Supplementary



Figure S1 Kaplan-Meier curves for PFS and OS. (A) PFS in patients with tumor PD-L1 TPS $\geq 1\%$ and those with tumor PD-L1 TPS < 1%. (B) OS in patients with tumor PD-L1 TPS $\geq 1\%$ and those with tumor PD-L1 TPS < 1%. PFS, progression-free survival; OS, overall survival; CI, confidence interval; NR, not reached; PD-L1, programmed death-ligand 1, TPS, tumor proportion score.

Table S1 Participating institutions

Participating institutions	Investigators	Approval Number
Shanghai Pulmonary Hospital, Tongji University	Guanghui Gao/Jian Ni/Shengxiang Ren/ Caicun Zhou	16162ZL-7
The First Affiliated Hospital of Zhejiang University	Yina Wang	2019-(35)
Fudan University Shanghai Cancer Center	Min Fan	1805184-7-1902B
Jiangsu Province Hospital	Renhua Guo	2018-MD-058.A2
The First Affiliated Hospital of Anhui Medical University	Kangsheng Gu	PJ2018-04-07(5)
The First Affiliated Hospital of USTC, Anhui Provincial Hospital	Yueyin Pan	2019-(32)
Beijing Cancer Hospital	Jun Zhao	2018YW07-ZY03
Harbin Medical University Cancer Hospital	Gongyan Chen	2018-52
The First Hospital of China Medical University	Yunpeng Liu	2018YL020-1
Shandong Cancer Hospital	Zhehai Wang	SDZLEC-2018-012-05
The First Affiliated Hospital of Guangzhou Medical University	Jianxing He	EC-2018-006(YW)-04
Fujian Medical University Union Hospital	Xiaoyan Lin	2018YW009-06
Henan Cancer Hospital	Zhiyong Ma	2018028
Henan Provincial People's Hospital	Shundong Cang	2018-018-05
Affiliated Hospital of Hebei University	Aimin Zang	HDFY-LL-2019-037
Jiangxi Cancer Hospital	Zhihua Liu	2018008-YW007

Table S2 Objective response rates by subgroups

Variables	Subgroups	Number of responders	ORR, % (95% CI)
Sex	Male (n=25)	4	16.0 (4.5, 36.1)
	Female (n=18)	4	22.2 (6.4, 47.6)
Age	<65 years (n=38)	7	18.4 (7.7, 34.3)
	≥65 years (n=5)	1	20.0 (0.5, 71.6)
ECOG performance status	1 (n=39)	7	17.9 (7.5, 33.5)
	0 (n=4)	1	25.0 (0.6, 80.6)
Smoking status	Current or former smoked (n=19)	4	21.1 (6.1, 45.6)
	Never smoked (n=24)	4	16.7 (4.7, 37.4)
No. of organs with metastasis	≤2 (n=31)	7	22.6 (9.6, 41.1)
	>2 (n=12)	1	8.3 (0.2, 38.5)
PD-L1 TPS	≥1% (n=22)	6	27.3 (10.7, 50.2)
	<1% (n=13)	1	7.7 (0.2, 36.0)
	Unknown (n=8)	1	12.5 (0.3, 52.7)
EGFR L858R	Yes (n=14)	3	21.4 (4.7, 50.8)
	No (n=29)	5	17.2 (5.8, 35.8)
EGFR 19del	Yes (n=22)	3	13.6 (2.9, 34.9)
	No (n=21)	5	23.8 (8.2, 47.2)
EGFR 20ins	Yes (n=3)	1	33.3 (0.8, 90.6)
	No (n=40)	7	17.5 (7.3, 32.8)

ECOG, Eastern Cooperative Oncology Group; PD-L1, programmed death-ligand 1; TPS, tumor proportion score; EGFR, epidermal growth factor receptor; ORR, objective response rate; CI, confidence interval.

Patient ID	Age	Gender	BoR	PFS (mo)	OS (mo)
1	33	Male	SD	5.6	11.4
2	52	Female	PD	1.8	6.5
3	47	Female	PD	2.0	3.1
4	60	Female	SD	1.8+	15.7+

Table S3 Efficacy outcomes in patients with ALK-rearranged NSCLC

BoR, best overall response; OS, overall survival; PD, progressive disease; PFS, progression-free survival; SD, stable disease.

