

Supplementary

Table S1 Participating institutions

Principal investigator	Institution	Number of patients	Ethics committee approval Number/ID
Guanghui Gao/Shengxiang Ren/Caicun Zhou	Shanghai Pulmonary Hospital, Tongji University	5	16162ZL-7
Jun Zhao	Beijing Cancer Hospital	5	2018YW07-ZY03
Yina Wang	The First Affiliated Hospital Zhejiang University	8	2019-35
Gongyan Chen	Harbin Medical University Cancer Hospital	2	2018-52
Jianhua Chen	Hunan Cancer Hospital	2	2019-22
Kangsheng Gu	The First Affiliated Hospital of Anhui Medical University	1	PJ2018-04-07(5)
Renhua Guo	Jiangsu Province Hospital	1	2018-MD-058.A2
Yueyin Pan	The First Affiliated Hospital of USTC, Anhui Provincial Hospital	1	2019-32

Table S2 Correlation of PD-L1 expression and efficacy assessed by investigator per RECIST v1.1

Variables	PD-L1 TPS ≥1% (n=13)	PD-L1 TPS <1% (n=11)
Best overall response, n (%)		
CR	0	0
PR	5 (38.5)	2 (18.2)
SD	6 (46.2)	7 (63.6)
PD	0	1 (9.1)
NE	2 (15.4)	1 (9.1)
ORR, n (%) [95% CI]	5 (38.5) [13.9–68.4]	2 (18.2) [2.3–51.8]

TPS, tumor proportion score; CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease; NE, not evaluable; ORR, objective response rate; CI, confidence interval.

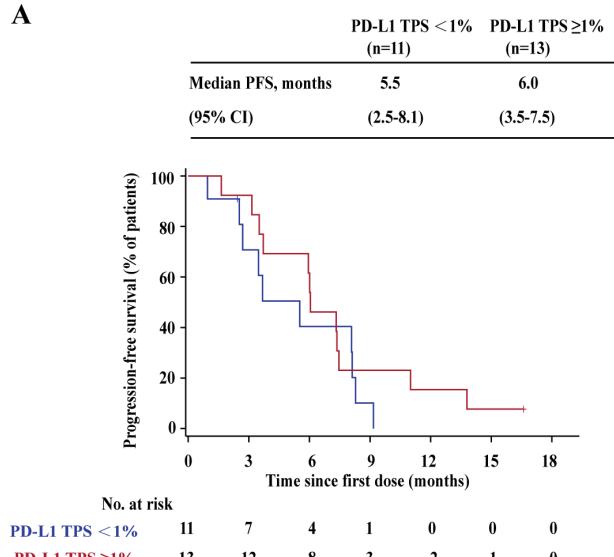
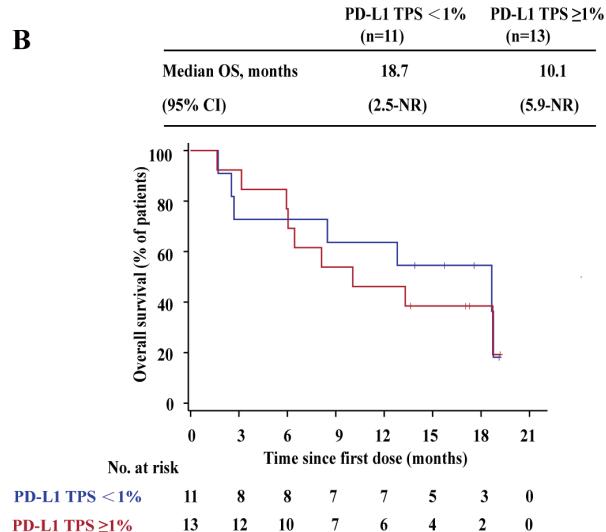
A**B**

Figure S1 Kaplan-Meier curves for (A) PFS and (B) OS in patients with PD-L1 TPS $\geq 1\%$ and those with PD-L1 TPS <1%. PFS, progression-free survival; OS, overall survival; CI, confidence interval; PD-L1, programmed death-ligand 1; TPS, tumor proportion score.

