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# IN BRIEF

# RHEUMATOID ARTHRITIS

#### U-Act-Early finds tocilizumab favours RA remission

In DMARD-naive patients with newly diagnosed rheumatoid arthritis (RA) and a 28-joint disease activity score  $\geq$ 2.6, immediate initiation of tocilizumab (with or without methotrexate) seems to be more effective than standard care. In a 2-year study, sustained remission was achieved by 86% (91 of 106) of patients receiving tocilizumab plus methotrexate and 84% (86 of 103) of patients receiving tocilizumab only, versus 44% (48 of 108) of patients initially given methotrexate monotherapy according to international guidelines.

ORIGINAL ARTICLE Bijlsma, J. W. J. et al. Early rheumatoid arthritis treated with tocilizumab, methotrexate, or their combination (U-Act-Early): a multicentre, randomised, double-blind, double-dummy, strategy trial. Lancet <u>http://dx.doi.org/10.1016/S0140-6736(16)30363-4</u> (2016)

## **STEM CELLS**

#### Stem cell therapy seems safe in refractory RA

53 patients with active rheumatoid arthritis (28-joint disease activity score >3.2) who had not responded to at least two biologic agents were randomly assigned to three once-weekly infusions of allogeneic Cx611 adipose-tissue derived stem cells (which resemble mesenchymal stem cells) at doses of  $1 \times 10^6$ ,  $2 \times 10^6$  or  $4 \times 10^6$  cells per kg, or placebo. Treatment was generally well tolerated, and no dose-limiting toxic effects were observed. Although the study was not designed to assess efficacy, a trend towards improved response was observed in Cx611-treated patients versus those who received placebo.

ORIGINAL ARTICLE Álvaro-Gracia, J. M. *et al.* Intravenous administration of expanded allogeneic adipose-derived mesenchymal stem cells in refractory rheumatoid arthritis (Cx611): results of a multicentre, dose escalation, randomised, single-blind, placebo-controlled phase Ib/Ila clinical trial. *Ann. Rheum. Dis.* <u>http://dx.doi.org/10.1136/</u> annrheumdis-2015-208918 (2016)

### THERAPY

#### Patients with TRAPS respond to canakinumab

In patients with active TNF-receptor-associated periodic syndrome (TRAPS), treatment with canakinumab (an anti-IL-1 $\beta$  monoclonal antibody) led to clinical remission and full or partial serological remission in 19 of 20 patients (median time to remission 4 days). The benefits of canakinumab were sustained throughout treatment (150 mg every 4 weeks for 4 months). Although all patients relapsed upon withdrawal of canakinumab, similar benefits were maintained upon reintroduction of this agent for a further 24 months.

**ORIGINAL ARTICLE** Gattorno, M. *et al.* Canakinumab treatment for patients with active recurrent or chronic TNF receptor-associated periodic syndrome (TRAPS): an open-label, phase II study. *Ann. Rheum. Dis.* <u>http://dx.doi.org/doi;10.1136/annrheumdis-2015-209031</u> (2016)

## VASCULITIS SYNDROMES

#### 16S RNA sequencing sheds light on Behçet disease

In saliva samples collected from 31 patients with Behçet disease (nine of whom also supplied a second sample following periodontal treatment), salivary microbial communities were notably less diverse than in samples from 15 healthy controls. The differences could not be explained by immunosuppressive medication use or *HLA-B\*5101–MICA* (a Behçet disease risk allele) carrier status. Periodontal treatment improved oral health in patients with Behçet disease but had no short-term effect on salivary bacterial communities.

ORIGINAL ARTICLE Coit, P. et al. Sequencing of 16S rRNA reveals a distinct salivary microbiome signature in Behçet's disease. *Clin. Immunol.* **169**, 28–35 (2016)