Conclusions: The CANTOS trial confirms that serum urate is a risk marker for both gout and cardiovascular events and demonstrates that IL-1 β inhibition is effective in preventing both of these inter-related conditions. However, canakinumab had no effects on serum urate itself.

REFERENCE:

- [1] Ridker PM, Everett BM, Thuren T, et al. Antiinflammatory therapy with canakinumab for atherosclerotic disease. *N Engl J Med* 2017;377:1119.

Disclosure of Interest: D. Solomon Grant/research support from: Astra Zeneca, R. Glynn: None declared, J. MacFadyen: None declared, P. Libby: None declared, T. Thuren Employee of: Novartis, B. Everett: None declared, P. Ridker: None declared

DOI: 10.1136/annrheumdis-2018-eular.1567

OP0015 MORTALITY OF THE COBRA EARLY RHEUMATOID ARTHRITIS TRIAL COHORT AFTER 23 YEARS FOLLOW UP

P.B.M. Poppelaars¹, L.H.D. van Tuyl¹, M. Boers^{1,2}. ¹Amsterdam Rheumatology and Immunology Center | VU University Medical Center; ²Epidemiology and Biostatistics, VU University Medical Center, Amsterdam, Netherlands

Background: Mortality in patients with rheumatoid arthritis (RA) is higher than the general population. Most cohorts show that the adverse effect of RA becomes apparent only after more than a decade of follow up. Whether early, intensive treatment can improve this is still unknown. COBRA combination therapy (COmbinatietherapie Bij Rheumatoïde Artritis) showed long-term effectiveness for treatment of early RA without undue harm.¹ In 2010, after 11 years of follow up, the COBRA follow up study showed lower mortality in patients with COBRA treatment compared to patients with sulphasalazine monotherapy.²

Objectives: Our aim was to investigate mortality in the COBRA-trial cohort after 23 years and compare this mortality to a reference sample of the general population in the Netherlands.

Methods: In the COBRA trial, patients with early RA (median disease duration, 4 months) were treated with sulphasalazine monotherapy (SSZ, n=79) or a combination of SSZ, low-dose methotrexate and initially high, step-down prednisolone (COBRA, n=76). In the current study, we investigated mortality in the COBRA trial with the help of the Dutch state registry for mortality (Centrum van familiegeschiedenis, CBG). We compared the mortality in this cohort to a reference sample of the general population in the Netherlands matched for age and gender (data from Statistics Netherlands). The Standardised Mortality Ratio (SMR) compared the trial groups and the general population.

Results: With data of 154 out of the 155 patients, follow up was nearly complete. Duration of follow up was mean 23 (in patients alive, range 22–24) years. In total 44 patients died (28%, SMR=0.80 [95% CI: 0.59 to 1.06]); 20 of 75 COBRA patients (27%, SMR 0.75; [0.47–1.14]) and 24 of 79 SSZ patients (30%, SMR 0.85 [0.56–1.25]); the difference in mortality was not significant (p=0.61). In the reference sample of the general population (n=154) 55 people (36%) died. The positive trend for COBRA over SSZ decreased over time (figure 1).

Conclusions: This prospective cohort study of early RA is one of the first to show a normalisation of RA mortality compared to the general population after 23 years of follow up. In fact, this trial population had a numerically lower mortality than expected. This confirms that early, intensive treatment of RA (that can include glucocorticoids) has long-term benefits, and strongly suggests these benefits include normalisation of mortality.

REFERENCES:

- [1] Boers M, et al. *Lancet* 1997;350:309–18.
[2] van Tuyl LH, et al. *Ann Rheum Dis* 2010;69:807–12.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3675

OP0016 A MULTICENTRE RANDOMISED CONTROLLED TRIAL OF ZOLEDRONIC ACID FOR OSTEOARTHRITIS OF THE KNEE WITH BONE MARROW LESIONS

G. Cai¹, D. Aitken¹, L. Laslett¹, C. Hill², L. March³, A.E. Wluka⁴, Y. Wang⁴, L. Blizzard¹, F. Cicuttini⁴, T. Winzenberg¹, G. Jones¹. ¹Menzies Institute for Medical Research, University of Tasmania, Hobart; ²The Queen Elizabeth Hospital, Woodville; ³Royal North Shore Hospital, University of Sydney, Sydney; ⁴Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, Australia

Background: No disease-modifying drugs are currently available for the treatment of osteoarthritis (OA). Bone marrow lesions (BMLs) visualised on magnetic resonance imaging (MRI) have been identified as a promising therapeutic target. Our pilot study showed that a single infusion of zoledronic acid (ZA) reduced knee pain and BML size in knee OA patients over 6 months.¹ A longer, larger study was required to assess whether these improvements can be reproduced in a larger multicentre design.

Objectives: To compare the effect of once-yearly intravenous infusion of ZA to placebo on knee pain and BML size over 24 months in knee OA patients with significant knee pain and BMLs.

Methods: The Zoledronic Acid for Osteoarthritis Knee Pain (ZAP2) study is a multicentre, randomised, double-blinded, placebo-controlled trial over 24 months. Patients ≥ 50 years who had significant knee pain (defined as a visual analogue scale (VAS) ≥ 40 mm) and MRI-detected knee BML were randomised to receive either ZA (5 mg in 100 ml saline) or placebo (100 ml saline) once-yearly. Those with severe knee OA (joint space narrowing (JSN) on X-ray of Grade 3 using the Osteoarthritis Research Society International (OARSI) atlas) were excluded. Outcomes included knee pain and function by the Western Ontario and McMasters Universities Osteoarthritis Index (WOMAC), knee pain by VAS and change in knee total BML size (sum of medial femoral, lateral femoral, medial tibial, lateral tibial and patellar sites) by proton density weighted MRI from baseline to 24 months. Effect modification of the absence or presence of radiographic OA (JSN grade 0 or grade 1–2) was pre-specified. Mixed effect modelling using an intent-to-treat design was performed for data analyses. Adjustment for baseline values were performed for knee pain and function outcomes due to baseline imbalances.

Results: 223 patients (mean $\pm$ SD age 62.0 $\pm$ 8.0 years, 117 females) were enrolled. At baseline, mean $\pm$ SD knee WOMAC pain (0–500), WOMAC function (0–1700) and VAS pain scores (0–100) were 200.0 $\pm$ 105.0, 656.9 $\pm$ 352.9 and 51.0