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*Identification of biomarkers for early
detection of ovarian cancer*

Ovarian cancer is the fourth most common cause of cancer-related death in women, although it only accounts for 4% of cancers in women in the United States. The high death rate is due to a lack of specific symptoms in the early stages of the disease and poor detection methods leading to diagnoses made in late-stage disease development, which corresponds to a poor prognosis. The overall 5-year survival rate is 45%, but if the diagnosis is made in the early stage of the disease it greatly increases to 94%, showing the importance of detecting ovarian cancer as early as possible. The current diagnostic marker for ovarian cancer, CA125, is only observed in 50% of women with stage I ovarian cancer and can also be elevated in other benign conditions. Therefore, new biomarkers, defined as quantifiable expressed traits that allow distinction between normal and diseased states, are needed for early detection of ovarian cancer. In this project, the gene expression level of seven genes was quantified by a technique called real-time quantitative polymerase chain reaction (qPCR). Genes that are found to be highly overexpressed and specific to ovarian cancer cell lines compared to normal ovarian cell lines will be further pursued by our laboratory, as they may serve as potential biomarkers for early detection of ovarian cancer.



Poster Number: Session: