RESEARCH HIGHLIGHTS

IN BRIEF

CONNECTIVE TISSUE DISEASES

N-acetylcysteine is known to be effective for the short-term treatment of digital ulcers and Raynaud phenomenon in patients with systemic sclerosis; Rosato et al. have now shown that the agent also has beneficial long-term effects. In 50 consecutive patients treated for a median of 3 years, intravenous *N*-acetylcysteine therapy every 2 weeks led to a reduction in the numbers of digital ulcers and frequency of Raynaud attacks.

Original article Rosato, E. *et al.* The treatment with *N*-acetylcysteine of Raynaud's phenomenon and ischemic ulcers therapy in sclerodermic patients: a prospective observational study of 50 patients. *Clin. Rheumatol.* doi:10.1007/s10067-009-1251-7.

Belimumab combined with standard therapy is no better than standard therapy alone in the treatment of active systemic lupus erythematosus. In a 52-week randomized controlled trial, reductions in disease activity score and median time to disease flare were similar in the two treatment groups. Patients defined as "serologically active", however, showed a considerably better response to combination therapy than standard therapy alone.

Original article Wallace, D. J. *et al.* A phase II, randomized, double-blind, placebo-controlled, dose-ranging study of belimumab in patients with active systemic lupus erythematosus. *Arthritis Rheum.* **61**, 1168–1178 (2009).

PEDIATRIC RHEUMATOLOGY

A study from Italy suggests that serum osteopontin levels are a predictor of response to methotrexate therapy for juvenile idiopathic arthritis. Baseline levels of osteopontin were lower in patients who responded to methotrexate therapy than in non-responders. Although methotrexate considerably reduced osteopontin levels from baseline in both responders and non-responders, no significant associations were found between osteopontin levels and disease activity.

Original article Masi, L. *et al.* Serum osteopontin as a predictive marker of responsiveness to methotrexate in juvenile idiopathic arthritis. *J. Rheumatol.* doi:10.3899/jrheum.081156.

RHEUMATOID ARTHRITIS

Investigators have suggested that increased expression of interleukin (IL)-7 and IL-7 receptor (IL-7R α) in synovial tissue of patients with rheumatoid arthritis could lead to joint inflammation via activation of B cells, T cells and macrophages. Blockade with soluble human IL-7R α ameliorated the receptor-mediated immune response in tissue samples, prompting the researchers to suggest that IL-7 could be a suitable therapeutic target in rheumatoid arthritis.

Original article Hartgring, S.A. *et al.* Elevated expression of interleukin-7 receptor in inflamed joints mediates interleukin-7-induced immune activation in rheumatoid arthritis. *Arthritis Rheum.* **60**, 2595–2605 (2009).