Original article

The effects of T-DXd on the expression of HLA class I and chemokines CXCL9/10/11 in HER2-overexpressing gastric cancer cells

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Running title: The effect of T-DXd on HER2-positive GC

Supplementary Figure Legends

Supplementary Figure S1. The effect of trastuzumab on the expression of HLA class I in HER2-positive GC cells.

(A) Cell surface expression of HER2 (*left*) and HLA class I (*right*) in HER2-positive GC cell lines treated with several concentrations of trastuzumab or 100 ng/ml IFN-γ for 72 h (n=3). Representative histograms were shown. Values are shown as means ± SEM. **P* <0.05, ***P* <0.01, ****P* <0.001, *****P* <0.0001. (B) Western blot analysis of the indicated molecules in HER2-positive GC cell lines treated with several concentrations of trastuzumab for 72 h.Values are shown as means ± SEM. **P* <0.05, ****P* <0.001, *****P* <0.0001.

Supplementary Figure S2. The effect of irinotecan on the expression of HLA class I in HER2-positive GC cells.

Cell surface expression of HER2 and HLA class I in HER2-positive GC cell lines treated with several concentrations of trastuzumab or 100 ng/ml IFN-γ for 72 h (n=3). Representative histograms were shown. Values are shown as means ± SEM. ****P* <0.001, *****P* <0.0001.

Supplementary Figure S3. The effect of T-DXd on the expression of HLA class I in HER2-negative GC cells.

The expression of HER2 (*left*) and HLA class I (*right*) in HER2-negative GC cell lines treated with several concentrations of T-DXd or 100 ng/ml IFN-γ for 72 h (n=3). Representative histograms were shown. Values are shown as means ± SEM. **P* <0.05, ****P* <0.001, *****P* <0.0001.

Supplementary Figure S4. The effect of irinotecan on mRNA expression of *CXCL9/10/11* in HER2-positive GC cells.

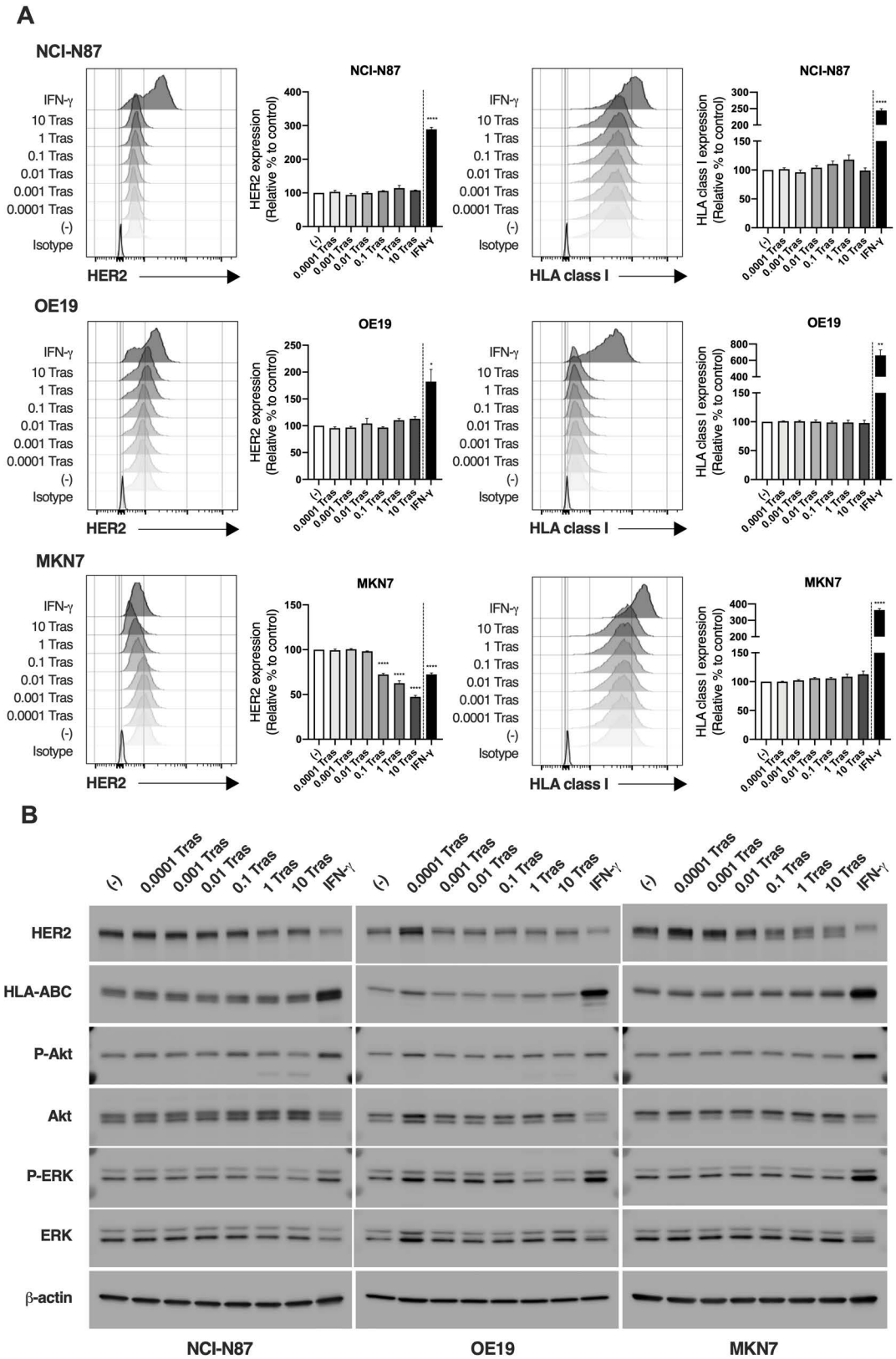
mRNA expression of *CXCL9*, *CXCL10,* and *CXCL11* in NCI-N87 cells treated with or without 10 or 50 μM irinotecan for 72 h (n=3). Values are shown as means ± SEM. ***P* <0.05, ****P* <0.001.

