

## عنوان مقاله:

Gene expression profile of circulating tumor cells in patients with breast cancer by RT-qPCR

## محل انتشار:

دومین همایش بین المللی افق های نوین در علوم پایه و فنی و مهندسی (سال: 1398)

تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

Introduction: Breast cancer is still the most frequent cause of cancer-related death in women worldwide. One of the most common methods used to diagnose cancer is laboratory tests using tumor markers. Markers most frequently studied are cytokeratins. Cytokeratins (CK-18) and (CK-19) are the major proteins of the epithelial cell skeleton, and in this research, the expression potential of CK-18 and CK-19 genes were studied as a molecular biomarker for diagnosis of breast cancer in the circulatory system using Real-time PCR technique. Materials and Methods: Blood samples of patients and healthy individuals (as control group) were purchased from Cancer Institute of Imam Khomeini Hospital, Tehran and their RNA were extracted. In the next step, cDNA molecule was synthesized using reverse transcriptase enzyme (RT) and gene-specific primers were designed and synthesized. Then the expression of CK-18 and CK-19 tumor markers was evaluated by real-time PCR technique; finally, the data obtained from cancer samples and the control group were analyzed by SPSS software. Results: CK-18 and CK-19 were observed and measured in patients' serum and were very low in the healthy group. Conclusion: CK-18 and CK-19 expressions were measured quantitatively and were positive in patients' serum. Also, according to the disease grade, cytokeratins expression were different in patients' serum; the more the disease progressed, the higher the expression

## کلمات کلیدی:

Breast Cancer, CK-18, CK-19, Real-time PCR, Tumor Marker

## لینک ثابت مقاله در پایگاه سیویلیکا:

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