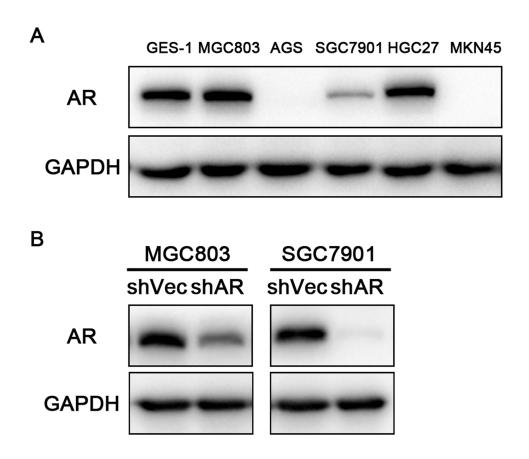
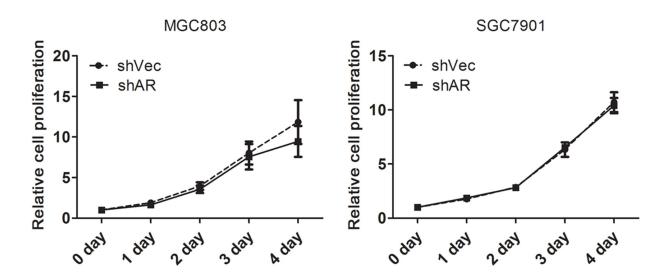
## **Expression of estrogen receptors and androgen receptor and their clinical significance in gastric cancer**

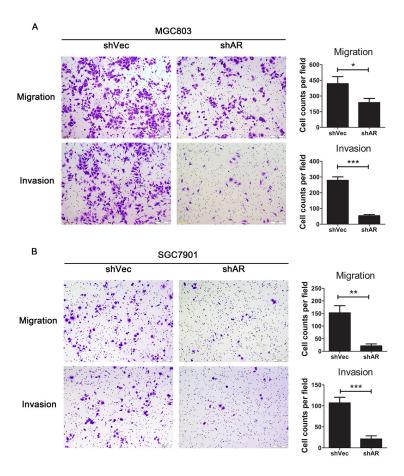
## SUPPLEMENTARY FIGURES AND TABLE



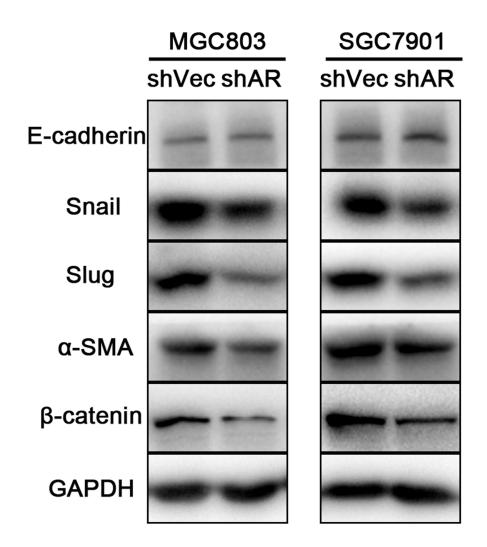
**Supplementary Figure 1: Expression of AR in GC cells. (A)** Endogenous expression of AR in the normal gastric mucosal epithelial cell and GC cell lines. **(B)** AR expression was successfully downregulated in MGC 803 and SGC7901 cells compared with corresponding vector cells.



**Supplementary Figure 2: Downregulation of AR did not influence the proliferation of GC cells** *in vitro.* The proliferation of GC cells was determined by Cell Counting Kit 8 (CCK8), the proliferation rate of the AR downregulated MGC 803 and SGC7901 cells had no difference compared to corresponding vector cells.



Supplementary Figure 3: Downregulation of AR suppressed the migration and invasion of GC cells in vitro. (A) Representative images for AR stably downregulated or vector transfected MGC803 cells in migration and invasion assays. Statistics for cell counts per field were shown in bar graphs. (B) Representative images for AR stably downregulated or vector transfected SGC7901 cells in migration and invasion assays. Statistics for cell counts per field were shown in bar graphs. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001. Results were the the mean  $\pm$  standard deviation from three independent experiments.



Supplementary Figure 4: Downregulation of AR suppresses the migration and invasion of GC cells via inhibiting EMT. The expression of EMT associated molecules including  $\alpha$ -SMA, snail, slug and  $\beta$ -catenin were reduced in AR stably downregulated MGC 803 and SGC7901 cells compared with corresponding vector cells.

## Supplementary Table 1: Correlations among expression of ERα, ERβ, AR in gastric cancer

Correlation	r	p
ERα vs ERβ	0.275	0.001
ERα vs AR	0.287	0.001
ERβ vs AR	0.388	< 0.001

 $ER\alpha$ , estrogen receptor alpha;  $ER\beta$ , estrogen receptor beta; AR, androgen receptor. r, Spearman rank correlation coefficients.