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**Title:** Wnt11 affects survival and adhesion of human ovarian cancer cell line SKOV3

**Authors:** H. Rezvani, Y. Heidarian, M. Karimzadeh, G. Hossein

**Abstract:**

**Introduction:** Ovarian cancer is the most common and lethal cancer in women. Previous reports demonstrated alteration of Wnt signaling in ovarian cancer as Wnt11 was shown to be expressed in ovarian cancer cell lines. However, the role of Wnt11 in epithelial ovarian cancer remains unknown. In this study, we sought to determine the role of Wnt11 on survival, and adhesion of ovarian cancer Skov3 cell line by using SiRNA Wnt11.

**Methods:** Skov3 cell line was transfected with SiRNA Wnt11 with lipofectamine 2000 or SiPORT as transfection reagent. After 48 hours post-transfection Wnt11 expression was assessed with western blot. In parallel, survival/proliferation of transfected cells was assessed by using MTT test. Adhesion test was performed after 48 h post-transfection with SiRNA Wnt11 in coated or uncoated wells with thin layer of matrigel.

**Results:** Our results showed significant increased cell survival in transfected cells compared to control in the absence of serum (147% versus 100% in control). Although not significant, similar effect was observed in the presence of serum. In addition, decreased Wnt11 expression by 50% with 150 nM SiRNA Wnt11 was observed as revealed by western blot. Adhesion of transfected cells was increased compared to control after 15 minutes post seeding in coated wells with thin layer of matrigel (63% versus 37% in control).

**Conclusion:** These data may suggest a significant role of Wnt11 in survival, and adhesion in ovarian cancer which needs further molecular investigation.

Ovarian cancer, Wnt11, SKOV3, Cell survival, Adhesion

**Presentation:** Poster