

THE "IN VITRO" EFFECT OF ALFLUTOP® PRODUCT ON SOME EXTRACELLULAR SIGNALING FACTORS INVOLVED IN THE OSTEOARTHRICULAR PATHOLOGY INFLAMMATION

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Abstract. The biochemical diversity and the complex relationship between the mechanisms involved in osteoarthritis suggest a targeted therapy on several metabolic pathways, in order to obtain a superior long term efficacy. After the discovery of the cytokines as humoral factors that modulates the connective tissue, it has been opened new therapeutic insights through the stopping of inflammation based on synthetic / natural agents. The aim of our studies is to highlight the effect of Alflutop® product on soluble factors involved in the progression of inflammation (IL6, IL8 and VEGF), correlating the gene response with the phenotypic expression. The inflammation was induced in a human chondrocyte cell line (CHON-001) by three types of pro-inflammatory stimuli: TNF α , IL1 β , PMA (phorbol myristat acetat) and the extracellular release of IL6, IL8 cytokines and VEGF pro-angiogenic factor were analyzed. (Flow-cytometry and qRT-PCR).

The results proved the "in vitro" anti-inflammatory effect induced by Alflutop® on chondrocytes through mechanisms involving the cytokine signaling pathway, at genotypic and phenotypic level..

Keywords: Alflutop®, IL6, IL8, VEGF, anti-inflammatory effects.