

Table S1 Sample size of patients with *TTN* mutation in LUAD and LUSC

Therapy types	LUAD		LUSC	
	<i>TTN</i> -MT	<i>TTN</i> -WT	<i>TTN</i> -MT	<i>TTN</i> -WT
Total	205	358	326	179
Chemotherapy	71	116	101	42

TTN, titin; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; MT, mutant-type; WT, wild-type.

Table S2 Sample size of patients with different types of *TTN* mutation in LUAD and LUSC

Therapy type	LUAD				LUSC			
	Missense mutation	Nonsense mutation	Splice site	Multi hit	Missense mutation	Nonsense mutation	Splice site	Multi hit
Chemotherapy	62	1	1	7	88	3	0	10

TTN, titin; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma.

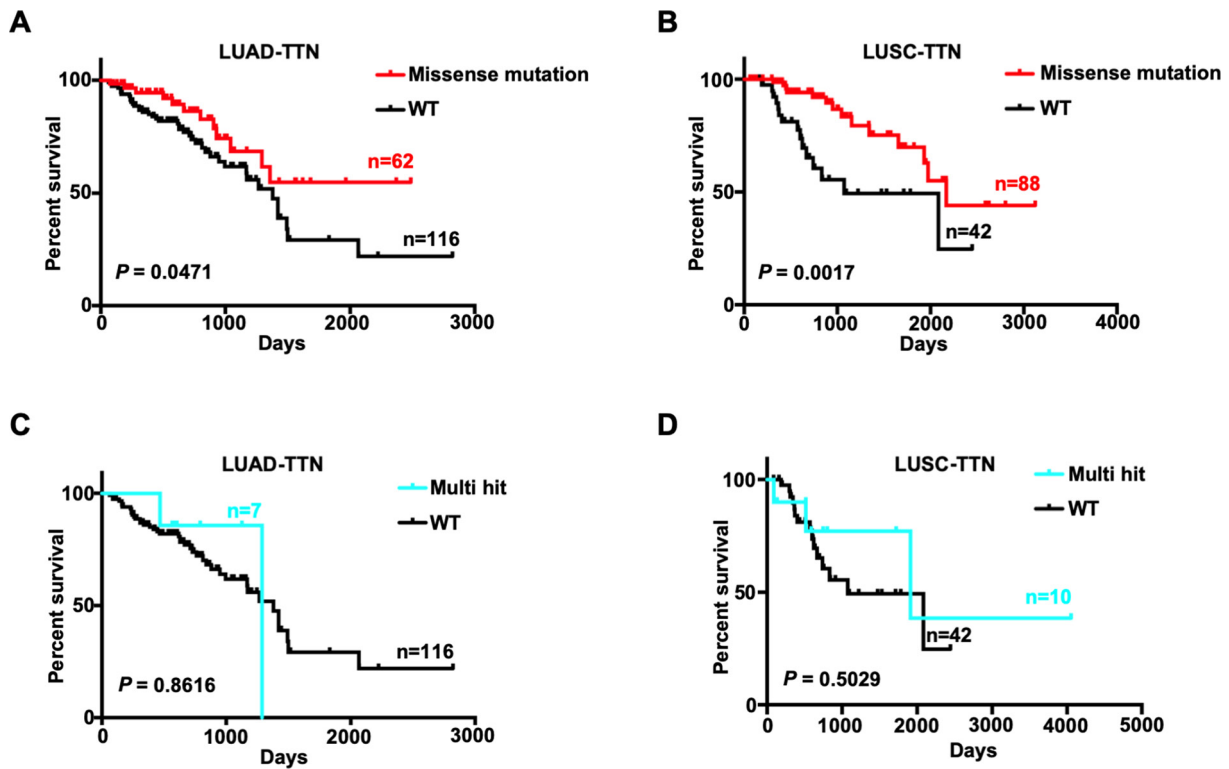


Figure S1 The association between different types of *TTN* mutation and OS in LUAD and LUSC patients on chemotherapy. (A,B) The difference in OS between patients with missense mutation (n=62) of *TTN* and *TTN*-WT (n=116) in LUAD patients treated with chemotherapy, and between patients with missense mutation (n=88) of *TTN* and *TTN*-WT (n=42) in LUSC treated with chemotherapy. (C,D) The difference in OS between patients with multi hit mutation (n=7) of *TTN* and *TTN*-WT (n=116) in LUAD treated with chemotherapy, and between patients with multi hit mutation (n=10) of *TTN* and *TTN*-WT (n=42) in LUSC treated with chemotherapy. *TTN*, titin; OS, overall survival; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; WT, wild-type.

