

Autoimmune diseases (ADs) are characterized by the loss of immune tolerance to self-antigens leading to an excessive immune responses and chronic inflammation. Although much progress has been made in revealing key players in pathophysiology of various ADs, their therapy remains challenging and in most cases still consists of conventional immunosuppressive treatment with corticosteroids and cytostatic drugs. There is an increasing interest in the role of heat shock proteins (HSPs) as a potential treatment targets for some ADs, e.g. rheumatoid arthritis. The aim of this project is to investigate the immunomodulatory role of HSP in autoimmune skin diseases based on preclinical studies. We think that our observations will pave the way for the application of therapy using HSP into patients with autoimmune/inflammatory skin conditions and possibly other inflammatory disorders.