عنوان مقاله:

Comparison of IL-25 and IL-17B in Apoptosis and Proliferation induction of breast cancer celllines

محل انتشار:

دهمین کنگره بین المللی سرطان پستان (سال: 1393)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Mahdieh Shokrollahi Barough - *Department of Immunology, Semnan University of Medical Sciences, Semnan, Iran*

Parviz Kokhaei - *Department of Immunology, Semnan University of Medical Sciences, Semnan, Iran*

Fatemeh Pak - *Department of Immunology, Semnan University of Medical Sciences, Semnan, Iran*

Mehdi Barati - *Department of Immunology, Semnan University of Medical Sciences, Semnan, Iran*

خلاصه مقاله:

Cytokines are one of the major components of tumor microenvironment. IL-25(IL-17E) and IL-17B are two members of IL-17 family which both of them bind to a unique receptor (IL-17RB). Sincethereceptoris widelyexpressedinbreast cancertissue, so the role of these cytokines in the tumor fate can be important.Materials and Method: MCF-7 (Estrogen positive) and MDA-MB231 (Estrogen negative) as breast cancer cell lines were treated by human recombinant cytokines (rhIL-25/IL-17E) and rhIL-17B from R&D system). Apoptosis test was performed using Annexin V and PI staining and analyzed by flow cytometry. Proliferation rate was evaluated by MTT proliferation assay. Results: According to our results apoptosis rate in IL-25 treated cells was more than control cells and proliferation rate in IL-17B treated cells was increased. To evaluate cytokines competition, different ratios of cytokines were used. The results showed that in some ratios these cytokines had inhibitory and/or a synergistic effect on each other.Conclusion: Biochemical component of the tumor microenvironment in different circumstances change and cytokines play an important role in tumor cell behavior. It seems these cytokines (IL 17E and IL- 17B) competed with each other and the balance is very important on the fate of breast cancer cells.

کلمات کلیدی:

Breast cancer, IL-17B, IL-25, MCF-7, apoptosis