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

REFERENCE:

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


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:

Disclosure of Interest: None declared


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

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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 McMaster 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 ±SD age 62.0±8.0 years, 117 females) were enrolled. At baseline, mean ±SD knee WOMAC pain (0–500), WOMAC function (0–1700) and VAS pain scores (0–100) were 200.0±105.0, 656.9±352.9 and 51.0

Conclusions: The COBRA trial follow up study showed lower mortality in patients with COBRA treatment compared to patients with sulphasalazine monotherapy.2 With data of 154 out of the 155 patients, follow up was nearly complete. Results:

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


Scientific Abstracts

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THE IMPACT OF THE DURATION OF BISPHOSPHONATE DRUG HOLIDAYS ON HIP FRACTURE RATES

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Background: Given FDA warnings, drug holidays (temporary or permanent discontinuation) of bisphosphonates (BPs) after long-term (3–5 years) continuous therapy is becoming increasingly common in the United States (US). However, the benefits and risks of stopping BPs, and the optimal timing to restart, remain unclear.

Objectives: We conducted a population-based cohort study of women on long term BP therapy to evaluate the rate of hip fracture following a drug holiday.

Methods: We used Medicare data (2006–2014) to identify all women with medical and pharmacy coverage who initiated a BP and were at least 80% adherent for >3 years (‘baseline’), at which follow-up time began. Patients using other bone therapies (e.g. denosumab, oestrogen, teriparatide, calcitonin) were excluded or censored if they started after follow-up began. We calculated crude rates of hip fracture for continuing BP therapy and among those who discontinued, for categories of time since discontinuing (i.e., length of drug holiday), extending up to 3 years. We used Cox proportional hazards models to evaluate the risk of discontinuing per the length of the drug holiday, using age as the time axis and controlling for potentially confounding factors, with and without adjusting for death as a competing risk.

Results: We identified 56,236 women who were highly adherent, long-term BP users. The mean (SD) age was 78.5 (7.5) years. The most commonly used BPs were alendronate (71.7% ever use, 52% exclusive use) and zoledronic acid (16.2% ever use, 8.9% exclusive use). During a median (IQR) follow-up of 2.1 (1.0, 3.0) years, 82,676 (40.1%) of women stopped BP therapy for at least 6 months or more. Among these women, 7,947 (12.7%) subsequently restarted any BP. Overall, 16,904 (10.8%) died. A total of 3,745 hip fractures occurred during follow-up. Hip fracture rates were lowest among women who were current users, and gradually increased as the length of the drug holiday increased, achieving their maximum with a drug holiday >2 years.

Conclusions: In a large cohort of U.S. women, a BP drug holiday greater than 2 years was associated with a significantly increased risk for hip fracture of up to 39% compared to continued BP use.

Disclosure of Interest: J. Curtis Grant/research support from: AbbVie, Amgen, BMS, Corrona, Janssen, Lilly, Myriad, Pfizer, Roche/Genentech, UCB, Consultant for: AbbVie, Amgen, BMS, Corrona, Janssen, Lilly, Myriad, Pfizer, Roche/Genentech, UCB, R. Chen Grant/research support from: Amgen, Z. Li Grant/research support from: Amgen, T. Arora Grant/research support from: Amgen, K. Saag Grant/research support from: Amgen, M. Kilgore research support from: Amgen, E. Delzell: None declared.


OP0017

THE VALUE OF ADDING MRI TO A CLINICAL TREAT-TO-TARGET STRATEGY IN RHEUMATOID ARTHRITIS PATIENTS IN CLINICAL REMISSION: CLINICAL AND RADIOGRAPHIC OUTCOMES FROM THE IMAGINE-RA RANDOMISED CONTROLLED TRIAL


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Background: Targeting MRI remission in rheumatoid arthritis (RA) patients in clinical remission may improve clinical outcome and halt joint damage progression.

Objectives: To determine whether a treat-to-target (T2T) strategy based on structured MRI assessments targeting absence of osteitis/bone marrow oedema (BME) would lead to improved clinical and radiographic outcomes, compared with a conventional T2T strategy in RA patients in clinical remission.

Methods: The IMAGINE-RA study was a 2 year investigator-initiated, randomised, open-label multicentre study. Two hundred RA patients in clinical remission (defined as: DAS28-CRP<3.2 and no swollen joints) receiving conventional synthetic disease-modifying antirheumatic drugs (csDMARDs) were randomly assigned 1:1 to a conventional DAS28-CPR-guided T2T strategy, targeting

Abstract OP0018 – Table 1. Primary and secondary outcomes at 24 months

<table>
<thead>
<tr>
<th>Measure</th>
<th>Conventional DAS28-CRP-guided T2T strategy</th>
<th>DAS28-CRP-guided T2T strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP (mg/L) at baseline</td>
<td>2.6 (1.5–3.9)</td>
<td>2.3 (1.3–3.7)</td>
</tr>
<tr>
<td>CRP (mg/L) at 24 months</td>
<td>1.9 (1.0–3.1)</td>
<td>1.6 (1.0–2.8)</td>
</tr>
</tbody>
</table>

Disclosure of Interest: None declared.