Long-term effectiveness and treatment sequences in patients with extensive stage small cell lung cancer receiving atezolizumab plus chemotherapy: results of the IFCT-1905 CLINATEZO real-world study

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Background

- Small cell lung cancer (SCLC) is a highly aggressive type of lung cancer with a tendency towards early recurrence and limited survival.
- Standard-of-care in 1st-line treatment is platinum-etoposide chemotherapy plus anti-PD-L1 immune checkpoint inhibitor atezolizumab or durvalumab, based on landmark, randomized, phase 3 clinical trials.

Methods - Objectives

- IFCT 1905-CLINATEZO is a nationwide, non-interventional, retrospective chart review study of 518 patients with extensive-stage SCLC who initiated atezolizumab plus chemotherapy as part of the French early access program between May 2019 and January 2020 (out of the 1402 patients who were included in this program).
- Inclusions were exhaustive per participating centers (65/307). Data collection run from March to November 2021.
- Key objectives were to assess effectiveness and safety of atezolizumab plus chemotherapy and analyze subsequent treatment sequences.

Best response and progression

Median follow-up (n=518): 30.8 months (95% CI, 29.9-31.5 months)

Best response	N=518
Complete response	19 (3.9% [2.2% - 5.6%])
Partial response	378 (77.1% [73.4% - 80.9%])
Objective Response	397 (81.0% [77.5% - 84.5%])
Stable disease	50 (10.2% [7.5% - 12.9%])
Disease Control	447 (91.2% [88.7% - 93.7%])
Progressive disease	43 (8.8% [6.3% - 11.3%])
Not done/Missing	28

A total of 430 (83%) patients had shown disease progression.
Sites of progression included: brain in 149 (35%) patients, mediastinum in 147 (34%) patients, liver in 97 (23%) patients, bone in 64 (15%) patients.

Conclusions

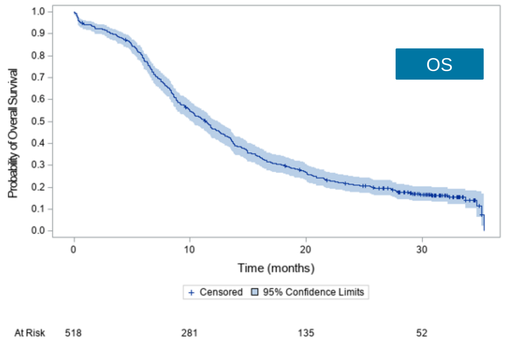
This study shows the reproducibility, in a real-life setting, of the key survival outcomes of IMpower-133, that may be attributed to the selection of patients fit for this regimen, the adoption of pragmatic approaches for the management of patients receiving atezolizumab, that includes concurrent radiotherapy and treatment beyond progression, and the high proportion of patients treated with 2nd-line therapies, mostly based on chemotherapy.

Baseline characteristics

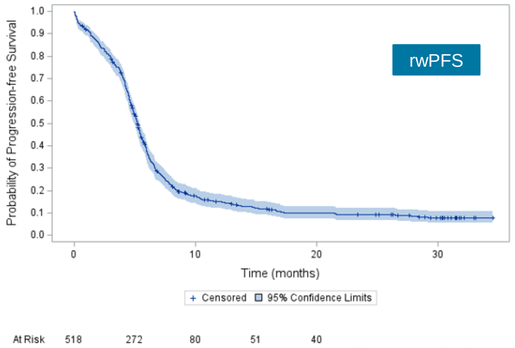
			N = 518
Gender	Male	N (%)	343 (66)
Age	>65 years	N (%)	277 (53)
Smoker	Current and past	N (%)	497 (96)
	Never	N (%)	21 (4)
Paraneoplasic disease	Yes	N (%)	26 (5)
Brain metastasis	Yes	N (%)	138 (27)

			N = 518
PS	0 - 1	N (%)	390 (75)
	2	N (%)	37 (7)
	3 - 4	N (%)	11 (2)
	Unknown	N (%)	80 (16)
Previous treatment Description regardless previous line (up to 4)	Yes	N (%)	**55** (11)
	Chemo-radiotherapy	N (%)	32 (58)
	Chemotherapy (CT)	N (%)	13 (24)
	Surgery +/- CT+RT	N (%)	13 (24)
	Radiotherapy (RT)	N (%)	11 (20)

Efficacy: OS and rwPFS



	Total (N =518)
Event: N (%)	431 (83.2)
Median OS: months [95% CI]	**11.3 [10.1-12.4]**
12-m OS: % [95% CI]	**46.7 [42.3-50.9]**
24-m OS: % [95% CI]	**21.2 [17.7-24.8]**



	Total (N =518)
Event: N (%)	456 (88.0)
Median rwPFS: months [95% CI]	**5.2 [5.0-5.4]**
6-m rwPFS: % [95% CI]	**37.5 [33.3-41.7]**
12-m rwPFS: % [95% CI]	**15.2 [12.2-18.6]**

Multivariate analysis for overall survival

			Univariate model			Multivariate model		
Factors		N	HR	95% CI	p	HR	95% CI	p
Age	≤ 65	241	1.00	-	-	1	-	-
	> 65	277	1.34	[1.11 - 1.63]	**0.002**	1.26	[1.02 – 1.55]	**0.03**
PS	0-1	390	1.00	-	-	1	-	-
	≥ 2	48	1.95	[1.42 - 2.68]	**< 0.0001**	1.88	[1.37 –2.59]	**< 0.0001**
Brain metastasis	No	380	1.00	-	-			
	Yes	138	1.07	[0.86 - 1.33]	NS			
Previous treatments	No	463	1.00	-	-			
	Yes	55	0.73	[0.53 – 1,00]	0.05			

Maximal toxicity of atezolizumab

SOC CTCAE V5.0	All N (%)	Grade 3 N (%)	Grade 4 N (%)	Grade 5 N (%)
All	101 (19.5)	70 (13.5)	28 (5.4)	3 (0.6)
Investigations	48 (9.3)	21 (4.1)	25 (4.8)	2 (0.4)
Blood and lymphatic system disorders	36 (6.9%)	33 (6.4%)	3 (0.6%)	0 (0%)
Gastrointestinal disorders	10 (1.9%)	9 (1.7%)	1 (0.2%)	0 (0%)
Skin & subcutaneous tissue disorders	7 (1.4%)	5 (1%)	2 (0.4%)	0 (0%)
Respiratory disorders	5 (1%)	5 (1%)	0 (0%)	0 (0%)
Infections and infestations	4 (0.8%)	3 (0.6%)	0 (0%)	1 (0.2%)
Fatigue	3 (0.6%)	3 (0.6%)	0 (0%)	0 (0%)
Endocrine disorders	3 (0.6%)	3 (0.6%)	0 (0%)	0 (0%)
Muskuloskeletal disorders	3 (0.6%)	3 (0.6%)	0 (0%)	0 (0%)
Cardiac disorders	3 (0.6%)	3 (0.6%)	0 (0%)	0 (0%)
Nervous system disorders	3 (0.6%)	2 (0.4%)	0 (0%)	1 (0.2%)
Renal failure	1 (0.2%)	1 (0.2%)	0 (0%)	0 (0%)

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