

Supplementary Table 2: Summary of clinical characteristics

VARIABLES	ALL PATIENTS (n=159)	COHORT 1 (n=89)	COHORT 2 (n=70)	ADJUSTED P-VALUE
Sex				
<i>Male</i>	93 (58)	52 (58)	41 (59)	1
<i>Female</i>	66 (41)	37 (42)	29 (41)	
Age at diagnosis	66 (14)	67 (13)	65 (13)	0.7
≤ 60	54 (34)	26 (29)	28 (40)	0.6
> 60	105 (66)	63 (71)	42 (60)	
Smoking status				
<i>Never smoker</i>	7 (4)	2 (2)	5 (7)	1
<i>Current or former smoker</i>	78 (49)	24 (27)	54 (77)	
NA	74 (47)	63 (71)	11 (16)	
Histological type				
<i>Adenocarcinoma</i>	120 (75)	66 (74)	54 (77)	0.91
<i>Other</i>	39 (24)	23 (25)	16 (23)	
WHO performance status				
0	26 (16)	8 (9)	18 (26)	0.96
> 0	68 (43)	18 (20)	50 (71)	
NA	65 (41)	63 (71)	2 (3)	
Cerebral metastasis				
Yes	23 (14)	2 (2)	23 (30)	0.86
NA	70 (44)	70 (79)	0 (0)	
Liver metastasis				
Yes	26 (16)	5 (6)	21 (30)	0.86
NA	70 (44)	70 (79)	0 (0)	
Bone metastasis				
Yes	45 (28)	6 (7)	39 (56)	0.86
NA	70 (44)	70 (79)	0 (0)	
Lymph node metastasis				
Yes	73 (46)	11 (12)	62 (89)	0.9
NA	70 (44)	70 (79)	0 (0)	
Pleuro-peritoneal metastasis				
Yes	55 (35)	6 (7)	49 (70)	0.64
NA	70 (44)	70 (79)	0 (0)	

Line of ICI					
	<i>I</i>	55 (34)	22 (25)	23 (33)	0.9
	<i>> I</i>	90 (57)	47 (53)	43 (61)	
	<i>NA</i>	14 (9)	20 (22)	4 (6)	
Type of ICI					
	<i>Anti PD-L1</i>	5 (3)	5 (6)	0 (0)	0.2
	<i>Anti PD-1</i>	141 (89)	77 (87)	64 (91)	
	<i>Anti CTLA4</i>	0 (0)	0 (0)	0 (0)	
	<i>Anti PD-L1 + anti CTLA4</i>	7 (4)	4 (4)	3 (4)	
	<i>Anti PD-1 + anti CTLA4</i>	3 (2)	0 (0)	3 (4)	
	<i>Other association</i>	3 (2)	3 (3)	0 (0)	
Tumor sample origin					
	<i>Primitive</i>	40 (25)	10 (11)	30 (43)	0.2
	<i>Metastatic</i>	37 (23)	2 (2)	35 (50)	
	<i>NA</i>	82 (52)	77 (87)	5 (7)	
Response					
	<i>Partial or complete response</i>	23 (15)	7 (8)	16 (23)	0.3
	<i>Stable</i>	57 (36)	13 (14)	44 (63)	
	<i>Progression</i>	15 (9)	6 (7)	9 (13)	
	<i>NA</i>	64 (40)	63 (71)	1 (1)	
PD-L1 status (cutoff at 1%)					
	<i>Negative tumors</i>	16 (10)	5 (6)	11 (16)	0.46
	<i>Positive tumors</i>	57 (36)	7 (8)	50 (71)	
	<i>NA</i>	86 (54)	77 (86)	9 (13)	
LDH		214 (80)	204.5 (48)	215.5 (78)	0.86
dNLR		2.5 (2)	NA	2.5 (2)	-
LPI score					
	<i>0</i>	32 (20)	9 (10)	23 (33)	0.2
	<i>> 0</i>	40 (25)	3 (3)	37 (53)	
	<i>NA</i>	87 (55)	77 (86)	10 (14)	
EGFR					
	<i>Mutated</i>	4 (3)	2 (2)	2 (3)	0.43
	<i>WT</i>	74 (46)	9 (10)	65 (93)	
	<i>NA</i>	81 (51)	78 (88)	3 (4)	
KRAS					
	<i>Mutated</i>	28 (18)	2 (2)	26 (37)	0.71
	<i>WT</i>	50 (31)	9 (10)	41 (59)	
	<i>NA</i>	81 (51)	78 (88)	3 (4)	
PI3K					
	<i>Mutated</i>	0 (0)	0 (0)	0 (0)	-

	<i>WT</i>	35 (22)	6 (7)	29 (41)	
	<i>NA</i>	124 (78)	83 (93)	41 (59)	
HER2	<i>Mutated</i>	0 (0)	0 (0)	0 (0)	-
	<i>WT</i>	78 (49)	11 (12)	67 (96)	
	<i>NA</i>	81 (51)	78 (88)	3 (4)	
BRAF	<i>Mutated</i>	2 (1)	0 (0)	2 (3)	1
	<i>WT</i>	74 (46)	10 (11)	64 (91)	
	<i>NA</i>	83 (52)	79 (89)	4 (6)	
ALK	<i>Mutated</i>	0 (0)	0 (0)	0 (0)	-
	<i>WT</i>	75 (47)	9 (10)	66 (94)	
	<i>NA</i>	84 (53)	80 (90)	4 (6)	
ROS	<i>Mutated</i>	0 (0)	0 (0)	0 (0)	-
	<i>WT</i>	63 (40)	7 (8)	56 (80)	
	<i>NA</i>	96 (60)	82 (92)	14 (20)	
MET	<i>Mutated</i>	2 (1)	0 (0)	2 (3)	1
	<i>WT</i>	60 (38)	7 (8)	53 (76)	
	<i>NA</i>	97 (61)	82 (92)	15 (21)	
OS (months), median (95% CI)		11.9 [8.8, NR]	12.8 [10.2;NR]	8.8 [6.1;13.9]	-
PFS (months), median (95% CI)		3.2 [2.7;4.3]	3.6 [2.7;5.6]	2.7 [2.2;4.3]	-

Continuous variables are described as median and interquartile range (IQR) and were compared between cohort 1 and cohort 2 with the Wilcoxon test. Categorical variables are described as number (%) and were compared between cohorts 1 and 2 using the Chi square or Fisher's exact test. P-values were adjusted using Benjamini-Hochberg FDR correction. ICI: Immune Checkpoint Inhibitors; IQR: Inter Quartile Range; LDH: Lactate Dehydrogenase; dNLR: derived neutrophils/(leukocytes minus neutrophils) ratio ; LIPI: Lung Immune Prognostic Index ; TTF1: Thyroid transcription factor 1; NA: Not Available ; WT: Wild-Type; NR: Not reached.