RESEARCH HIGHLIGHTS

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IN BRIEF

VASCULITIS SYNDROMES

Efficacy of tocilizumab for GCA in RCT

Tocilizumab plus glucocorticoids had greater efficacy than glucocorticoids alone in the induction and maintenance of remission in patients with giant cell arteritis (GCA) in a single-centre phase 2 randomized controlled trial. Patients with new-onset (n = 23) or relapsing (n = 7) GCA were randomly allocated (2:1) to receive tocilizumab or placebo; both groups also received tapered oral prenisolone (starting daily dose 1 mg/kg). At 12 weeks, 17 of 20 (85%) patients in the tocilizumab group achieved complete remission, compared with four of 10 (40%) in the placebo group (risk difference 45%, 95% Cl 11–79; P = 0.0301).

ORIGINAL ARTICLE Villiger, P. M. *et al.* Tocilizumab for induction and maintenance of remission in giant cell arteritis: a phase 2, randomised, double-blind, placebo-controlled trial. *Lancet* <u>http://dx.doi.org/10.1016/S0140-6736(16)00560-2</u> (2016)

RHEUMATOID ARTHRITIS

Antidrug antibodies crossreact with biosimilars

A study using bridging ELISA assays shows that antibodies to infliximab have identical reactivity towards the biosimilar CT-P13, suggesting that patients with anti-infliximab antibodies should not be switched to the biosimilar. 126 of 250 (50.4%) patients with rheumatoid arthritis and spondyloarthritis treated with infliximab tested positive when Remicade[®] (Janssen) was used to detect anti-drug antibodies. All 126 of these patients also tested positive with assays using either Remsima[®] (Orion Pharma) or Inflectra[®] (Hospira). Positive and negative percentage agreements were 100% in all comparisons.

ORIGINAL ARTICLE Ruiz-Argüello, M. B. *et al.* Antibodies to infliximab in Remicade-treated rheumatic patients show identical reactivity towards biosimilars. *Ann. Rheum. Dis.* <u>http://dx.doi.org/10.1136/annrheumdis-2015-208684</u> (2016)

CONNECTIVE TISSUE DISEASES

Steroidal nano-drug suppresses murine lupus

The efficacy of treatment with a liposome-based steroid (methylprednisolone hemisuccunate (MPS)) nano-drug was superior to similar doses of free MPS in a mouse model of lupus. The steroid nano-drug, which was administered weekly, suppressed anti-double-stranded DNA antibody levels, renal damage and proliferation of lymphoid tissue, and prolonged the survival of the MRL-lpr/lpr mice, to a greater extent than treatment with daily injections of free MPS.

ORIGINAL ARTICLE Moallem, E. *et al.* A liposomal steroid nano-drug for treating systemic lupus erythematosus. *Lupus* <u>http://dx.doi.org/10.1177/0961203316636468</u> (2016)

OSTEOARTHRITIS

Vitamin D not effective for knee OA

In patients with knee osteoarthritis and low vitamin D levels, monthly treatment with oral vitamin D_3 (50,000 IU; n = 209) or placebo (n = 204) for 2 years did not lead to significant between-group differences in MRI-measured cartilage volume loss or knee pain score. The results do not support the use of vitamin D_3 supplementation to prevent pain or cartilage loss in knee OA.

ORIGINAL ARTICLE Jin, X. *et al.* Effect of vitamin D supplementation on tibial cartilage volume and knee pain among patients with symptomatic knee osteoarthritis: a randomized clinical trial. JAMA **315**, 1005–1013 (2016)