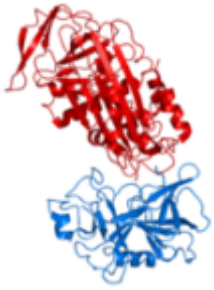
A promising new treatment for systemic lupus erythematosus (Lupus)



In a recent study from the University of Florida, scientists have discovered a potential treatment for systemic lupus erythematosus (SLE). SLE is an autoimmune disease in which the body's immune system attacks itself – causing harm to the heart, kidneys, joints, liver and skin, for example.

Previous research has shown that human alpha-1 antitrypsin (hAAT), a protein inhibitor, has the potential to treat chronic diseases like type 1 diabetes in mouse models. In the current study, published in the May 2016 edition of PLoS One, the authors applied hAAT to a mouse model and showed that treatment impacted on key aspects of immune function leading to SLE development. They showed that "hAAT treatment significantly inhibited DC activation, autoantibodies production and attenuated renal damage in the lupus mouse model." As there is no effective treatment currently in use for SLE, this study paves the way for the use of hAAT as a therapeutic clinical treatment for the many lupus patients debilitated by this autoimmune disease.

Elshikha, A. et al, 2016. Alpha 1 Antitrypsin Inhibits Dendritic Cell Activation and Attenuates Nephritis in a Mouse Model of Lupus. *PLOS*.