Table S4 Subsequent anti-tumor therapies that were initiated after the last dose of the study treatment

Variables	All patients n=43
Any subsequent therapy*	32 (74.4)
Targeted therapy	24 (55.8)
EGFR-TKI	10 (27.9)
ALK-TKI	3 (7.0)
Anti-angiogenic drugs	22 (51.2)
Systemic chemotherapy	23 (53.5)
Immunotherapy	3 (7.0)
Radiotherapy [#]	6 (14.0)
Antineoplastic Chinese traditional medicines	4 (9.3)

* 11 patients did not receive any subsequent anti-tumor therapies. [#] Radiotherapy included brain radiation (4 patients), bone radiation (2 patients) and lung radiation (2 patients). Percentages were calculated with the number of patients in the full analysis set as denominator. Data are n (%). EGFR, epidermal growth factor receptor; TKI, *tyrosine kinase inhibitor*; ALK, anaplastic lymphoma kinase.

Table S5 Antitumor activity of camrelizumab plus apatinib in advance NSCLC patients with EGFR mutation

		*		
	Number of patients	ORR, % (95% CI)	Median PFS (months)	Median OS (months)
All patients with EGFR mutation*	40	20.0 (9.1-35.6)	3.2 (1.9-5.5)	NR (7.3-NR)
EGFR 19del [#]	22	13.6 (2.9-34.9)	2.8 (1.8-5.5)	NR (4.4-NR)
EGFR L858R [#]	14	21.4 (4.7-50.8)	5.3 (1.6-8.2)	NR (4.3-NR)
EGFR 20ins	3	33.3 (0.8-90.6)	8.3 (1.9-8.3)	NR (6.0-NR)

* Two patients, who harbored *EGFR S768I/G719X/T790M*+ and *T790M*+ respectively, were not included into the three subgroups analysis. [#] One patient harbored both *EGFR 19del* and *EGFR L858R*. ORR, objective response rate; EGFR, epidermal growth factor receptor; PFS, progression-free survival; OS, overall survival; NR, not reached.

Table S6 The distribution of EGFR mutation (I	858R, 19del or 20ins) in patients with tu	mor PD-L1 TPS ≥1% or those with tumor PD-L1
TPS <1%		

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EGFR subtypes	PD-L1 TPS ≥1% (n=22)	PD-L1 TPS <1% (n=13)	PD-L1 TPS not available (n=8)
L858R (N=14)*	8 (36.4)	4 (30.8)	2 (25.0)
19del (N=22)*	10 (45.5)	9 (69.2)	3 (37.5)
20ins (N=3)	2 (9.1)	1 (7.7)	0

* One patient harbored both *EGFR 19del* and *EGFR L858R*. Data are n (%). EGFR, epidermal growth factor receptor; PD-L1, programmed death-ligand 1, TPS, tumor proportion score.

Table S7 Summary of treatment-related adverse events

	All patients (n=43)
Any TRAE	43 (100.0)
≥Grade 3 TRAE	28 (65.1)
Treatment-related SAEs	12 (27.9)
TRAEs leading to any treatment discontinuation	10 (23.3)
Camrelizumab discontinuation	7 (16.3)
Apatinib discontinuation	10 (23.3)
TRAEs leading to discontinuation of all study treatment	7 (16.3)
TRAEs leading to any treatment interruption	32 (74.4)
Camrelizumab interruption	16 (37.2)
Apatinib interruption	30 (69.8)
TRAEs leading to apatinib dose reduction	8 (18.6)
TRAEs leading to death	3 (7.0)

Data are n (%). TRAE, treatment-related adverse event.

Table S8 Summary of treatment-related serious adverse events

	All patie	nts N=43
Treatment-related SAES	Any Grade	Grade ≥3
Any	12 (27.9)	7 (16.3)
Immune-mediated hepatitis	2 (4.7)	2 (4.7)
Hemoptysis	2 (4.7)	1 (2.3)
Immune-mediated pneumonitis	2 (4.7)	1 (2.3)
Interstitial lung disease	1 (2.3)	1 (2.3)
Diabetes mellitus	1 (2.3)	1 (2.3)
Hepatic function abnormal	1 (2.3)	1 (2.3)
Pancreatitis acute	1 (2.3)	1 (2.3)
Pneumonia	1 (2.3)	1 (2.3)
Decreased appetite	1 (2.3)	0
Vomiting	1 (2.3)	0
RCCEP	1 (2.3)	0

Data are n (%). SAE, serious adverse event; RCCEP, reactive cutaneous capillary endothelial proliferation.

