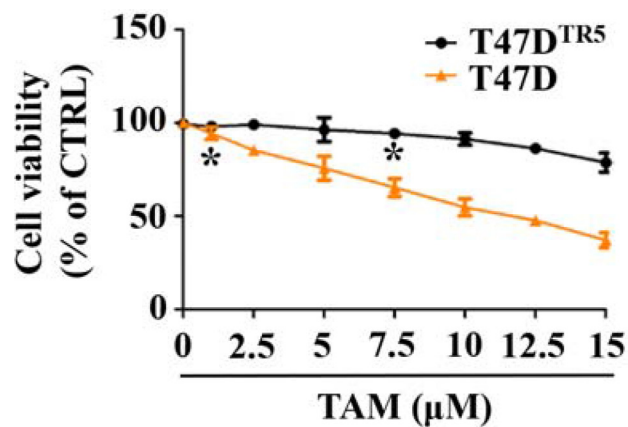
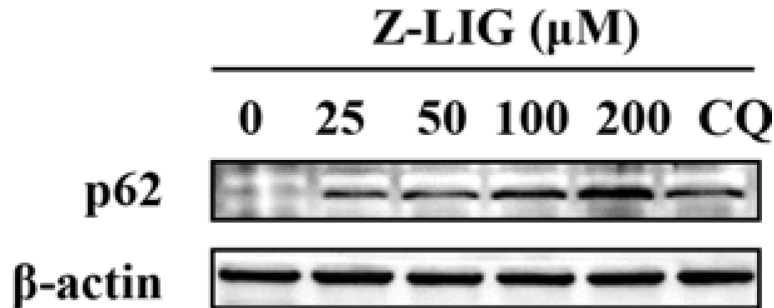


## Sensitization of tamoxifen-resistant breast cancer cells by Z-ligustilide through inhibiting autophagy and accumulating DNA damages

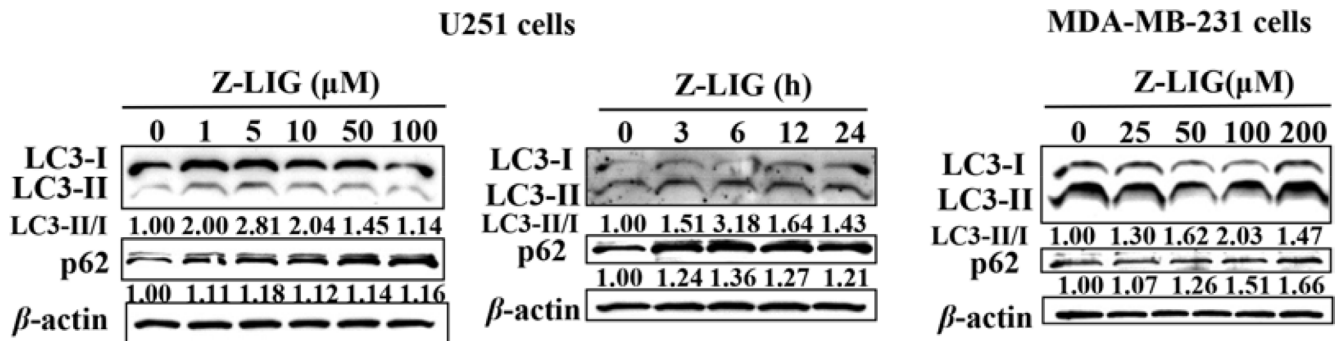
### Supplementary Materials



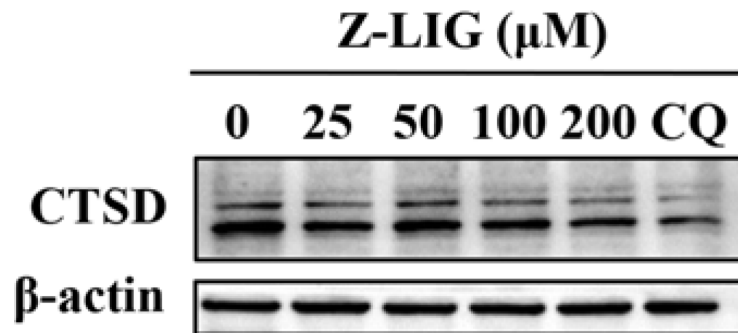
**Supplementary Figure 1: Effect of TAM on the cell viability of T47D and T47D<sup>TR5</sup> cells.** Cells were treated by TAM as indicated for 72 h and cell viability were determined by SRB assay. Values represent mean $\pm$ SD. \* $p < 0.05$ .



