The authors conclude that early treatment with rituximab might prevent irreversible damage to the salivary glands, with regeneration indicated by increased stimulated salivation and reduced salivary sodium concentration; however, the observed side effects warrant further study.

Rebecca Doherty

Original article Pijpe J *et al.* (2005) Rituximab treatment in patients with primary Sjögren's syndrome. *Arthritis Rheum* **52:** 2740–2750

A sensitive marker of pulmonary fibrosis activity in systemic sclerosis

Pulmonary fibrosis (PF) is a common complication of systemic sclerosis (SSc) and is a major cause of death. At present, KL-6 antigen and surfactant protein D (SP-D) are the most reliable serum markers for monitoring PF; however, they do not always accurately reflect underlying disease or improvements following immunosuppressive therapy.

Pulmonary and activation-regulated chemokine (PARC) levels are known to be raised in the lungs of patients with interstitial lung diseases. In this retrospective, longitudinal study of 21 SSc patients, PARC levels were found to correlate with PF and were a more sensitive reflection of PF activity than KL-6 and SP-D, levels. Increased PARC levels were associated with decreased diffusing capacity for carbon monoxide and decreased vital capacity. Serum PARC levels decreased more rapidly than KL-6 and SP-D levels in patients responding to immunosuppressive therapy. This probably reflects the fact that PARC is a product of activated alveolar macrophages and therefore parallels lung inflammation more closely than KL-6 and SP-D, which are released in response to alveolar damage and regeneration.

These results need to be confirmed in a larger group of patients, but based on these findings, serum PARC shows promise as a marker of PF in patients with SSc, although the authors caution that PARC levels should be interpreted alongside other clinical parameters and radiologic assessment to fully evaluate PF activity.

Carol Lovegrove

Original article Kodera M *et al.* (2005) Serum pulmonary and activation-regulated chemokine/CCL18 levels in patients with systemic sclerosis. *Arthritis Rheum* **52:** 2889–2896

A role for genotype in predicting efficacy and toxicity of methotrexate?

Although methotrexate (MTX) is the most commonly prescribed disease-modifying drug for juvenile idiopathic arthritis (JIA), its mechanism of action is unclear. MTX acts as a folate antagonist and exerts at least some of its anti-inflammatory effects via folate metabolism. A number of single-nucleotide polymorphisms in the methylenetetrahydrofolate reductase (*MTHFR*) gene have effects on folate metabolism and some have been associated with adverse drug reactions. In this study, the *MTHFR* polymorphisms C677T and A1298C were assessed for correlation with toxicity and efficacy in 58 patients with JIA who had been treated with oral MTX for at least 3 months.

The C allele of the A1298C polymorphism was found to be associated with better efficacy (more frequent reductions in swollen and tender joints, erythrocyte sedimentation rate and C-reactive protein levels) compared with 1298A/A homozygous genotype. The 677C/T genotype was associated with greater MTX toxicity (gastrointestinal symptoms, elevated serum transaminases and hair loss) and the 677C/C polymorphism with higher tolerability to MTX. The risk of having at least one adverse event was fourfold higher in patients with the *MTHFR* 677C/T genotype compared with those with the 677C/C genotype.

Although these data are preliminary, they imply a link between polymorphisms in the *MTHFR* gene and the efficacy and safety of MTX in patients with JIA. The determination of genotype might be clinically useful in estimating the risk of adverse events and treatment failure.

Carol Lovegrove

Original article Schmeling H *et al.* (2005) Influence of methylenetetrahydrofolate reductase polymorphisms on efficacy and toxicity of methotrexate in patients with juvenile idiopathic arthritis. *J Rheumatol* **32:** 1832–1836

A new instrument for assessing dactylitis in psoriatic arthritis

Dactylitis—characterized by a uniform swelling of the finger or toe—is a common feature of psoriatic arthritis, but there are no validated instruments for its assessment. To address this need, Helliwell and colleagues have begun