RESEARCH HIGHLIGHTS

IN BRIEF

BONE DISEASES

The oral bisphosphonate minodronate seems to safely and effectively lower the risk of vertebral fracture in postmenopausal women with osteoporosis. In a 2-year study of 704 women with low bone mineral density and 1–5 vertebral fractures, the overall rate of vertebral fracture was 59% lower in those who received 1 mg minodronate daily compared with placebo; discounting fractures that occurred in the first 6 months, this difference rose to 74%.

Original article Matsumoto, T. *et al.* Effect of daily oral minodronate on vertebral fractures in Japanese postmenopausal women. *Osteoporos. Int.* doi:10.1007/s00198-008-0816-7 (2008).

AUTOIMMUNITY

As a dietary supplement, honeybee royal jelly could have immunomodulatory properties. In a mouse model of human systemic lupus erythematosus, oral administration of royal jelly delayed the onset of and lessened the symptoms of the disease. Treatment extended the lifespan of the mice and decreased the levels of several markers of disease activity, as well as numbers of autoreactive B cells.

Original article Mannoor, M. K. *et al.* Honeybee royal jelly inhibits autoimmunity in SLE-prone NZB × NZW F1 mice. *Lupus* **18**, 44–52 (2008).

EXPERIMENTAL ARTHRITIS

Evidence from an animal model of arthritis suggests that plasmacytoid dendritic cells have a net antiinflammatory function in the context of defective immunoregulation in joints. Selective depletion of the cells *in vivo* increased disease activity and autoimmune responses to arthritis-related self proteins. This role could be exploited in the development of therapies to re-establish immune tolerance.

Original article Jongbloed, S. L. *et al.* Plasmacytoid dendritic cells regulate breach of self-tolerance in autoimmune arthritis. *J. Immunol.* **128**, 963–968 (2009).

RHEUMATOID ARTHRITIS

In patients with rheumatoid arthritis and no previous exposure to methotrexate, the combination of abatacept and methotrexate induced remission significantly more often than methotrexate alone, and was also significantly more effective at slowing radiographic progression of the disease. Over the course of the 1-year, phase IIIb trial, the rates of adverse events were similar for both treatments.

Original article Westhovens, R. *et al.* Clinical efficacy and safety of abatacept in methotrexate-naïve patients with early rheumatoid arthritis and poor prognostic factors. *Ann. Rheum. Dis.* doi:10.1136/ard.2008.101121 (2009).