Supplementary

Table S1 ORR and DCR treated with ICI

Variables	TTF-1(-) treated with ICI (N=19)	TTF-1 (+) treated with ICI (N=51)	Р
CR	0	3	-
PR	3	9	-
SD	5	15	-
PD	8	16	-
NE	3	8	-
ORR	3 (15.8%)	12 (23.5%)	0.74
DCR	8 (42.1%)	27 (52.9%)	0.59

ORR, objective response rate; DCR, disease control rate; ICI, immune checkpoint inhibitor; TTF-1, thyroid transcription factor-1; CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease; NE, not evaluable.

Table S2 ORR and DCR treated with ICI + chemotherapy

Variables	TTF-1(-) treated with ICI + chemo (N=14)	TTF-1 (+) treated with ICI + chemo (N=45)	Р
CR	3	4	-
PR	8	17	-
SD	2	16	-
PD	0	6	-
NE	1	2	-
ORR	11 (78.6%)	21 (46.7%)	0.063
DCR	13 (92.9%)	37 (82.2%)	0.67

ORR, objective response rate; DCR, disease control rate; ICI, immune checkpoint inhibitor; TTF-1, thyroid transcription factor-1; chemo, chemotherapy; CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease; NE, not evaluable.

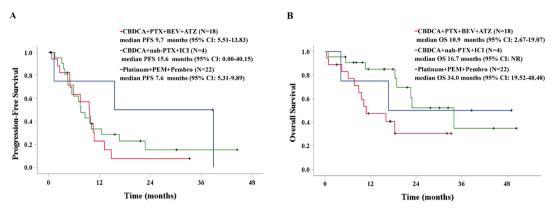


Figure S1 Kaplan-Meier curves in patients with TTF-1-positive expression according to ICI + chemotherapy regimens. (A) PFS; (B) OS. ATZ, atezolizumab; BEV, bevacizumab; CBDCA, carboplatin; CI, confidence interval; ICI, immune checkpoint inhibitor; nab-PTX, nanoparticle albumin-bound paclitaxel; NR, not reached; OS, overall survival; Pembro, pembrolizumab; PEM, pemetrexed; PFS, progression-free survival; PTX, paclitaxel; TTF-1, thyroid transcription factor-1.

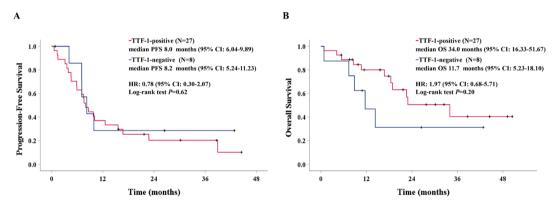


Figure S2 Kaplan-Meier curves in patients treated with ICI + chemotherapy without bevacizumab according to TTF-1 expression status. (A) PFS; (B) OS. CI, confidence interval; HR, hazard ratio; ICI, immune checkpoint inhibitor; OS, overall survival; PFS, progression-free survival; TTF-1, thyroid transcription factor-1.

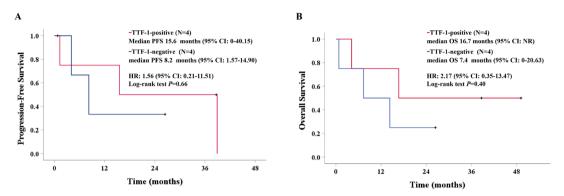


Figure S3 Kaplan-Meier curves in patients treated with CBDCA + nab-PTX + ICI according to TTF-1 expression status. (A) PFS; (B) OS. CI, confidence interval; CBDCA, carboplatin; HR, hazard ratio; ICI, immune checkpoint inhibitor; nab-PTX, nanoparticle albumin-bound paclitaxel; NR, not reached; OS, overall survival; PFS, progression-free survival; TTF-1, thyroid transcription factor-1.

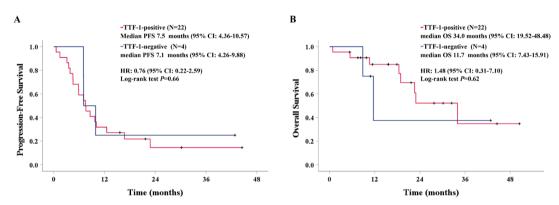


Figure S4 Kaplan-Meier curves in patients treated with platinum + pemetrexed + pembrolizumab according to TTF-1 expression status. (A) PFS; (B) OS. CI, confidence interval; HR, hazard ratio; OS, overall survival; PFS, progression-free survival; TTF-1, thyroid transcription factor-1.

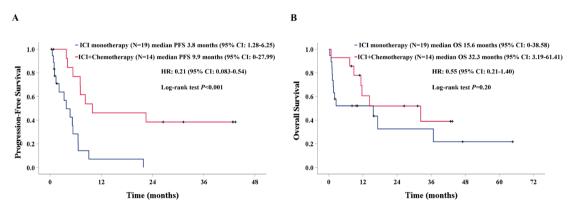


Figure S5 Kaplan-Meier curves in TTF-1-negative patients according to treatment selection: ICI monotherapy or ICI plus chemotherapy. (A) PFS; (B) OS. CI, confidence interval; HR, hazard ratio; ICI, immune checkpoint inhibitor; OS, overall survival; PFS, progression-free survival; TTF-1, thyroid transcription factor-1.