARCINOMA	22	81.5
SCAMOUS	5	18.5
OTHER	0	0
PERFORMANCE STATUS		
0 – 1	26	96.3
2	1	3.7
SMOKING HISTORY		
SMOKER	12	44.4
PREVIOUSLY SMOKER	14	51.9
NON-SMOKER	1	3.7
STAGE		
III	4	14.8
IVa	10	37.0
IVb	7	25.9
IVc	6	22.2
Nº METASTASIS		
≤ 1	12	44.4
≥ 2	15	55.6
BRAIN METASTASES		
YES	2	7.4
NO	25	92.6
HEPATIC METASTASES		
YES	2	7.4
NO	25	92.6
BONE METASTASES		
YES	9	33.3
NO	18	66.7
GANGLIONAR METASTASES		
YES	11	40.7
NO	16	59.3
LUNG METASTASES		
YES	9	33.3
NO	18	66.7

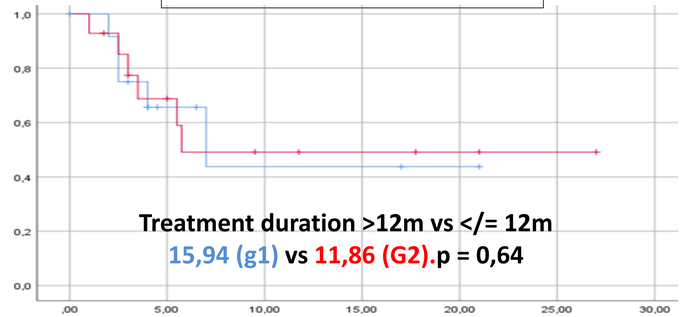
OVERALL SURVIVAL

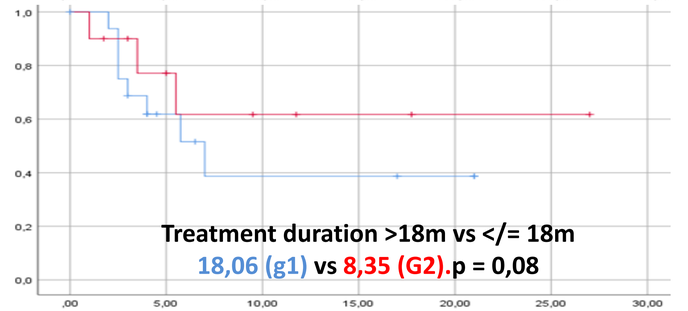


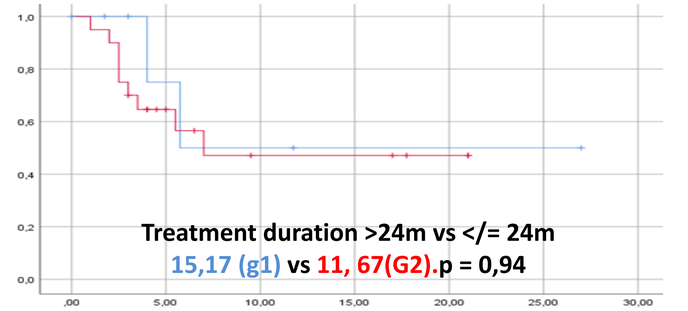




PROGRESION FREE SURVIVAL







Conclusions: A favorable trend is observed in OS and PFS in patients who are treated beyond two years; diferences were statistically significant for patients treated >1 year for OS. Retrospective nature and small sample of patients condition our results and limit their interpretation.