

Table S1 Baseline characteristics and efficacy data in non-SCC patients

Characteristics	Non-SCC only			P values
	Total	Tisle	K	
Age (years)	59 [56–66]	58 [57–69]	59 [55–66]	0.48
Sex				0.31
Female	6 (25.00)	3 (42.86)	3 (17.65)	
Male	18 (75.00)	4 (57.14)	14 (82.35)	
BMI at presentation (kg/m ²)	23.83±2.45	24.15±3	23.71±2.28	0.69
Smoking history				0.49
Never	9 (37.50)	3 (42.86)	6 (35.29)	
Light smoker	3 (12.50)	1 (14.29)	2 (11.76)	
Moderate smoker	5 (20.83)	0	5 (29.41)	
Heavy smoker	7 (29.17)	3 (42.86)	4 (23.53)	
CCI				0.84
0	10 (41.67)	2 (28.57)	8 (47.06)	
1	9 (37.50)	3 (42.86)	6 (35.29)	
2	3 (12.50)	1 (14.29)	2 (11.76)	
3	2 (8.33)	1 (14.29)	1 (5.88)	
FEV1 (percent predicted)	91.14±20.28	88.57±22.94	92.19±19.74	0.70
Clinical stage at presentation				0.40
IIa	0	0	0	
IIb	6 (25.00)	2 (28.57)	4 (23.53)	
IIIa	13 (54.17)	5 (71.43)	8 (47.06)	
IIIb	5 (20.83)	0	5 (29.41)	
PD-L1 expression				>0.99
<1%	3 (12.50)	1 (14.29)	2 (11.76)	
1–50%	11 (45.83)	3 (42.86)	8 (47.06)	
>50%	7 (29.17)	2 (28.57)	5 (29.41)	
NA	3 (12.50)	1 (14.29)	2 (11.76)	
Doses of immunotherapy				0.09
2 doses	3 (12.50)	0	3 (17.65)	
3 doses	8 (33.33)	5 (71.43)	3 (17.65)	
4 doses	12 (50.00)	2 (28.57)	10 (58.82)	
5 doses	1 (4.17)	0	1 (5.88)	
Chemotherapy regimens				0.007
Carboplatin + paclitaxel	6 (25.00)	5 (71.43)	1 (5.88)	
Cisplatin + paclitaxel	1 (4.17)	0	1 (5.88)	

Table S1 (continued)

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Characteristics	Non-SCC only			P values
	Total	Tisle	K	
Carboplatin + pemetrexed	13 (54.17)	2 (28.57)	11 (64.71)	
Cisplatin + pemetrexed	4 (16.67)	0	4 (23.53)	
Histologic subtypes				0.14
Adenocarcinoma	18 (75.00)	4 (57.14)	14 (82.35)	
Adenosquamous carcinoma	1 (4.17)	1 (14.29)	0	
Large cell neuroendocrine carcinoma	2 (8.33)	1 (14.29)	1 (5.88)	
Sarcomatoid carcinoma	2 (8.33)	0	2 (11.76)	
Lymphoepitheliomatoid carcinoma	1 (4.17)	1 (14.29)	0	
Radiologic response assessment				0.02
SD	8 (33.33)	0	8 (47.06)	
PR	15 (62.50)	6 (85.71)	9 (52.94)	
PD	1 (4.17)	1 (14.29)	0	
Pathologic response assessment				
ypT0	8 (33.33)	2 (28.57)	6 (35.29)	>0.99
ypT0N+	0	0	0	NA
pCR	8 (33.33)	2 (28.57)	6 (35.29)	>0.99
MPR	10 (41.67)	4 (57.14)	6 (35.29)	0.39
Pathologic downstaging				0.63
Yes	18 (75.00)	6 (85.71)	12 (70.59)	
Lymph node downstaging				0.37
Yes	16 (69.57)	6 (85.71)	10 (62.50)	

Data are presented as median [IQR], mean \pm standard deviation or n (%). Tisle, tislelizumab; K, pembrolizumab; CCI, Charlson Comorbidity Index; FEV1, forced expiratory volume in the first second; NA, not available; SD, stable disease; PR, partial response; PD, progressive disease; ypT0, primary tumors with 0% viable tumor cells; ypT0N+, 0% viable tumor cells in residual tumor but with positive resected lymph nodes; pCR, pathological complete response; MPR, major pathological response; SCC, squamous cell carcinoma.