Abstract THU0124 – Table 1. Summary of Patient Characteristics

Patient Characteristic (N=122)	Mean (SD)*
Duration of prior adalimumab, years	5.1 (3.0)
Duration of remission, years	2.2 (2.0)
Concomitant csDMARDs dose, mg	
Methotrexate (weekly)	13.2 (5.5)
Hydroxychloroquine (daily)	228.6 (75.6)
Sulfasalazine (daily)	750.0 (288.7)
Concomitant oral corticosteroids dose, mg (daily)	3.2 (1.7)
Anti-cyclic citrullinated peptide (ACCP), Unit	286.6 (206.4)
ACCP positive, n (%)	63 (52.9)
Rheumatoid factor (RF), KU/L	139.5 (395.4)
RF positive, n (%)	90 (76.3)
C-reactive protein (CRP), mg/L	5.3 (28.0)
Erythrocyte sedimentation rate (ESR), mm/hr	11.4 (8.4)
Tender joint count (TJC) 68	0.3 (0.6)
Swollen joint count (SJC) 66	0.1 (0.3)
DAS28 (ESR)	1.7 (0.6)
Clinical Disease Activity Index (CDAI)	1.3 (1.4)
Simplified Disease Activity Index (SDAI)	1.8 (3.0)
Patient's Global Assessment of Disease Activity –VAS, 0-100 mm	6.4 (8.9)
Physician's Global Assessment of Disease Activity –VAS, 0-100 mm	3.7 (5.0)
Pain –VAS, 0-100 mm	8.5 (11.5)
HAQ-DI	0.3 (0.4)
SF-36 MCS	54.4 (7.7)
SF-36 PCS	50.1 (7.8)
MRI OMERACT scores	
Synovitis, Range 0-24	3.5 (3.1)
Osteitis, Range 0-75	1.0 (2.0)
Tenosynovitis, Range 0-30	2.7 (2.7)
Erosion, Range 0-250	21.4 (26.9)

* All values are Mean (SD) unless otherwise specified
 ACCP = Anti-cyclic citrullinated peptide; CRP = C-reactive protein; ESR = Erythrocyte sedimentation rate; EAMs = extra-articular manifestations; HAQ-DI = Health Assessment Questionnaire – Disability Index; IBD = inflammatory bowel disease; MCS = mental component summary; OMERACT = Outcome Measures in Rheumatology; PCS = physical component summary; Pts = patients; RF = rheumatoid factor; SD = standard deviation; SF-36=Short form 36-item health survey; VAS = Visual Analogue Scale.

Conclusions: Pts with long-standing RA randomised to the tapering phase of the PREDICTRA study based on sustained DAS28-based clinical remission on prior standard dose ADA therapy showed very low levels of clinical disease activity and normal physical function. This concurred with low MRI inflammation scores, especially for osteitis and tenosynovitis, the latter pathology being reported for the first time in RA clinical remission pts.

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THU0125 PREVENTION OF THE PROGRESSIVE BIOCHEMICAL CARTILAGE DESTRUCTION UNDER METHOTREXATE THERAPY IN EARLY RHEUMATOID ARTHRITIS

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Background: Can methotrexate (MTX) stop cartilage loss measured by Delayed gadolinium-enhanced MRI of the cartilage (dGEMRIC) in patients with early rheumatoid arthritis (eRA)?

Objectives: Objective of the study was to investigate biochemical cartilage composition under MTX therapy and to intra-individually assess the impact of inflammation severity on cartilage composition by using dGEMRIC MRI in patients with eRA.

Methods: dGEMRIC of MCP joints of the index and middle finger of 28 patients from the AthroMark cohort were examined prior to MTX-therapy as well as after 3 and 6 months. OMERACT RA MRI score and clinical parameters (CRP and DAS28) were registered at any time point. Each patient's second and third MCP joints were dichotomized into the joint with more severe synovitis versus the joint with less severe synovitis according to the RAMRIS synovitis subscore.

Results: MCP joints with more severe synovitis ('bad joints') demonstrated significantly lower dGEMRIC values compared to MCP joints with less severe synovitis ('good joints') at time-points 0 and 3 months (p=0.002; p=0.019, respectively). After 6 months of MTX therapy no significant difference of dGEMRIC index was found between good and bad joint (p=0.086).

Conclusions: Under MTX therapy, biochemical cartilage integrity remains stable; no further cartilage destruction occurred if patients are treated early in the course of the disease. In addition, six months of MTX therapy triggered an alignment of

dGEMRIC index of MCP joints with initially severe synovitis and less severe synovitis in an intra-individual assessment. This underlines the importance of an early treatment in eRA to reduce further cartilage damage of the inflamed joints.

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THU0126 IMPACT OF RESIDENTIAL AREA ON THE PROFILE OF RHEUMATOID ARTHRITIS PATIENTS INITIATING THEIR FIRST BIOLOGIC DMARD: RESULTS FROM THE ONTARIO BEST PRACTICES RESEARCH INITIATIVE (OBRI)

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Background: Access to care and management of Rheumatoid Arthritis (RA) patients may differ based on residential area which, in turn, can affect the real-world effectiveness of anti-rheumatic medications.

Objectives: We aimed to describe differences in the profile of patients initiating their first biologic disease modifying antirheumatic drug (bDMARD) based on their residence in urban vs. rural areas.

Methods: RA patients enrolled in the OBRI initiating their first bDMARD within 30 days prior to or anytime following enrolment were included in the analysis. Patients excluded if they had less than 2 years of follow-up and less than 2 visits during this period of time. Patients characteristics included sociodemographics (age, gender, race, education level, marital status, smoking status, annual household income, health insurance coverage), disease duration, disease severity parameters (Disease Activity Score (DAS), Clinical Disease Activity Index (CDAI), Swollen and Tender Joints (SJC28, TJC28), Physician Global Assessment (PhGA), Patient Global Assessment (PGA), Health Assessment Questionnaire – Disability Index (HAQ-DI), presence of erosion), bDMARD type, and concomitant anti-rheumatic medications including conventional synthetic disease modifying antirheumatic drug (csDMARDs), non-steroidal anti-inflammatory drugs (NSAIDs), and oral steroids.

Results: A total of 629 RA patients were included of whom 522 (83%) resided in urban areas and 107 (17%) in rural areas. Other than marital status (urban vs. rural: 64.6% vs. 82.2% married; p<0.001) and race (urban vs. rural: 78.0% vs. 95.3% Caucasian; p=0.001) no significant differences in sociodemographics were observed between groups. However, patients from urban areas were less likely to have an erosion (46.6% vs. 50.5%; p=0.23), had lower TJC28 (7.2 vs. 7.9; p=0.43), and lower SJC28 (6.6 vs. 7.1; p=0.42) at bDMARD initiation. Type of bDMARD (anti-TNF vs. other mechanism of action) was comparable between groups (87.9% on anti-TNF) as was concomitant treatment with csDMARDs (84.9% on csDMARDs), and NSAIDs (19.6% on NSAIDs). Concomitant use of oral steroids was significantly lower in patients from urban areas (21.5% vs. 29.9%; p=0.04).

Conclusions: Important differences may exist in the profiles of RA patients initiating their first bDMARD, and residing in rural versus urban areas. The implications on treatment outcomes should be assessed.

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