Differential gene expression in the visceral adipose-derived stromal cells from cancer patients and their interactions with human ovarian cancer cells

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Recent studies have indicated the presence of crosstalk between cancer cells and the adipose tissue through paracrine or endocrine signaling. Even remote adipose tissue is influenced by malignant tumors through inflammatory cytokines, such as cancer cachexia. Conversely, the adipose tissue has been shown to promote cancer growth and metastasis. Adipose-derived stromal cells (ASCs) are multipotent precursor cells which are considered to reside in adipose stromal vascular fraction and to be responsible for generation of adipocytes. These ASCs have also been implicated in cancer progression through comprising the tumor microenvironment. In this presentation, our recent research which aims to evaluate the crosstalk between ASCs and cancer cells through gene expression analysis and in vitro studies will be briefly introduced.

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EDUCATIONS/TRAINING

2003	Seoul National University College of Medicine, Korea, MD.
2003-2004	Seoul National University Hospital, internship
2004-2008	Seoul National University Hospital, resident
2009	Seoul National University College of Medicine, MS
2013	Seoul National University College of Medicine, PhD

POSITIONS AND HONORS

2008-2012	Clinical Fellow, Seoul National University Hospital
2012-2013	Assistant Professor, Department of Obstetrics and Gynecology, Seoul National University College of Medicine
2013-Present	Research Professor, Center for Health Knowledge and Culture, Seoul National University College of Medicine

RECENT PUBLICATIONS

1. Kim MK, Suh DH, Kim B and Song YS. Cellular stress responses and cancer: new mechanistic insights on anticancer effect by phytochemicals. ***Phytochem Rev*** June 2013 (published online).
2. Lim W, Kim HS, Jeong W, Ahn SE, Kim J, Kim YB, Kim MA, Kim MK, Chung HH, Song YS, Bazer FW, Han JY and Song G. SERPINB3 in the Chicken Model of Ovarian Cancer: A Prognostic Factor for Platinum Resistance and Survival in Patients with Epithelial Ovarian Cancer. ***PLoS One*** 7: e49869, 2012.
3. Suh DH, Kim MK, Kim HS, Chung HH and Song YS. Unfolded protein response to autophagy as a promising druggable target for anticancer therapy. ***Ann N Y Acad Sci*** 1271: 20-32, 2012.
4. Kim MK, Kim MA, Kim JW, Chung HH, Park NH, Song YS and Kang SB. Loop electrosurgical excision procedure findings for identification of patients with early-stage cervical cancer suitable for less radical surgery. ***Int J Gynecol Cancer*** 22: 1214-1219, 2012.
5. Kim MK, Kim K, Han JY, Lim JM and Song YS. Modulation of inflammatory signaling pathways by phytochemicals in ovarian cancer. ***Genes Nutr*** 6: 109-115, 2011.
6. Kim MK, Jo H, Kong HJ, Kim HC, Kim JW, Kim YM, Song YS, Kang SB, Mok JE and Lee HP. Postoperative nomogram predicting risk of recurrence after radical hysterectomy for early-stage cervical cancer. Int ***J Gynecol Cancer*** 29: 1581-1586, 2010.
7. Kim MK, Kim JW, Kim MA, Kim HS, Chung HH, Park NH, Park IA, Song YS and Kang SB. Feasibility of less radical surgery for superficially invasive carcinoma of the cervix. ***Gynecol Oncol*** 119: 187-191, 2010.
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