



Supplementary Figure 1: Western blot validation of γ H2AX antibody (clone JBW301). The antibody specifically recognizes γ H2AX at 17 kDa, which was increased by topotecan (TPT) treatment in human MCF-7 breast cancer cells. β -actin was used as loading control.

Supplementary Table 1: γ H2AX expression in relation to patient and clinicopathologic variables within chemotherapy alone group.

Variable	118 patients No. (%)	γ H2AX-positive (31 patients) No. (%)	γ H2AX-negative (87 patients) No. (%)	P value
Age at Diagnosis				1.000
<50 yr	59 (50.0)	15 (48.4)	44 (50.6)	
\geq 50 yr	59 (50.0)	16 (51.6)	43 (49.4)	
T stage				0.898
T0	0	0	0	
T1	32 (27.1)	9 (29.0)	23 (26.4)	
T2	48 (40.7)	11 (35.5)	37 (42.5)	
T3	29 (24.6)	8 (25.8)	21 (24.1)	
T4	9 (7.6)	3 (9.7)	6 (6.9)	
N stage				0.357
N0	30 (25.4)	9 (29.0)	21 (24.1)	
N1	75 (63.6)	18 (58.1)	57 (65.5)	
N2	12 (10.2)	3 (9.7)	9 (10.3)	
N3	1 (0.8)	1 (3.2)	0 (0.0)	
Tumor size				0.711
<2 cm	26 (22.0)	7 (22.6)	19 (21.8)	
2-5 cm	60 (50.8)	14 (45.2)	46 (52.9)	
>5 cm	32 (27.1)	10 (32.3)	22 (25.3)	
Histology				0.236
Ductal	111 (94.1)	31 (100.0)	80 (92.0)	
Lobular	7 (5.9)	0 (0.0)	7 (8.0)	
Tumor grade				0.008
I	11 (9.3)	0 (0.0)	11 (12.6)	
II	49 (41.5)	9 (29.0)	40 (46.0)	
III	58 (49.2)	22 (71.0)	36 (41.4)	
Stage				0.993
I	12 (10.2)	3 (9.7)	9 (10.3)	
II	61 (51.7)	16 (51.6)	45 (51.7)	
III	45 (38.1)	12 (38.7)	33 (37.9)	
Estrogen receptor				0.007
Negative	61 (51.7)	23 (74.2)	38 (43.7)	
Positive	57 (48.3)	8 (25.8)	49 (56.3)	
Hormone receptor status				0.041
Negative	52 (44.1)	19 (61.3)	33 (37.9)	
Positive	66 (55.9)	12 (38.7)	54 (62.1)	
HER2 status				0.099
Negative	84 (71.2)	18 (58.1)	66 (75.9)	
Positive	34 (28.8)	13 (41.9)	21 (24.1)	
p53 status				0.309
Negative	64 (54.2)	14 (45.2)	50 (57.5)	
Positive	36 (30.5)	12 (38.7)	24 (27.6)	
Unknown	18 (15.3)	5 (16.1)	13 (14.9)	
Triple negative	33	9 (27.3)	24 (27.7)	1.000

HER2, human epidermal growth factor receptor; No., number.