Unique genetic marker may improve detection of recurrent ovarian cancer

December 7 2011

Ovarian cancer is a major health concern for women and the identification of sensitive biomarkers for early detection and/or monitoring of disease recurrence is of high clinical relevance.

New work published in the Dec. 7 issue of the online journal *PLoS ONE* reports promising advances toward the development of blood-based DNA markers for ovarian cancer.

The researchers, led by Peter W. Laird of the University of Southern California in Los Angeles, found that a DNA modification called "methylation" at a specific DNA site occurs frequently in ovarian tumors and can also be detected in the blood of ovarian cancer patients. This newly described methylation site was identified through a rigorous high-throughput screening process that tested over 27,000 different sites in the genome.

The epigenetic marker identified in this study was shown to have the potential to monitor disease status after surgery and might therefore prove helpful in enhancing the performance of existing biomarkers for disease recurrence.

More information: Campan M, Moffitt M, Houshdaran S, Shen H, Widschwendter M, et al. (2011) Genome-Scale Screen for DNA Methylation-Based Detection Markers for Ovarian Cancer. PLoS ONE 6(12): e28141. doi:10.1371/journal.pone.0028141