

## **Wnt signaling in granulosa cell tumors of the ovary**

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### **Background**

Granulosa cell tumors (GCT), a malignant type of sex-cord stromal tumor, account for approximately 2-5% of all ovarian malignancies. They are often identified before they have spread beyond the ovary, but advanced disease can be quite challenging to treat. Wnt signaling has been suggested to contribute to the formation of GCT. We hypothesized Wnt signaling was involved in human GCT.

### **Methods**

We examined a total of 12 samples for both RNA and protein expression in human GCT using qualitative real-time PCR (qPCR) and immunohistochemical (IHC) staining, respectively, to determine the presence of Wnt signaling.

### **Results**

Both RNA and protein levels of  $\beta$ -catenin and Lef-1 were elevated in GCT compared to non-cancerous ovarian controls.

### **Conclusions**

Wnt signaling appears to be activated in ovarian GCT, and may pose as a potential therapeutic target. Continued research is needed to uncover the role of Wnt signaling in this rare tumor type.

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