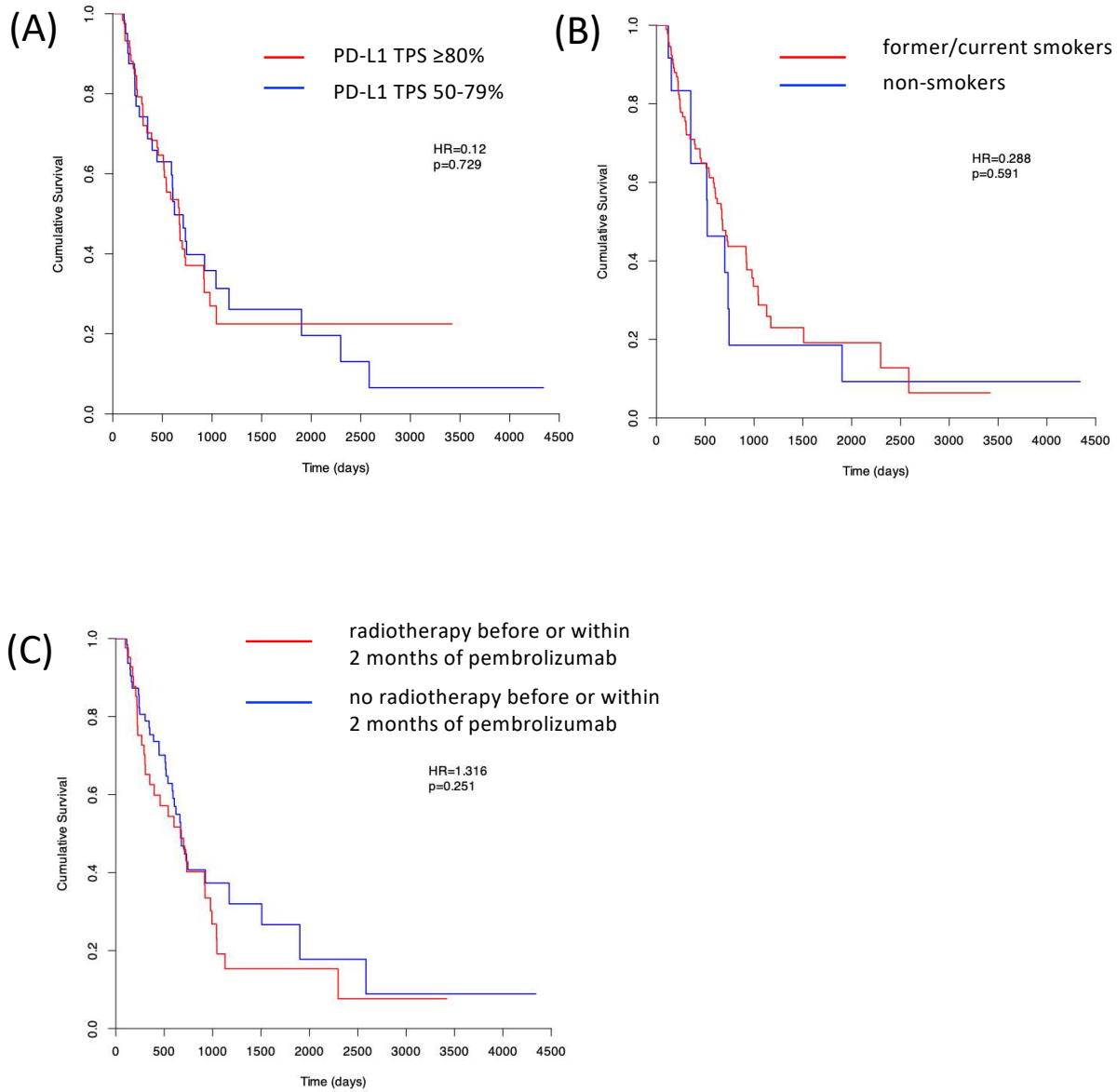


## Mander *et al*, Supplementary Table 1 Summary of Patient demographics

Characteristics	PD-L1 TPS 50-79% (N = 40)	PD-L1 TPS ≥80% (N = 60)	p-value for pairwise comparison (Mann-Whitney test)
<b>Age - yr (at diagnosis)</b>			0.428
Median	67	68	
Range	47-81	40-91	
<b>Sex</b>			0.955
Male - no. (%)	18 (45.0%)	26 (43.3%)	
Female - no. (%)	22 (55.0%)	34 (56.7%)	
<b>Performance status</b>			0.353
0 - no. (%)	7 (17.5%)	8 (13.3%)	
0-1 - no. (%)	0 (0%)	3 (5%)	
1 - no. (%)	20 (50%)	35 (58.3%)	
1-2 - no. (%)	0 (0%)	3 (5%)	
2 - no. (%)	8 (20%)	10 (16.7%)	
2-3 - no. (%)	3 (7.5%)	0 (0%)	
3 - no. (%)	2 (5.0%)	1 (1.7%)	
<b>Smoking status</b>			0.306
Current - no. (%)	22 (55.0%)	23 (38.3%)	
Former - no. (%)	12 (30.0%)	31 (51.7%)	
Never - no. (%)	6 (15.0%)	6 (10.0%)	
<b>Histology</b>			0.280
Squamous cell carcinoma - no. (%)	12 (30.0%)	13 (21.7%)	
Adenocarcinoma- no. (%)	25 (62.5%)	41 (68.3%)	
Adenosquamous - no. (%)	1 (2.5%)	1 (1.7%)	
Not specified - no. (%)	2 (5.0%)	5 (8.3%)	
<b>EGFR mutation status</b>			0.692
Positive - no. (%)	1 (2.5%)	1 (1.7%)	
Negative - no. (%)	25 (62.5%)	43 (71.7%)	
Unknown - no. (%)	14 (35.0%)	16 (26.7%)	
<b>ALK translocation status</b>			1.000
Positive - no. (%)	0 (0%)	0 (0%)	
Negative - no. (%)	25 (62.5%)	43 (71.7%)	
Unknown - no. (%)	15 (37.5%)	17 (28.3%)	
<b>ROS-1 rearrangement status</b>			1.000