Table 39 Adverse events of special interest regardless of study treatment
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AESI	All patients, n=43
Any	17 (39.5)
Grade ≥2 interstitial pneumonia	1 (2.3)
Interstitial lung disease	1 (2.3)
Grade ≥2 diarrhea/colitis	0
Diarrhea	0
Other Grade ≥3 immune-mediated AEs	9 (20.9)
RCCEP	9 (20.9)
Immune-mediated hepatitis	2 (4.7)
Rash	2 (4.7)
Lymphocyte count decreased	1 (2.3)
White blood cell count decreased	1 (2.3)
Immune-mediated pneumonitis	1 (2.3)
Hyponatremia	1 (2.3)
Platelet count decreased	1 (2.3)
Palmar-plantar erythrodysaesthesia syndrome	1 (2.3)
Pneumonia	1 (2.3)
Diabetes mellitus	1 (2.3)
Acute pancreatitis	1 (2.3)
Hypochloremia	1 (2.3)
Blood bilirubin increased	0
Alanine aminotransferase increased	0
Type 2 diabetes mellitus	0
Blood alkaline phosphatase increased	0
Hepatic function abnormal	0
Gamma-glutamyltransferase increased	0
Aspartate aminotransferase increased	0
Proteinuria	0

Data are n (%). AESI, adverse events of special interest; RCCEP, reactive cutaneous capillary endothelial proliferation.

Table S10 Immune-mediated AEs regardless of attribution to study treatment

Immune-mediated AFs —	All patients, N=43		
	Any Grade	Grade ≥3	
Any	26 (60.5)	10 (23.3)	
Rash	8 (18.6)	2 (4.7)	
Aspartate aminotransferase increased	8 (18.6)	0	
RCCEP	7 (16.3)	0	
Alanine aminotransferase increased	6 (14.0)	0	
Asthenia	6 (14.0)	0	
Pyrexia	4 (9.3)	0	
White blood cell count decreased	3 (7.0)	1 (2.3)	
Blood thyroid stimulating hormone increased	3 (7.0)	0	
Blood bilirubin increased	3 (7.0)	0	
Diarrhea	3 (7.0)	0	
Immune-mediated hepatitis	2 (4.7)	2 (4.7)	
Lymphocyte count decreased	2 (4.7)	1 (2.3)	
Palmar-plantar erythrodysaesthesia syndrome	2 (4.7)	1 (2.3)	
Immune-mediated pneumonitis	2 (4.7)	1 (2.3)	
Hypochloremia	2 (4.7)	1 (2.3)	
Hyponatremia	2 (4.7)	1 (2.3)	
Bilirubin conjugated increased	2 (4.7)	0	
Cough	2 (4.7)	0	
Autoimmune hypothyroidism	2 (4.7)	0	
Hypokalemia	2 (4.7)	0	
Anemia	2 (4.7)	0	
Platelet count decreased	1 (2.3)	1 (2.3)	
Pancreatitis acute	1 (2.3)	1 (2.3)	
Interstitial lung disease	1 (2.3)	1 (2.3)	
	1 (2.3)	1 (2.3)	
Pneumonia	1 (2.3)	1 (2.3)	
C-reactive protein increased	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	0	
Read abalactorel increased	1 (2.3)	0	
	1 (2.3)	0	
Blood perathresid bernans increased	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	0	
In-loadinyronine free increased	1 (2.3)	0	
	1 (2.3)	0	
	1 (2.3)	U	
Pruntus	1 (2.3)	0	
Peripheral swelling	1 (2.3)	U	
Mouth ulceration	1 (2.3)	0	
Vomiting	1 (2.3)	0	
Dyspnoea	1 (2.3)	0	
Нурохіа	1 (2.3)	0	
Hypophysitis	1 (2.3)	0	
Immune-mediated thyroiditis	1 (2.3)	0	
Autoimmune thyroiditis	1 (2.3)	0	
Gastroenteritis	1 (2.3)	0	
Headache	1 (2.3)	0	
Arthralgia	1 (2.3)	0	
Urinary incontinence	1 (2.3)	0	
Vulvar erosion	1 (2.3)	0	
Hypertension	1 (2.3)	0	
Eye pain	1 (2.3)	0	

Data are n (%). AEs, adverse events; RCCEP, reactive cutaneous capillary endothelial proliferation.

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