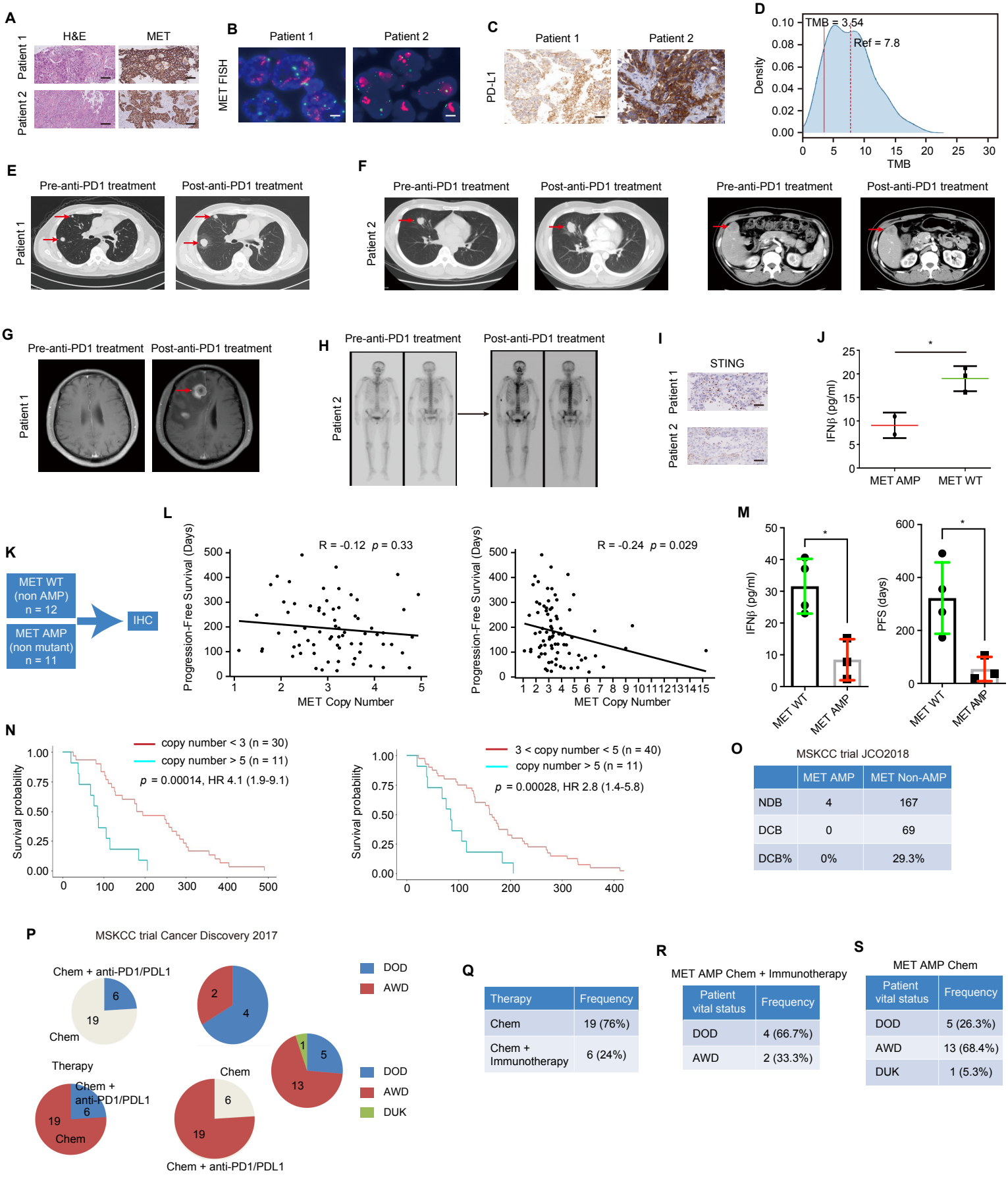
Supplementary Figure S1



	MET AMP	MET Non-AMP
NDB	4	167
DCB	0	69
DCB%	0%	29.3%

Therapy	Frequency
Chem	19 (76%)
Chem + Immunotherapy	6 (24%)

Patient vital status	Frequency
DOD	4 (66.7%)
AWD	2 (33.3%)

Patient vital status	Frequency
DOD	5 (26.3%)
AWD	13 (68.4%)
DUK	1 (5.3%)

Supplementary Figure S1. Case report of resistance to ICB in patients with MET amplification and MET is a biomarker and driver for ICB resistance

A, H&E staining of two MET amplification tumors IHC of MET of patient tumors**.**

B, MET FISH in the two MET AMP samples.

C, Representative PD-L1 staining of the two MET AMP patients, both of whom underwent anti-PD1 therapy.

D, TMB (tumor mutation burden) of patient 2.

E-F, Representative CT scans of these two patients, both of whom underwent anti-PD1 therapy.

G, Representative brain MR of one patient showing a new metastasis site after anti-PD1 therapy.

H, Representative whole-body ECT scan of patient 2 showing a new bone metastasis site in the right upper limb after anti-PD1 therapy**.**

I, Representative STING staining of the two MET AMP patients.

J, The levels of IFNβ in samples from two MET AMP cases, 3 MET WT patients (student's t-test; $*p < 0.05$).

K, A working model of IHC.

L, The correlation of PFS and patients with MET copy number (copy number less than 5), R = -0.12, $p = 0.33$ and the correlation of PFS and all patients with MET copy number, R = -0.24, $p = 0.029$.

M, The levels of IFNβ and PFS in 7 cases treated with anti-PD1 in Hubei cohort (frozen serum samples from Hubei cohort from 4 cases of MET WT and 3 cases of MET amplified patients). Representative data (mean ± SEM) are shown from *MET* WT (n = 4) *MET* AMP (n = 3) samples by two-sided unpaired t-test; $*p < 0.05$.

N, Kaplan-Meier curve for progression-free survival (PFS) between MET copy < 3 and MET copy > 5 after anti-PD1 therapy in this cohort. And Kaplan-Meier curve for

progression-free survival (PFS) between 3 < MET copy and < 5 and MET copy > 5 after anti-PD1 therapy in this cohort.

O, The durable clinical benefit rate (DCB) of MET amplification (n = 4) and nonamplification patients in the MSKCC JCO 2018 trial (durable clinical benefit: PFS > 6 months).

P-Q, MET amplification patients (n = 25) in MSKCC Cancer Discovery 2017 with anti-PD-1/PDL1 (n = 6) or without anti-PD1/PDL1 treatment (n = 19).

R-S, The rates of dead of disease (DOD) and alive with disease (AWD) of patients with MET amplification in MSKCC Cancer Discovery 2017 with or without anti-PDL1 treatment.