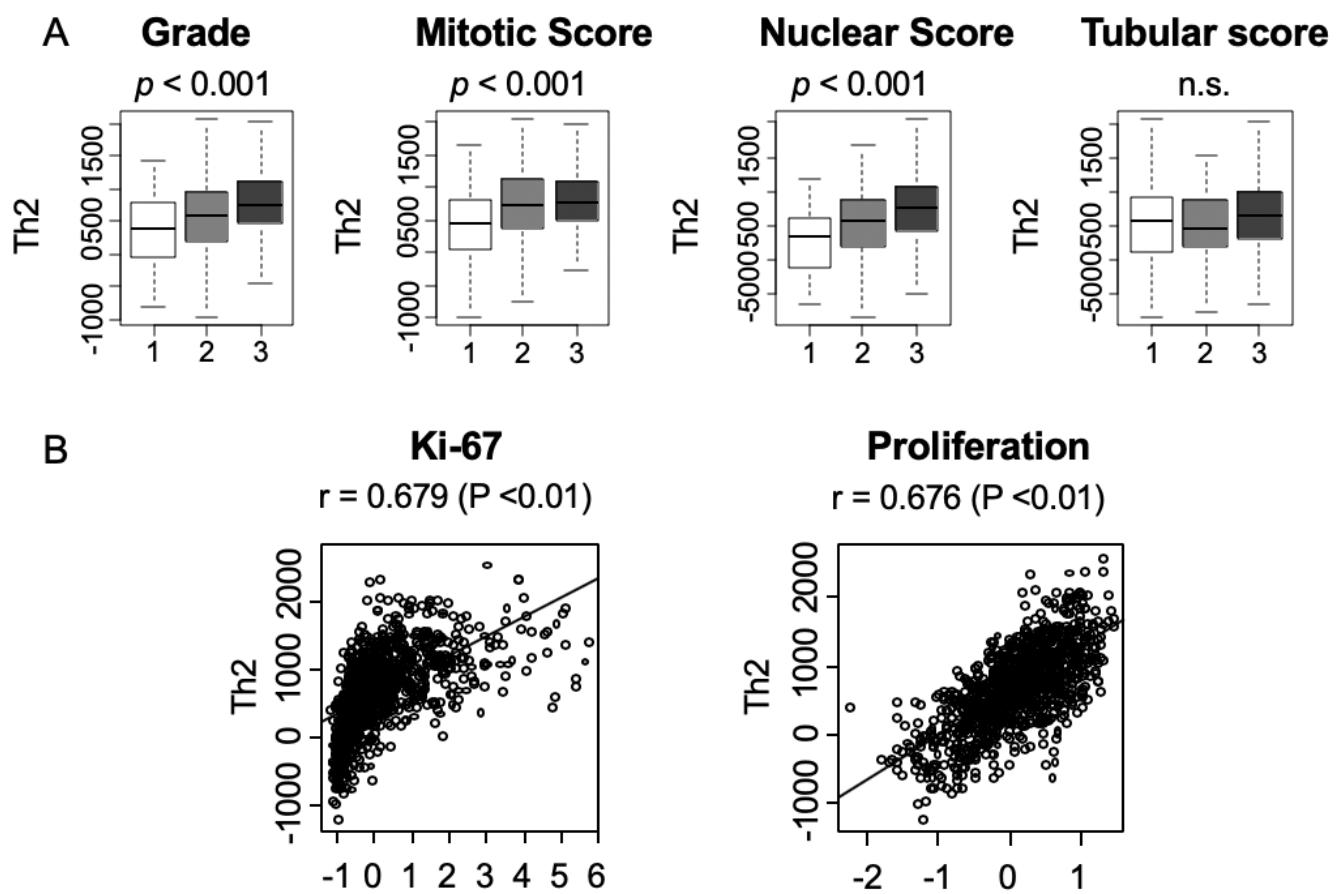


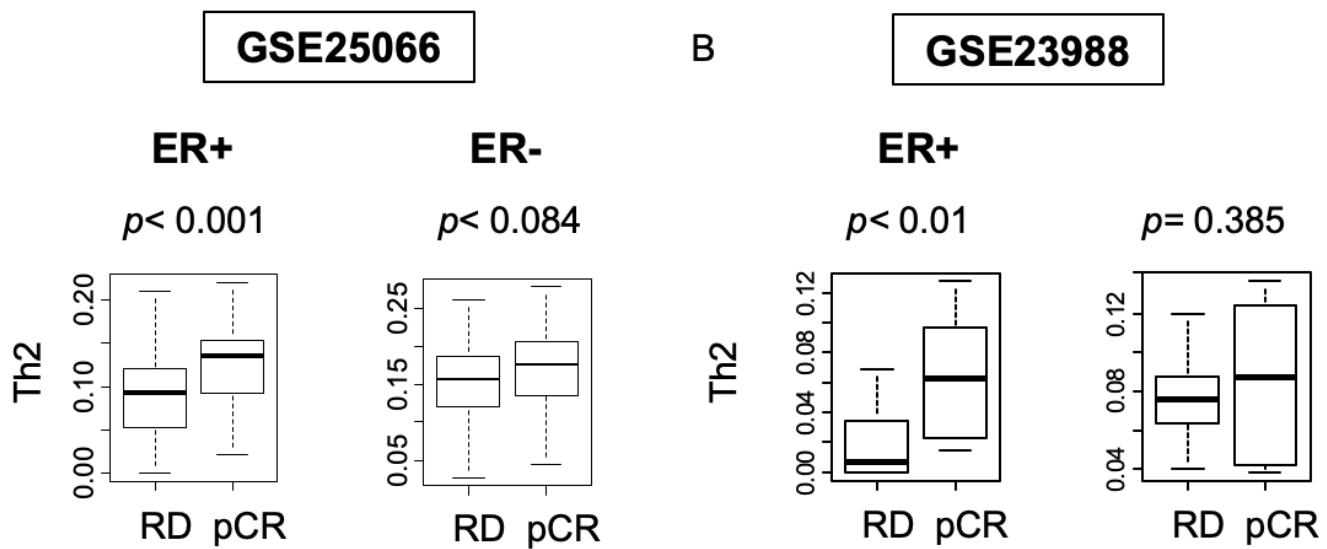
## Supplementary

**Table S1** Demographic and clinicopathological factors of Th2 High and Th2 low groups in TCGA breast cancer cohort

Clinicopathological factor	Whole cohort (n=1,069)		P value
	Th2 High, n=535	Th2 Low, n=534	
Age			0.235
<65 y	378	359	
≥65 y	157	175	
Stage			<0.01
1	72	106	
2	328	277	
3	117	127	
4	8	10	
Unknown	10	14	
T category			<0.05
1	120	151	
2	333	282	
3	58	78	
4	20	18	
Unknown	4	5	
N category			<0.01
0	248	256	
1	183	163	
2	69	49	
3	25	50	
Unknown	10	16	
M category			0.822
0	478	407	
1	10	10	
Unknown	47		
ER status			0.0879
Negative	128	108	
Positive	374	408	
Unknown	33	18	
PgR status			0.183
Negative	177	161	
Positive	324	353	
Unknown	34	20	
HER2 status			<0.05
Negative	265	283	
Positive	92	66	
Unknown	178	185	
Histologic subtype			<0.001
Infiltrating ductal carcinoma	442	321	
Infiltrating lobular	48	153	
Carcinoma			XXXX
Other	29	45	
Unknown	16	15	



**Figure S1 XXXXXX.** (A) Analysis with the whole cohort showed that Th2 levels have a significant correlation with pathological grade, especially high mitotic and nuclear score ( $P<0.001$ ). (B) Whole cohort showed high correlation of Th2 levels with Ki-67 and proliferation score ( $r=0.679$  and  $r=0.676$ , respectively).



**Figure S2** Patients who achieved pCR have significantly higher Th2 levels compared with the ones who had residual disease (RD) in analysis of two cohorts (GSE25066 and GSE23988).