The progresses obtained in the knowledge of immunopathogenetic mechanisms preceding and sustaining the evolution of connective tissue diseases allowed the development of new “targeted” treatments aiming to correct the major immune regulatory mechanisms implicated in disease pathogenesis. The new therapeutic concept known as „immune modulation” or more specific as „interventional immunology” is stepping fast ahead the classic DMARD (disease-modifying anti rheumatic drug) treatment, given the superior efficacy and safety profile emerging from the targeting only the immune regulatory mechanisms specific for each connective tissue disease.

Based on the immunopathogenetic mechanisms interventional immunology in rheumatoid arthritis employs the following biologic agents or small peptide molecules: anti TNF-α agents, anti IL-6, anti IL-15 agents, co-stimulatory molecules blockade (anti LFA1, CTLA4 IgG), anti-inflammatory cytokines: IL-1 RA, anti T lymphocyte agents, anti B lymphocyte agents and modulation of intracellular cytokine signalling.