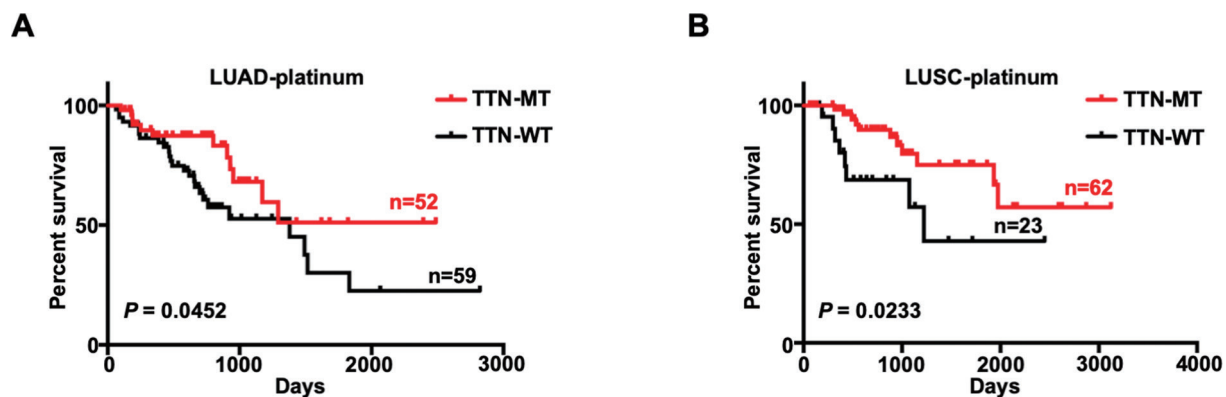


Figure S2 The association between *TTN* mutation and OS in platinum-treated LUAD and LUSC patients on chemotherapy. (A) The difference in OS between patients with *TTN* mutation (n=52) and *TTN*-WT (n=59) in LUAD patients treated with platinum-related drugs. (B) The difference in OS between patients with *TTN* mutation (n=62) and *TTN*-WT (n=23) in LUSC patients treated with platinum-related drugs. *TTN*, titin; OS, overall survival; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; MT, mutant-type; WT, wild-type.

Table S3 Sample size of patients with *TTN* and/or *TP53* mutation in LUAD and LUSC

Therapy types	Numbers		
	<i>TTN</i> +/ <i>TP53</i> +	<i>TTN</i> +/ <i>TP53</i> -	<i>TTN</i> -/ <i>TP53</i> +
LUAD			
Total	107	98	84
Chemotherapy	33	38	30
LUSC			
Total	218	108	90
Chemotherapy	65	36	19

“+” indicates MT; “-” indicates WT. *TTN*, titin; *TP53*, tumor protein 53; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; MT, mutant-type; WT, wild-type.