Positive - no. (%)	0 (0%)	0 (0%)	
Negative - no. (%)	10 (25.0%)	19 (31.7%)	
Unknown - no. (%)	30 (75.0%)	41 (68.3%)	
<b>Pembrolizumab therapy</b>			0.101
First line (%)	34 (85%)	54 (85%)	
Second line (%)	6 (15%)	6 (15%)	
<b>Stage</b>			0.422
I - no. (%)	1 (2.5%)	1 (1.7%)	
II - no. (%)	3 (7.5%)	2 (3.3%)	
III - no. (%)	10 (25.0%)	14 (23.3%)	
IV - no. (%)	26 (65.0%)	43 (71.7%)	
<b>Radiotherapy before or within two months of immunotherapy</b>			0.944
Radical - no. (%)	4 (10.0%)	6 (10.0%)	0.968
Palliative - no. (%)	12 (30.0%)	17 (28.3%)	0.961
Thoracic - no. (%)	4 (10.0%)	10 (16.7%)	
Extra-thoracic - no. (%)	8 (20.0%)	7 (11.7%)	

Mander *et al*, Supplementary Figure 1

Mander *et al*, Supplementary Table 2  
Cox regression analysis

Variable	Hazard Ratio (HR)	Standard Error (SE)	p-value
<b>PD-L1≥80% (yes/no)</b>	1.178	0.286	0.568
<b>Smoking status (yes/no)</b>	2.040	0.408	0.081
<b>Performance Status (PS)</b>			<b>0.009</b>
PS(1)	0.074	0.747	0.000
PS(2)	0.523	0.857	0.449
PS(3)	0.133	0.661	0.002
PS(4)	0.279	0.982	0.193
PS(5)	0.137	0.695	0.004
(PS(6)	0.073	1.191	0.028
<b>Stage</b>			0.126
Stage(1)	0.616	1.032	0.639
Stage(2)	0.310	0.657	0.075
Stage(3)	0.504	0.370	0.064
<b>Histology</b>			0.827
Histology(1)	1.028	1.041	0.979
Histology(2)	1.237	1.071	0.843
<b>Radiotherapy before of within 2 months of starting immunotherapy (yes/no)</b>	0.478	0.322	<b>0.022</b>