

IN BRIEF

INFECTION**Therapeutics and risk of infection in pregnancy**

Data from a large-scale observational study of pregnant women with systemic inflammatory conditions ($n = 4,961$) shows that the risk of serious infection is similar among those taking steroids (3.4%), non-biologics (2.3%) or TNF inhibitors (1.5%). Comparisons between these groups found no statistically significant differences, giving hazard ratios for non-biologics versus steroids, TNF inhibitors versus steroids, and TNF inhibitors versus non-biologics of 0.81, 0.91 and 1.36, respectively. Dose–response analysis indicated that high steroid doses were independently associated with an increased risk of serious infection in pregnancy.

ORIGINAL ARTICLE Desai, R. J. *et al.* Risk of serious infections associated with use of immunosuppressive agents in pregnant women with autoimmune inflammatory conditions: cohort study. *BMJ* <http://dx.doi.org/10.1136/bmj.j895> (2017)

OSTEOARTHRITIS**A new tool for measuring synovial inflammation**

Researchers have developed a new method for measuring knee joint effusion-synovitis volume, an MRI marker of synovial inflammation. This new approach gave reproducible volume measurements that were highly correlated with effusion-synovitis scores. In patients with symptomatic knee osteoarthritis who had low baseline levels of vitamin D and effusion-synovitis ($n = 413$), monthly supplementation with vitamin D₃ (50,000 IU) over 24 months retarded the progression of effusion-synovitis compared with the placebo group (-1.94 ml, 95% CI -3.54 to -0.33).

ORIGINAL ARTICLE Wang, X. *et al.* Knee effusion-synovitis volume measurement and effects of vitamin D supplementation in patients with knee osteoarthritis. *Osteoarthritis Cartilage* <http://dx.doi.org/10.1016/j.joca.2017.02.804> (2017)

RISK FACTORS**Generational differences in arthritis prevalence**

A longitudinal study of four birth cohorts (1935–1944, $n = 1,598$; 1945–1954, $n = 2,208$; 1955–1964, $n = 2,781$; and 1965–1974, $n = 2,230$) found that succeeding generations had a higher prevalence of arthritis. Various risk factors were associated with arthritis but did not account for this cohort effect. The benefits of improved education, increased income and smoking cessation on arthritis prevalence partially overcame the detrimental effects of increasing BMI. Further analysis suggested that obese individuals had an earlier age of arthritis onset compared with individuals of normal weight.

ORIGINAL ARTICLE Badley, E. M. *et al.* A population-based study of changes in arthritis prevalence and arthritis risk factors over time: Generational differences and the role of obesity. *Arthritis Care Res. (Hoboken)* <http://dx.doi.org/10.1002/acr.23213> (2017)

THERAPY**Monitoring risk of anterior uveitis in AS**

In a study of patients with ankylosing spondylitis (AS), the rate of anterior uveitis was reduced upon treatment with adalimumab ($n = 406$) or infliximab ($n = 605$) compared with pretreatment rates. The opposite was seen in patients receiving etanercept treatment ($n = 354$). Treatment with etanercept was associated with an increased risk of anterior uveitis compared with adalimumab (HR 3.86, 95% CI 1.85–8.06) or infliximab (HR 1.99, 95% CI 1.23–3.22), whereas no significant differences were observed between adalimumab and infliximab treatment.

ORIGINAL ARTICLE Lie, E. *et al.* Tumour necrosis factor inhibitor treatment and occurrence of anterior uveitis in ankylosing spondylitis: results from the Swedish biologics register. *Ann. Rheum. Dis.* <http://dx.doi.org/10.1136/annrheumdis-2016-210931> (2017)