Supplementary Figure S5. Schematic representation of the effect of T-DXd on GC.

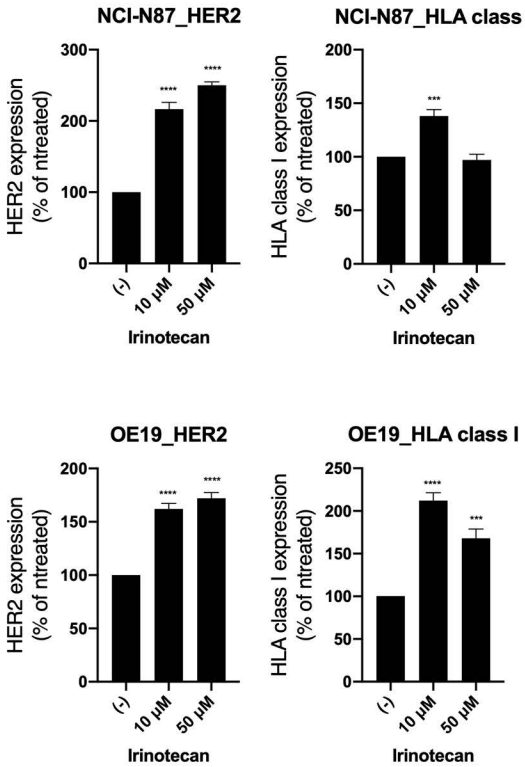
T-DXd moderately increases HLA class I expression in HER2-positive GC cells. T-DXd also triggers the expression of CXCL9/10/11 in HER2-positive GC cells, which might recruit tumor-infiltrating lymphocytes into GC tissues. CXCL; C-X-C motif chemokine ligand, GC; gastric cancer, HER2; human epidermal growth factor-2, HLA; human leukocyte antigen, IFN-γ; interferon-γ, T-DXd; trastuzumab deruxtecan, TIL; tumor-infiltrating lymphocytes

Supplementary Figure S6. Full-length blots shown in figures and supplementary figures.

