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REVIEW on PhD Thesis

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Biochemical Studies on Therapeutic Potential of Sapropelic Mud from Techirghiol in Ankylosing Spondylitis

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Objectives and aim of the work

Ankylosing spondylitis (AS) is a complex disease, potentially debilitating, with an insidious onset and radiologic progression of sacroileitis after several years, having as consequences loss of working capacity because of invalidity, damage of health resources and of life quality. Pathogenesis of this condition is not completely elucidated. Yet immune mediated mechanisms involving human leucocyte antigen HLAB-27, cellular inflammatory infiltrations, proinflammatory cytokines, as tumor necrosis factor TNF-α and interleukin-10, as well as genetic and environment factors are playing an important role.
Until recently, therapeutic options for patients with AS at best have been able to reduce some of the symptoms of the disease. Many patients with AS have severe or progressive disease, which is responsible for significant direct and indirect socioeconomic costs. Traditional therapies including nonsteroidal anti-inflammatory drugs (NSAIDs) and disease-modifying anti-rheumatic drugs (DMARDs), such as methotrexate and sulfasalazine, provide limited relief of symptoms. There is accumulating evidence that anti-tumor necrosis factor (anti-TNF) therapy is highly effective in AS, improving signs and symptoms of disease and quality of life, which may subsequently reduce the socioeconomic costs associated with the disease. However, further research is needed to demonstrate whether patients benefit from long-term therapy and whether radiologic progression and ankylosis can be slowed or halted.
Anti-TNF therapy is very costly (up to 13 000$ a year). Another major concern is that because these drugs are so new, long-term scrutiny for their possible side-