

## IN BRIEF

**SYSTEMIC LUPUS ERYTHEMATOSUS****Trauma and PTSD linked with SLE risk**

In a longitudinal study of 54,763 women followed up over 24 years, investigators found that the incidence of systemic lupus erythematosus (SLE) was higher in women with probable post-traumatic stress disorder (PTSD) (that is, reporting four to seven symptoms of PTSD) than in women not exposed to trauma (HR 2.87, 95% CI 1.31–6.28). They also found a strong association between trauma exposure, regardless of PTSD symptoms, and incident SLE (HR 2.87, 95% CI 1.31–6.28).

**ORIGINAL ARTICLE** Roberts, A. L. *et al.* Association of trauma and posttraumatic stress disorder with incident systemic lupus erythematosus (SLE) in a longitudinal cohort of women. *Arthritis Rheumatol.* <http://dx.doi.org/10.1002/art.40222> (2017)

**JUVENILE IDIOPATHIC ARTHRITIS****Evidence of gut-driven inflammation in new JIA**

A study that investigated links between juvenile idiopathic arthritis (JIA) and gut microorganisms found that circulating anti-lipopolysaccharide (anti-LPS) antibody concentrations were higher in patients with new-onset JIA, with no substantial intergroup differences between those with polyarticular JIA ( $n = 22$ ), oligoarticular JIA ( $n = 31$ ) or spondyloarthropathies ( $n = 16$ ), than in healthy controls ( $n = 34$ ). Circulating concentrations of LPS-binding protein and  $\alpha$ -1-acid glycoprotein were also increased in patients with JIA and correlated with C-reactive protein levels as well as juvenile arthritis disease activity score.

**ORIGINAL ARTICLE** Fotis, L. *et al.* Serologic evidence of gut-driven systemic inflammation in juvenile idiopathic arthritis. *J. Rheumatol.* <http://dx.doi.org/10.3899/jrheum.161589> (2017)

**SPONDYLOARTHRITIS****Predictive factors of anti-TNF efficacy**

Among 168 patients who were determined to have axial spondyloarthritis (axSpA) according to the clinical arm of the ASAS classification criteria, response to TNF inhibitor therapy was dependent on the presence or absence of objective signs of axSpA (such as arthritis, dactylitis, enthesitis, uveitis and others). Only 13.7% of patients with non-radiographic SpA and no objective signs achieved a 50% improvement in Bath Ankylosing Spondylitis Disease Activity Index (BASDAI 50) at 3 months, compared with 45.1% of the group of patients with one or more objective signs.

**ORIGINAL ARTICLE** Vidal, C. *et al.* Poor efficacy of TNF inhibitors in non-radiographic axial spondyloarthritis in the absence of objective signs: a bicentric retrospective study. *Joint Bone Spine* <http://dx.doi.org/10.1016/j.jbspin.2017.08.005> (2017)

**RHEUMATOID ARTHRITIS****Risk from silica exposure influenced by smoking**

The risk of developing anti-citrullinated protein antibody-positive rheumatoid arthritis is high among current smokers exposed to silica (OR 7.5, 95% CI 4.2–13.2), with the two risk factors having a synergistic effect, according to findings from the Swedish Epidemiological Investigation of Rheumatoid Arthritis (EIRA) study. The additive interaction between silica exposure and smoking increased with pack-years of smoking, with the highest attributable proportion due to interaction (AP) seen with  $\geq 28$  pack-years of smoking (AP 0.7, 95% CI 0.4–0.9).

**ORIGINAL ARTICLE** Zeng, P. *et al.* Amount of smoking, duration of smoking cessation and their interaction with silica exposure in the risk of rheumatoid arthritis among males: results from the Swedish Epidemiological Investigation of Rheumatoid Arthritis (EIRA) study. *Ann. Rheum. Dis.* <http://dx.doi.org/10.1136/annrheumdis-2017-212145> (2017)