## عنوان مقاله:

Enrichment ovarian cancer stem cells from ascite patients with malignant epithelial ovarian cancer

## محل انتشار:

سومین سمپوزیوم بین المللی سرطان نسترن (سال: 1396)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Ovarian cancer is the fifth leading cause of death from cancer in women and the most lethal gynecological malignancy.more than 50% of EOC patients with advanced disease (stage III or stage IV)present with ascites in their abdominal cavity. ascites consisting of secreted factors that can affect the cellular environment of the tumor cells and the mesothelial cells of the peritoneum. Secretedextracellular matrix (ECM) molecules, cytokines, chemokines, proteases, vascular permeability factors, and lysophosphatidic acid have all been detected in the ascites fluid, and many of these molecules have been shown to enhance the growth of tumor cells. Cancer stem cells (CSCs) a subpopulation in tumors and ascites, are known to cause drug resistance, tumor recurence and metastasis. recently demonstrated an association between chemoresistance and CSC-like phenotypes in ovarian cancer In this report we looked at the mechanisms of the enrichment of CSC-like residual cells in response to paclitaxel treatment. 6 number ascitic fluid samples were collected from patients with malignant epithelial ovarian cancer (EOC) then cultured in vitro conditions. Real-time q-pcr were used to characterize EOC cell populations deriving from the ascites samples.in the following primary, secondary and tertiary multicellular spheroid(MCS) isolated form EOC cells in non-adherent condition with serum-freemedium, furthermore expression of ovarian CSC (OCSCs) and stemness markers were asses. Then, with the aim of identify chemoresistance cells, tertiary MCS were treated with PTX 100μM(IC50 dose) for 48h,in the following expression of OCSCs markers in the chemoresistant population cells were evaluated. Our result showed, MCS culture of EOC cells derived-ascites patients with malignant EOCin conditions serum-free medium supplement ascite can induce an enrichment of CSCs.as well as treatment of MCS, with dose of IC50 PTX, can induce cell chemoresistante properties

## کلمات کلیدی:

Ovarian Cancer, Cell and Cancer, Cancer Stem Cells, Stem Cells and Cancer, Chemotherapy