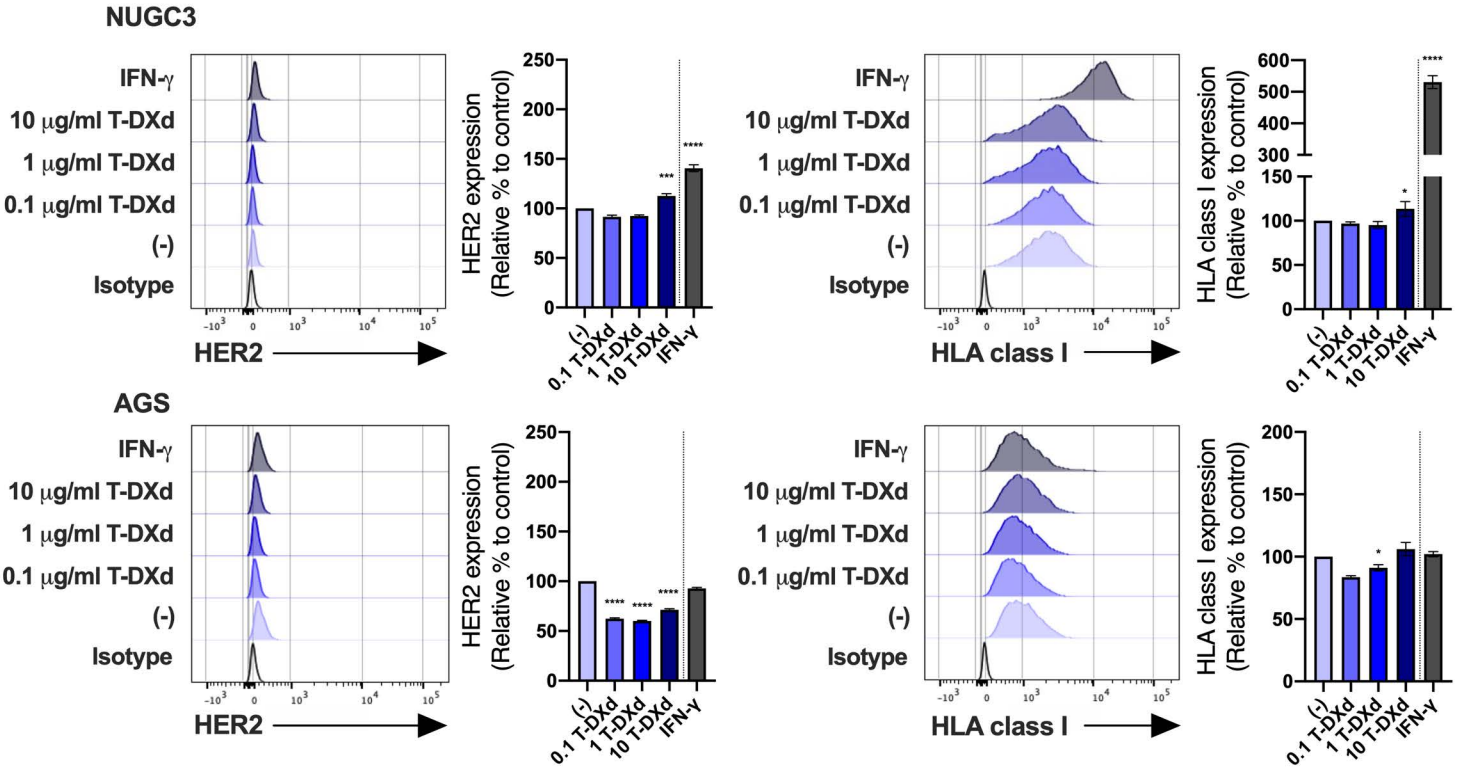
Supplementary Figure S1



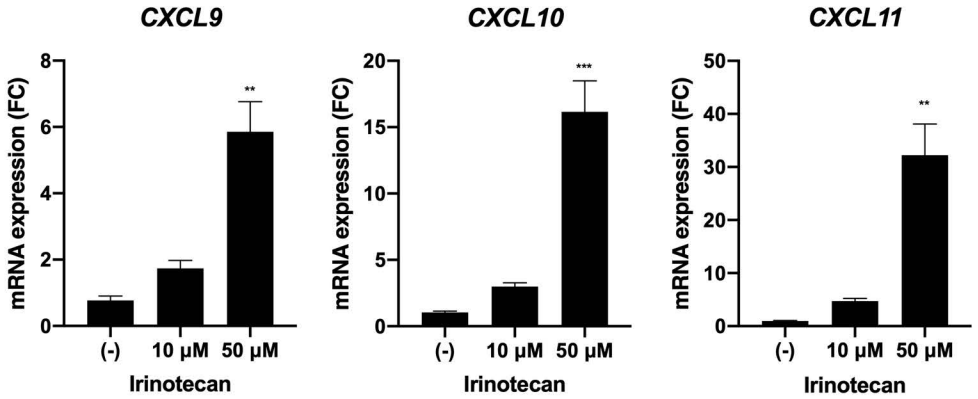
Supplementary Figure S2



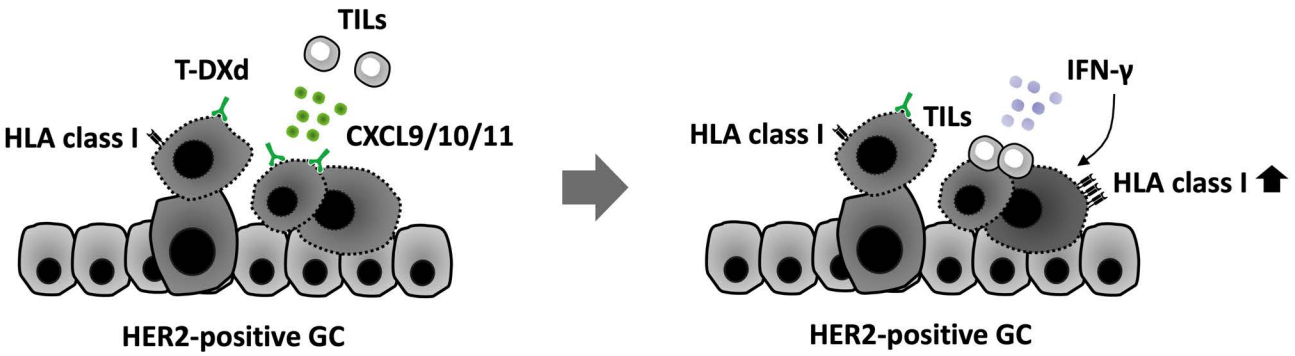
