TARGETING THE IL-17 PATHWAY IN AUTOIMMUNE DISEASES

Th17 cells, and their hallmark effector cytokine IL-17A, are now recognized as an important driver of multiple autoimmune diseases, including psoriasis and the seronegative spondyloarthropathies: ankylosing spondylitis and psoriatic arthritis. Several molecules that selectively target components of the Th17 pathway are being tested for efficacy in immune-mediated diseases, including those that target IL-17A, and the IL17 receptor. I will discuss the rationale and results of clinical trials using these molecules, focusing on secukinumab (AIN457), a recombinant, highly selective, fully human monoclonal anti–IL-17A antibody of the IgG1/kappa isotype. The results indicate that IL-17A is a primary effector molecule that plays an important pathogenic role in many autoimmune diseases, and its blockade is safe and effective in the treatment of psoriasis, psoriatic arthritis and ankylosing spondylitis.