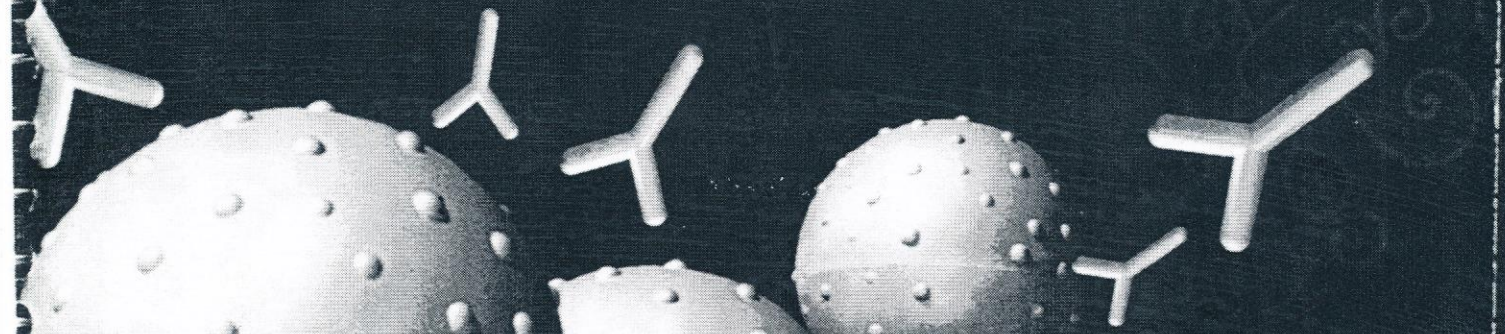
8th International Congress on Autoimmunity

Granada, Spain | May 9-13, 2012

Final Program

Novel Diagnostic Tools & New Therapeutic Avenues in Autoimmune Diseases



Friday, May 11, 2012

10:00-17:00 **Poster Area**

POSTER SESSION 2: MECHANISM AND ETIOLOGY OF AI DISEASES (Contd.)

Poster No

220 **THE CONSTANT REGION CONTRIBUTES TO THE ANTIGENIC SPECIFICITY AND POTENTIAL PATHOGENICITY OF ANTI-DNA ANTIBODIES**
Y. Xia, R. Pawar, A. Nakouzi, M. Monestier, M. Fan, A. Casadevall, **C. Putterman**, *USA*

POSTER SESSION 2: NEW BIOLOGICAL DRUGS

Poster No

221 **EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS AMELIORATION AFTER DIPDHAQ TREATMENT DUE TO LOWER LEVELS OF IFN-Γ, IL-12P40, IL-17A AND IL-6 IN THE BRAIN**
C.C.S. Alves, S.B.R. Castro, C.F. Costa, A.T. Dias, C.J. Alves, H.C. Teixeira, M.V. Almeida, A.P. Ferreira, *Brazil*

222 **PSORIASIS THERAPY: INFLIXIMAB TREATMENT AND APPEARANCE OF AUTOANTIBODIES AGAINST NUCLEAR ANTIGENS**
C. Bonaguri, V. Lora, P. Gisondi, A. Russo, F. Sandei, L. Battistelli, J.R. Ojeda Ramos, A. Melegari, G. Girolomoni, G. Lippi, *Italy*

223 **IMMUNOMODULATORY EFFECTS AND IMPROVED PROGNOSIS OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS AFTER O-TETRADECANOYL-GENISTEIN TREATMENT**
S.B.R. Castro, C.O. Rezende Junior, C.C.S. Alves, A.T. Dias, L.L. Alves, L. Mazzoccoli, F.P. Mesquita, N.S.V. Figueiredo, M.A. Juliano, M.C.M.N. Castañon, J. Gameiro, M.V. Almeida, H.C. Teixeira, A.P. Ferreira, *Brazil*

224 **DOWN- REGULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR BY A BETA-BLOCKER**
F. Hajighasemi, *Iran*

225 **EFFECTS OF INFLIXIMAB THERAPY VERSUS LEFLUNOMIDE THERAPY IN SERUM LIPID PROFILE RHEYMATOID ARTHRITIS IN PATIENTS**
G. Papadopoulos, K. Tsepanis, E. Koutsika, S. Mavidou, **X. Mpotjiori**, A. Vakaloudi, A. Koteli, *Greece*

226 **LUPUS-LIKE REACTION IN A PATIENT WITH ANKYLOSING SPONDYLITIS: IS THAT DUE TO INFLIXIMAB?**
T. Santiago, *Portugal*

DOWN- REGULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR BY A BETA-BLOCKER

F. Hajighasemi

Department of Immunology, Faculty of Medicine, Shahed University, Tehran, Iran

Objective: Beta-Blockers have been largely used for treatment of several cardiovascular complications such as arterial hypertension and arrhythmias. Ad anti-inflammatory effects of propranolol (a non selective beta-adrenergic blocker) have been reported. Angiogenesis, the process of neovascularization, is an important procedure in inflammation and autoimmunity. Vascular endothelial growth factor (VEGF) is a cytokine which has a key role in angiogenesis and inflammation. In this study the effect of propranolol on VEGF production in Human peripheral blood mononuclear cells (hPBMCs) have been investigated in vitro.

Methods: HPBMCs were used in this study. The cells were cultured in complete RPMI medium and then incubated with different concentrations of propranolol (4×10^{-7} - 4×10^{-4} M) for 24 hours. The level of VEGF secreted in the cell culture supernatants was measured with the enzyme-linked immunosorbent assay (ELISA) kits (R&D systems).

Results: Propranolol significantly and dose-dependently decreased VEGF production in hPBMCs, compared to untreated control cells.

Discussion: According to the results of this study, propranolol considerably decreased the VEGF expression in hPBMCs. Propranolol with inhibitory effect on VEGF production, might be a potent inhibitor of neovascularization and so angiogenesis. Thus propranolol together with its chronic long-term usage in cardiac problems may have possible implication in autoimmunity suppression.