Table S3 Treatment-related SAEs

Treatment-related SAEs	Total (N=25)	
	Any grade	Grade ≥ 3
Any	12 (48.0)	8 (32.0)
Interstitial lung disease	2 (8.0)	2 (8.0)
Immune-mediated pneumonia	2 (8.0)	2 (8.0)
Acquired tracheoesophageal fistula	1 (4.0)	1 (4.0)
Tracheal fistula	1 (4.0)	1 (4.0)
Platelet count decreased	1 (4.0)	1 (4.0)
Death	1 (4.0)	1 (4.0)
Hemorrhage	1 (4.0)	1 (4.0)
Pulmonary tuberculosis	1 (4.0)	0
Muscular weakness	1 (4.0)	0
Haemangioma	1 (4.0)	0
Adrenal insufficiency	1 (4.0)	0

SAEs, serious adverse events.

Table S4 Summary of treatment-related adverse events

TRAEs, n (%)	Total (N=25)
Any TRAE	25 (100.0)
TRAEs leading to dose interruption	19 (76.0)
TRAEs leading to camrelizumab interruption	12 (48.0)
TRAEs leading to apatinib interruption	18 (72.0)
TRAEs leading to apatinib reduction	9 (36.0)
TRAEs leading to discontinuation	5 (20.0)
TRAEs leading to camrelizumab discontinuation	4 (16.0)
TRAEs leading to apatinib discontinuation	4 (16.0)
TRAEs leading to death	3 (12.0)

TRAE, treatment-related adverse event.

Table S5 Immune-mediated AEs regardless of attribution to study treatment

Immune-mediated AEs, n (%)	Total (N=25)	
	Any grade	Grade ≥3
Any	18 (72.0)	8 (32.0)
Asthenia	4 (16.0)	2 (8.0)
Alanine aminotransferase increased	4 (16.0)	0
Aspartate aminotransferase increased	4 (16.0)	0
Blood thyroid stimulating hormone increased	4 (16.0)	0
Blood bilirubin increased	3 (12.0)	0
Rash	3 (12.0)	0
Hypochloraemia	2 (8.0)	2 (8.0)
Hyponatraemia	2 (8.0)	2 (8.0)
Interstitial lung disease	2 (8.0)	2 (8.0)
Immune-mediated pneumonia	2 (8.0)	2 (8.0)
Hypertension	2 (8.0)	2 (8.0)
Tri-iodothyronine decreased	2 (8.0)	0
Blood bilirubin unconjugated increased	2 (8.0)	0
Tri-iodothyronine free decreased	2 (8.0)	0
Hypocalcaemia	2 (8.0)	0
Hypertriglyceridaemia	2 (8.0)	0
Decreased appetite	2 (8.0)	0
Pyrexia	2 (8.0)	0
Palmar-plantar erythrodysaesthesia	2 (8.0)	0
Hypothyroidism	2 (8.0)	0
Adrenal insufficiency	2 (8.0)	0
Diarrhoea	2 (8.0)	0
Reactive cutaneous capillary endothelial proliferation	2 (8.0)	0
Nausea	1 (4.0)	1 (4.0)
Mouth ulceration	1 (4.0)	1 (4.0)
Vomiting	1 (4.0)	1 (4.0)
Oestradiol decreased	1 (4.0)	0
Amylase increased	1 (4.0)	0
Bilirubin conjugated increased	1 (4.0)	0
Urinary occult blood positive	1 (4.0)	0
Electrocardiogram QT prolonged	1 (4.0)	0
Blood luteinising hormone decreased	1 (4.0)	0
Blood thyroid stimulating hormone decreased	1 (4.0)	0
Blood corticotrophin increased	1 (4.0)	0
Blood glucose increased	1 (4.0)	0
Platelet count decreased	1 (4.0)	0
Blood testosterone decreased	1 (4.0)	0
Hypokalaemia	1 (4.0)	0
Hypercholesterolaemia	1 (4.0)	0
Face oedema	1 (4.0)	0
Chest discomfort	1 (4.0)	0
Pruritus	1 (4.0)	0
Hyperprolactinaemia	1 (4.0)	0
Pulmonary tuberculosis	1 (4.0)	0
Upper respiratory tract infection	1 (4.0)	0
Haemangioma	1 (4.0)	0
Proteinuria	1 (4.0)	0
Myocardial infarction	1 (4.0)	0
Anaemia	1 (4.0)	0

AEs, adverse events.