

was associated with a fourfold increase in risk; however, azathioprine is now rarely used in RA management.

These results indicate that the small proportion of patients with RA who are at a high risk for lymphoma can be easily identified, and placed under surveillance. Conventional treatment does not have to be modified, as it poses no additional risk, and might even have a protective effect by decreasing disease activity.

Katherine Sole

**Original article** Baecklund E *et al.* (2006) Association of chronic inflammation, not its treatment, with increased lymphoma risk in rheumatoid arthritis. *Arthritis Rheum* **54**: 692–701

## Levels of molecular biomarkers can predict rate of disease progression in osteoarthritis

It is currently difficult to identify which patients with osteoarthritis (OA) will show rapid disease progression. Radiography is the most common method of assessing structural change in osteoarthritis, but has the drawback of only detecting large changes, which occur relatively late in the disease process. Molecular biomarkers are a promising alternative, as they can detect change earlier in the disease process than radiography can. Mazières *et al.* conducted a 3-year, multicenter, prospective, longitudinal study, investigating the predictive value of several serum and urine biomarkers of bone, cartilage and synovium metabolism in hip osteoarthritis.

Data were analyzed for 333 patients, aged between 50 and 75 years, who had painful hip OA. Ten biomarkers were investigated, but only two—urinary C-terminal crosslinking telopeptides of collagen type II and serum hyaluronan—were found to predict disease progression. Baseline levels of these two biomarkers in the highest tertile were associated with a progression risk 3.7 times higher than the risk associated with the lowest tertiles.

The authors caution that this association, although statistically significant, is quite modest; therefore, measuring the levels of molecular biomarkers only at baseline might not be sufficient to predict OA progression in individual patients. It might be more useful to

take measurements at several time points, as disease activity probably varies over time.

Katherine Sole

**Original article** Mazières B *et al.* (2006) Molecular markers of cartilage breakdown and synovitis at baseline as predictors of structural progression of hip osteoarthritis. The ECHODIAH Cohort. *Ann Rheum Dis* **65**: 354–359

## GLOSSARY

### BRITISH ISLES LUPUS ASSESSMENT GROUP (BILAG) INDEX

Systematic lupus erythematosus disease activity index, scored from A (active disease requiring major immunosuppressive therapy) to E (no evidence of disease activity ever)

## Data analysis supports the existence of subtypes of systemic lupus erythematosus

Patients with systemic lupus erythematosus (SLE) tend to present with multisystem disease, or symptoms that focus on the renal or the musculoskeletal and mucocutaneous systems. This pattern of presentation has led some clinicians to believe that distinct subtypes of SLE exist, so Allen *et al.* performed a statistical analysis to examine the relationship between renal, musculoskeletal, and mucocutaneous disease activity.

The team prospectively collected data on 440 patients from two Birmingham, UK hospitals over a 10-year period. Sociodemographic data were obtained at the first visit and disease activity (measured by the BRITISH ISLES LUPUS ASSESSMENT GROUP [BILAG] INDEX) and medication usage were recorded at every clinic visit (median time between visits 90 days). Organ damage was assessed every 6 months.

They found that, in the three systems studied, patients with a higher frequency of clinic visits with active disease were more likely to continue with active disease in that system (and not in any other), compared with patients who had a lower frequency of visits. In addition, they found that renal disease is most likely to occur on its own, but that patients with predominantly mucocutaneous symptoms might develop musculoskeletal symptoms, and vice versa.

These findings were validated in a second cohort of 295 patients from a different UK hospital; similar relationships were seen, indicating that patients with renal symptoms, and patients with mucocutaneous and musculoskeletal symptoms, respectively, might represent distinct subgroups of SLE patients.

Chrissie Giles

**Original article** Allen E *et al.* (2006) A statistical analysis of the interrelationships between disease activity in different systems in systemic lupus erythematosus. *Rheumatology* **45**: 308–313