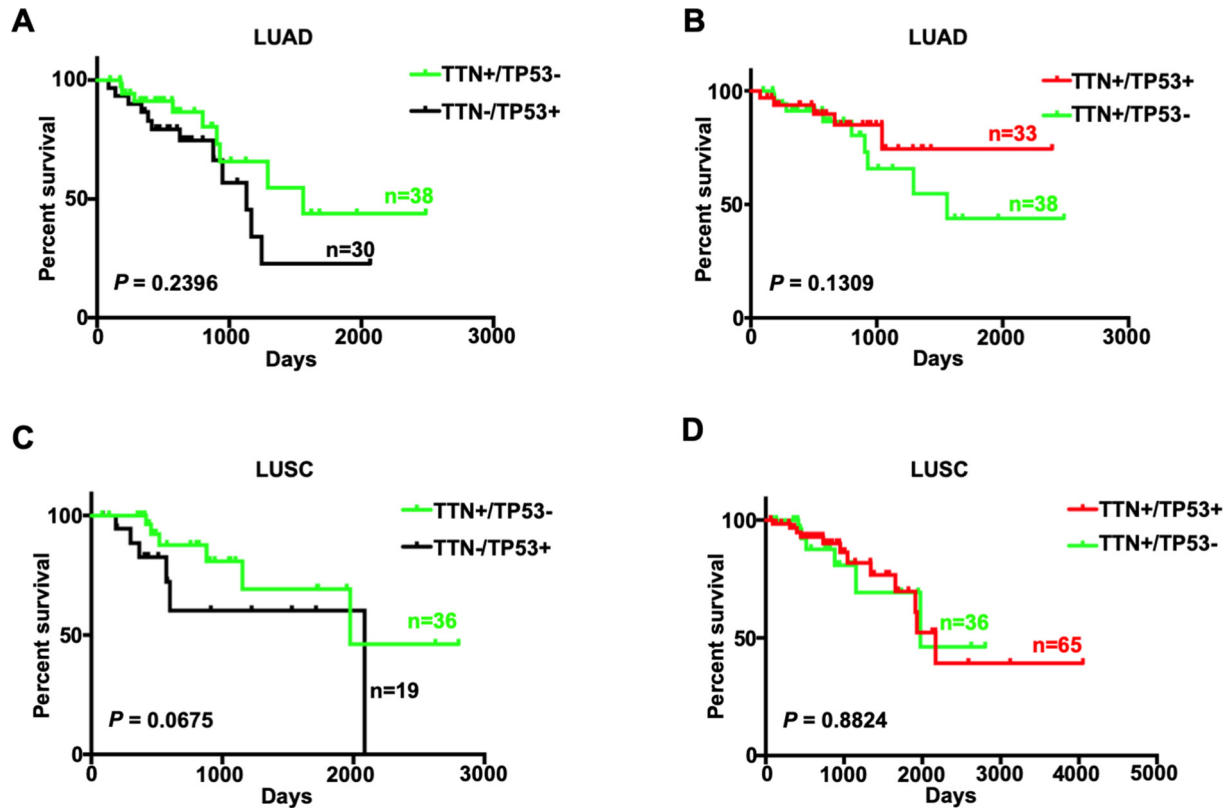


Figure S3 The association between *TTN* and/or *TP53* mutations and OS in LUAD patients treated with chemotherapy. The difference in OS period between *TTN* mutation and single mutation of *TP53* (A), *TTN/TP53* double mutation and single mutation of *TTN* (B) in LUAD patients who were treated with chemotherapy. The difference in OS period between *TTN* mutation and single mutation of *TP53* (C), *TTN/TP53* double mutation and single mutation of *TTN* (D) in LUSC patients who were treated with chemotherapy. “+” indicates MT; “-” indicates WT. *TTN*, titin; *TP53*, tumor protein 53; OS, overall survival; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; MT, mutant-type; WT, wild-type.

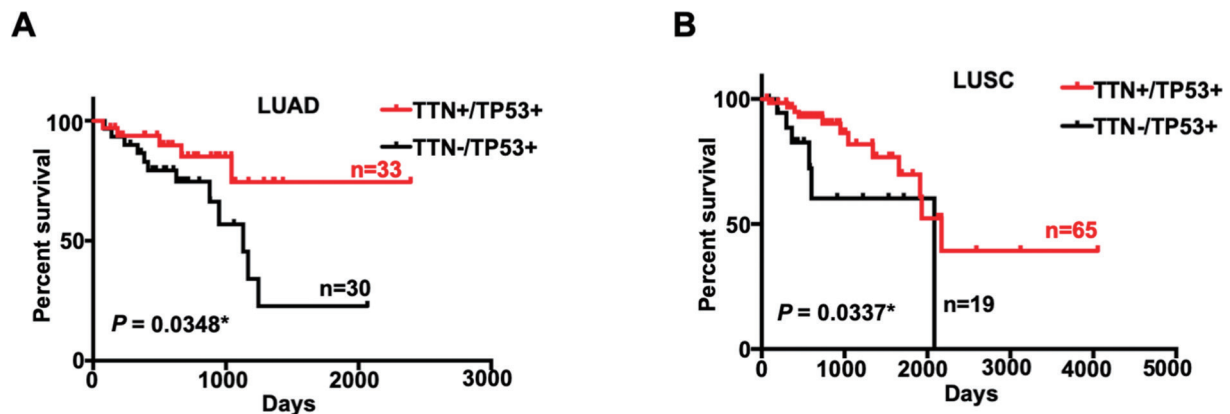


Figure S4 The difference in OS between *TTN/TP53* double mutation and single mutation of *TP53* in LUSC and LUAD patients treated with chemotherapy. The difference in OS period between *TTN/TP53* double mutation and single mutation of *TP53* in LUAD patients (A) and in LUSC patients (B) who were treated with chemotherapy. “+” indicates MT; “-” indicates WT. OS, overall survival; *TTN*, titin; *TP53*, tumor protein 53; LUAD, lung adenocarcinoma; LUSC, lung squamous carcinoma; MT, mutant-type; WT, wild-type.