

Biomarkers for Ovarian Cancer

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Description of the scientific aims

Epithelial ovarian cancer (EOC) is typically diagnosed at advanced state when the disease survival is poor. Earlier diagnosis with more specific and sensitive methods would significantly improve survival. We develop markers and methods for early EOC diagnosis and for targeted treatment. We use our prospectively collected sample material from malignant and benign gynecological conditions as well as novel detection methods such as cancer-associated glycostructures and exosomes. We have identified prognostic transcript markers and aim to develop a marker panel that directs patients to effective therapies. We collaborate closely with national and international ovarian cancer networks and specialists of novel technological platforms.

Selected publications 2010-

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3. Hallamaa M, Huhtinen K, Matomäki J, Suvitie P, Perheentupa A. Serum concentrations of HE4 change little during in vitro fertilization. *Acta Obstetrica et Gynecologica Scandinavica* 93:640-6, 2014.
4. Huhtinen K, Desai R, Stähle M, Salminen A, Handelsman DJ, Perheentupa A, Poutanen M. Endometrial and endometriotic concentrations of estrone and estradiol are determined by local metabolism rather than circulating levels. *J Clin Endocrinol Metab.* 97:4228-35, 2012.
5. Hallamaa M, Suvitie P, Huhtinen K, Matomäki J, Poutanen M, Perheentupa A. Serum HE4 concentration is not dependent on menstrual cycle or hormonal treatment among endometriosis patients and healthy premenopausal women. *Gynecol Oncol.* 125:667-72, 2012.