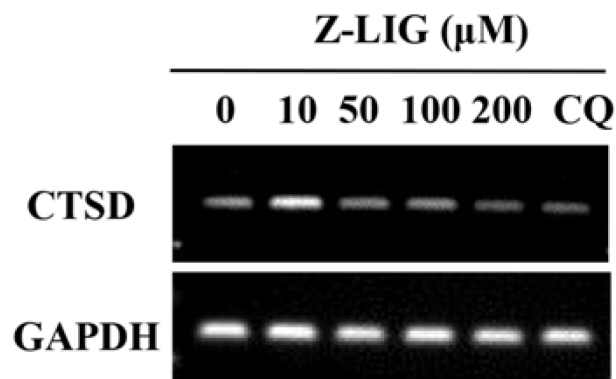
**Supplementary Figure 2: Effect of Z-LIG on p62 expression in T47D<sup>TR5</sup> cells.** Cells were treated with Z-LIG with indicated concentrations for 24 h. Then, the expression of p62 was analyzed by Western blotting. The blots were a representative of three independent experiments.



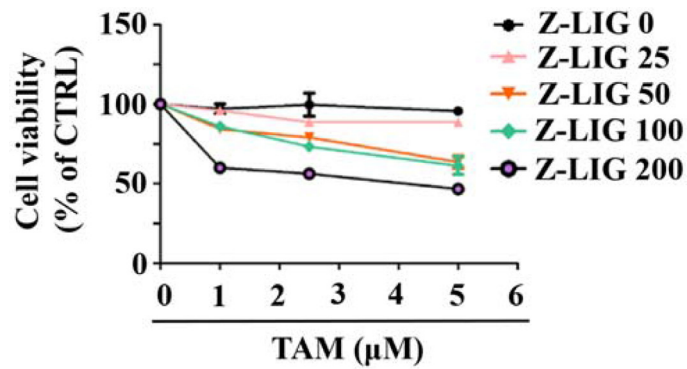
**Supplementary Figure 3: Effect of Z-LIG on conversion of LC3II and p62 expression in U251 cells and MDA-MB-231 cells.** U251 cells were treated with Z-LIG with indicated concentrations for 24 h or treated with Z-LIG (50 μM) for indicated time points. MDA-MB-231 cells were treated with Z-LIG with indicated concentrations for 24 h. Then, the expression of LC3II/I and p62 was analyzed by Western blotting.



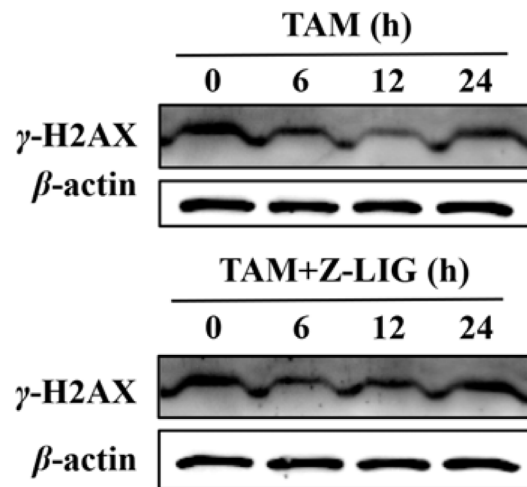
**Supplementary Figure 4: Effect of Z-LIG on the expression of CTSD protein.** T47D cells were treated with Z-LIG as indicated or 20  $\mu\text{M}$  CQ for 24 h, and the expression of CTSD protein was determined by Western blotting.



**Supplementary Figure 5: Effect of Z-LIG on the expression of CTSD mRNA.** MCF-7 cells were treated with Z-LIG as indicated or 20  $\mu\text{M}$  CQ for 24 h, and the expression of CTSD mRNA were determined by RT-PCR.



**Supplementary Figure 6: Effect of combinatorial Z-LIG and TAM on cell viability.** T47D<sup>TR5</sup> cells were pretreated with Z-LIG as indicated for 12 h and then treated with TAM as indicated for 72 h. The cell viability was determined by SRB assay. Values represent mean ± SD.



**Supplementary Figure 7: Effect of TAM or combinatorial TAM and Z-LIG on expression of γ-H2AX.** T47D<sup>TR5</sup> cells were pretreated with or without Z-LIG (50 µM) for 12 h and then exposed to TAM (5 µM) for 0, 6, 12 and 24 h. The expression of γ-H2AX was determined by Western blotting. The blots were a representative of three independent experiments.