

Supplementary

Table S1 Characteristics of treatment in the patient cohort according to molecular subgroup

Characteristics	All	EGFR exon19 del exon21 L858R	EGFR exon20 insertion	k-Ras	ALK	RET	HER2 exon20 Insertion	BRAF V600E
Line of ICIs treatment								
First-line	16 [19]	0 [0]	0 [0]	8 [47]	0 [0]	4 [67]	3 [50]	1 [33]
Second-line	31 [37]	13 [32]	4 [40]	7 [41]	1 [50]	2 [33]	2 [33]	2 [67]
Third-line	26 [31]	19 [48]	4 [40]	1 [6]	1 [50]	0 [0]	1 [17]	0 [0]
Fourth-line	11 [13]	8 [20]	2 [20]	1 [6]	0 [0]	0 [0]	0 [0]	0 [0]
Immunotherapy								
Sintilimab	26 [31]	12 [30]	4 [40]	4 [24]	0 [0]	2 [33]	2 [33]	0 [0]
Camrelizumab	17 [20]	9 [23]	1 [10]	4 [24]	0 [0]	1 [17]	1 [17]	2 [67]
Toripalimab	14 [17]	9 [23]	2 [20]	2 [12]	0 [0]	0 [0]	1 [17]	1 [33]
Pembrolizumab	13 [15]	5 [13]	2 [20]	3 [17]	0 [0]	2 [33]	1 [17]	0 [0]
Nivolumab	7 [8]	3 [7]	0 [0]	2 [12]	1 [50]	0 [0]	1 [17]	0 [0]
Tislelizumab	7 [8]	2 [4]	1 [10]	2 [12]	1 [50]	1 [17]	0 [0]	0 [0]
Combinations								
Chemotherapy	48 [58]	20 [49]	8 [80]	11 [66]	1 [50]	4 [67]	3 [50]	2 [67]
Antiangiogenesis	18 [21]	7 [18]	0 [0]	3 [17]	0 [0]	2 [33]	3 [50]	1 [33]
Chemotherapy + antiangiogenesis	18 [21]	13 [33]	2 [20]	3 [17]	1 [50]	0 [0]	0 [0]	0 [0]

Table S2 Treatment-associated adverse effects

Toxicity description CTCAE v5.0	Frequency	01-mild	02-moderate	03-severe	04-life threatening
Bone marrow suppression	51.2%	26	12	4	1
Nausea and Vomiting	32.1%	16	9	2	–
Liver enzymes elevated	28.6%	14	7	3	–
Creatinine increased	19.0%	4	9	3	–
Hypothyroidism	9.5%	5	2	1	–
Pneumonitis	7.1%	2	2	2	–
Dermatitis	6.0%	2	3	–	–
Hypoadrenocorticism	2.4%	1	1	–	–
Colitis	1.2%	–	–	1	–
Myocarditis	1.2%	–	–	–	1

Table S3 Therapeutic efficacy according to PD-L1 status

PD-L1 status (n=84)	Unknown (n=31)	Negative (n=33)	Positive (n=20)
Complete response	0	1	0
Partial response	10	12	10
Stable disease	14	14	8
Progressive disease	7	6	2
ORR (%)	32.3	39.4	50

ORR, objective response rate.

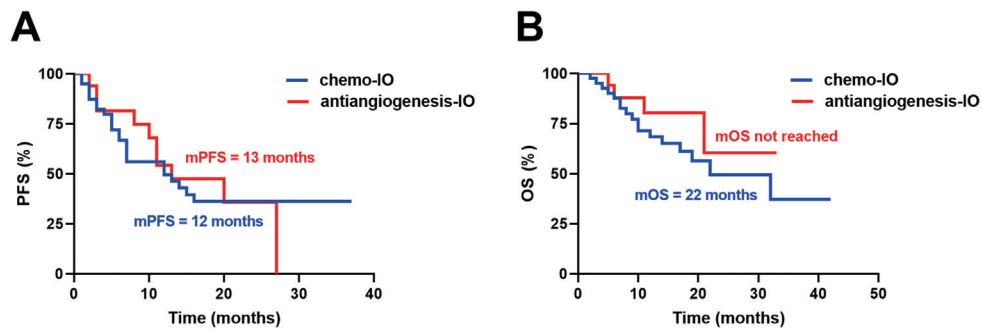


Figure S1 Kaplan-Meier curves for PFS (A) and OS (B) of patients between chemo-IO and antiangiogenesis-IO without cytotoxic chemotherapy. PFS, progression-free survival; OS, overall survival; IO, immune-oncology.