Supplementary Figure S3



Supplementary Figure S4



Supplementary Figure S5



Supplementary Figure S6-1

Fig. 2B_NCI-N87

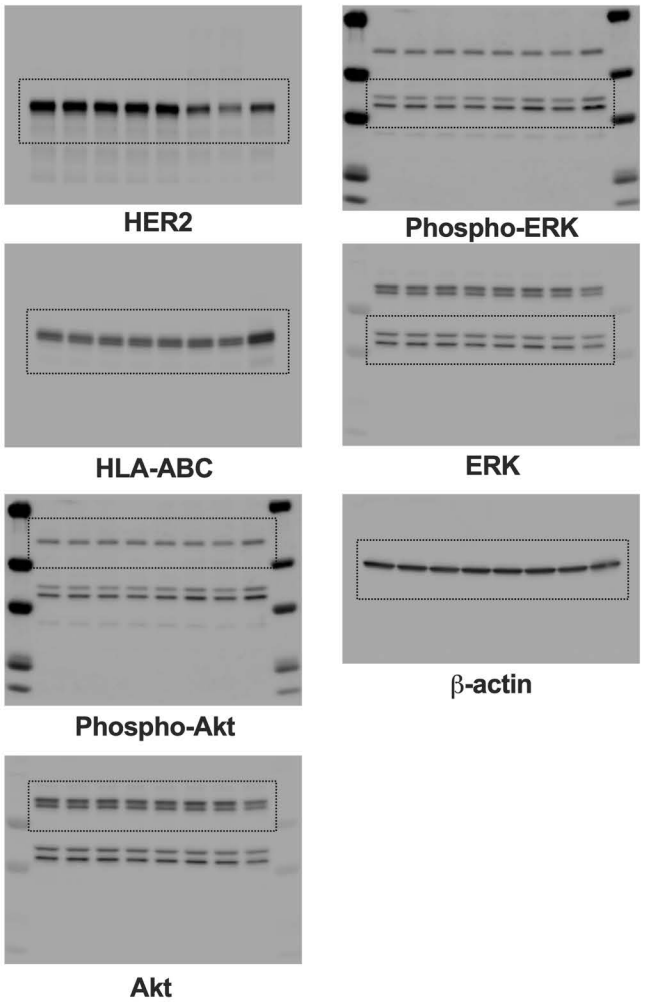


Fig. 2B_OE19

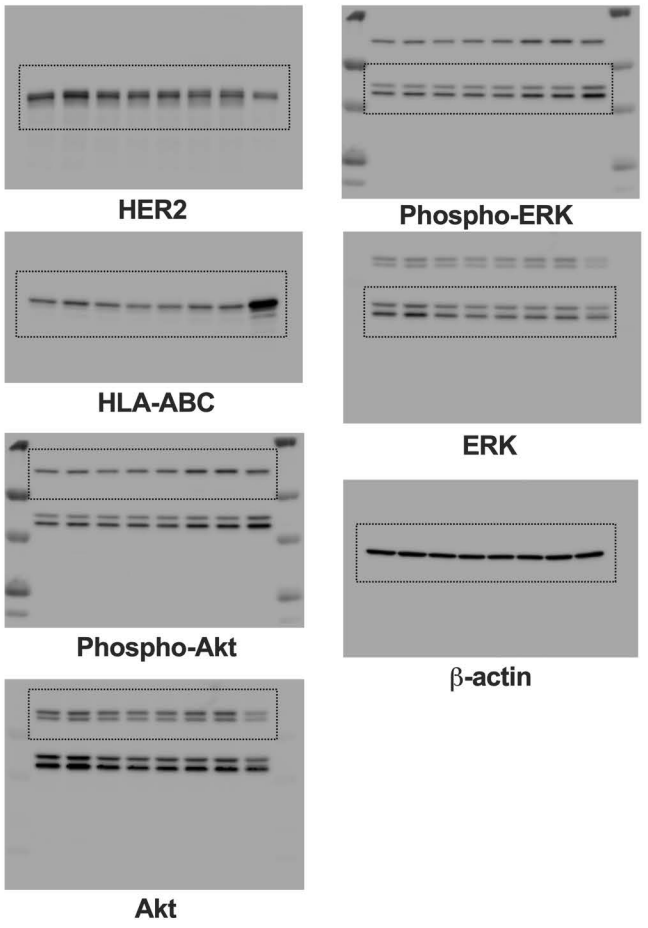
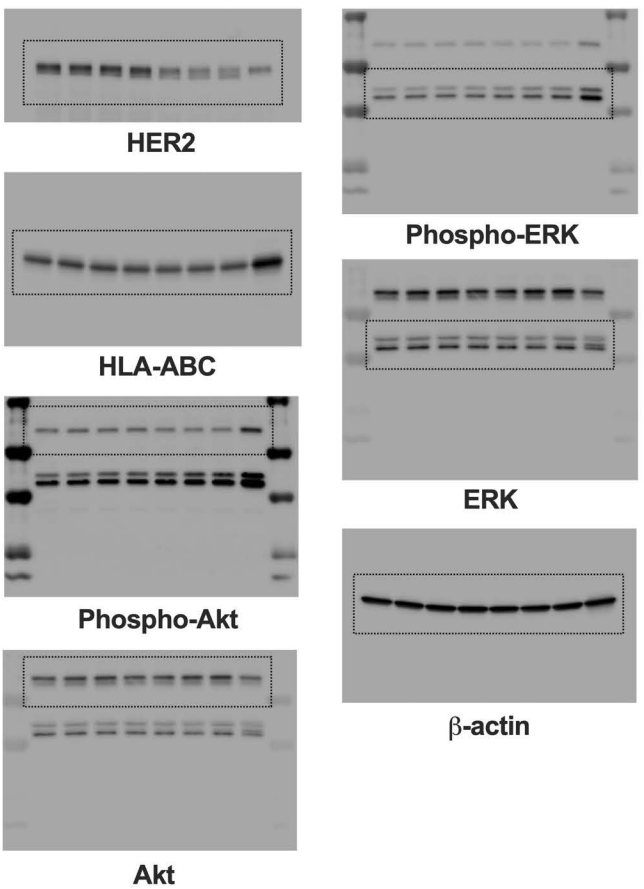


Fig. 2B_MKN7



Supplementary Figure S6-2