

RHEUMATOLOGY 2011 ABSTRACTS

Concurrent Oral 1 – Therapy of rheumatic disease

OP4. EFFECTIVENESS OF RITUXIMAB IN RHEUMATOID ARTHRITIS: RESULTS FROM THE BRITISH SOCIETY FOR RHEUMATOLOGY BIOLOGICS REGISTER (BSRBR)

Moetaza M. Soliman¹, Darren M. Ashcroft¹, Kath D. Watson², Mark Lunt², Deborah Symmons² and Kimme L. Hyrich²
¹School of Pharmacy and Pharmaceutical Sciences, University of Manchester, Manchester, United Kingdom; ²Arthritis Research UK Epidemiology Unit, The University of Manchester, Manchester, United Kingdom

Background: Rituximab (RTX) in combination with methotrexate (MTX) has been licensed since 2006 for the management of severe active rheumatoid arthritis (RA) in patients who have failed at least one anti-tumour necrosis factor (anti-TNF) therapy. Published clinical trials have demonstrated the efficacy of RTX in improving both clinical symptoms and patients' physical function. This study aimed to assess the effectiveness of RTX in RA patients treated in routine clinical practice by examining clinical and patient reported outcomes six months after receiving a first course of RTX.

Methods: The analysis involved 550 RA patients registered with the BSRBR, who were starting RTX and were followed up for at least 6 months. Change in Disease Activity Score (DAS28) and European League Against Rheumatism (EULAR) response were used to assess the clinical response while change in Health Assessment Questionnaire (HAQ) score was used to assess the physical function of the patients 6 months after starting RTX. The change in DAS28 and HAQ was compared between seronegative and seropositive patients and anti-TNF naïve patients versus anti-TNF failures. The response was also compared between patients receiving RTX in combination with MTX, other non-biologic disease modifying anti-rheumatic drugs (nbDMARDs) or no nbDMARDs.

Results: The mean (s.d.) age of the cohort was 59 (12) years and 78% of the patients were females. The patients had a mean (s.d.) of 15 (10) years of disease duration. 16% were biologic naïve while 84% were anti-TNF failures. 32% of the patients were seronegative and 68% were seropositive. The mean (95% CI) DAS28 at baseline was 6.2 (6.1, 6.3) which decreased to 4.8 (4.7, 4.9) at 6 months of follow up. 16% were EULAR good responders, 43% were moderate responders and 41% were non responders. The mean (95% CI) change in HAQ was -0.1 (-0.2, -0.1) (Table 1). The mean change in DAS28 was similar in seropositive and seronegative patients (p=0.18) while the anti-TNF naïve patients showed a greater reduction in DAS28 scores than anti-TNF failures (p=0.05). Patients receiving RTX in combination with MTX showed similar changes in DAS28 and HAQ compared to patients receiving RTX alone or with other nbDMARDs.

Conclusions: RTX has proven to be effective in the routine clinical practice. Anti-TNF naïve patients seem to benefit more from RTX treatment than anti-TNF failures.

Disclosure statement: The authors have declared no conflicts of interest.

OP5. RAPID AND SUSTAINED TREATMENT EFFECT OF CANAKINUMAB IN CHILDREN ACROSS DIFFERENT DISEASE SEVERITY PHENOTYPES OF CRYOPYRIN-ASSOCIATED PERIODIC SYNDROME

H. J. Lachmann¹, P. Quartier², E. Hachulla³, M. Gattorno⁴, R. Cartwright⁵, I. Kone-Paut⁶, F. Zulian⁷, E. Weisbarth-Riedel⁸, L. Lepore⁹, J. Hoyer^{1,0}, I. Foeldvari^{1,1}, E. Ramos^{1,2}, K. Leslie^{1,3}, G. Krammer^{1,4}, R. Preiss^{1,5}, E. Incerá^{1,4}, J. B. Kuemmerle-Deschner^{1,6} and P. N. Hawkins¹
¹Department of Medicine, Royal Free and University College Medical, London, United Kingdom; ²Université Paris-Descartes and Unite d'Immuno-Hematologie et Rhumatologie Pédiatrique, Necker-Enfants Malades, Assistance Publique Hopitaux de Paris, Paris, France; ³Department of Internal Medicine, Hôpital Claude Huriez CHRU, Lille Cedex, France; ⁴Department of Second Division of Pediatrics, G. Gaslini Institute, Genoa, Italy; ⁵Department of Pediatrics and Allergy and Immunology, Allergy Center at Brookstone, Columbus, GA, USA; ⁶Department of Service De Pédiatrie Generale, Hôpital Kremlin Bicetre, CEREMAI, Le Kremlin Bicetre, France; ⁷S.S. Pediatric Rheumatology, University of Padova School of Medicine, Padova, Italy; ⁸Kinderklinik, Rheum. Ambulanz, Universitätsklinikum Hamburg-Eppendorf, Hamburg, Germany; ⁹S.C.U. Clinica Pediatrica, IRCCS Burlo Garofolo, Trieste, Italy; ¹⁰Innere Medizin und Nephrologie, Universitaetsklinikum Giessen und Marburg GmbH, Marburg, Germany; ¹¹Zentrum für Rheumatologie, Hamburger Zentrum fuer Kinder-und Jugendrheumatologie, Hamburg, Germany; ¹²Department of Pediatrics, Hospital Central de Asturias, Oviedo, Spain; ¹³Department of Dermatology, UCSF School of Medicine, San Francisco, CA, USA; ¹⁴Development, Novartis Pharma AG, Basel, Switzerland; ¹⁵Development, Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA; ¹⁶Klinik fuer Kinder-und Jugendmedizin, Universitaetsklinikum, Tuebingen, Germany

Background: Canakinumab provides sustained interleukin-1 β (IL-1 β) blockade and is effective in the treatment of cryopyrin-associated periodic syndrome (CAPS), comprising familial cold auto-inflammatory syndrome [FCAS], Muckle-Wells syndrome [MWS], neonatal-onset multisystem inflammatory disease/chronic infantile neurologic, cutaneous and articular syndrome [NOMID/CINCA]. Herein we report the long-term safety, tolerability, and efficacy of canakinumab in paediatric CAPS patients from the largest study across all CAPS phenotypes conducted to date.

Methods: Canakinumab-naïve or roll-over patients from earlier studies received canakinumab s.c. 150 mg or 2 mg/kg (≤ 40 kg) every 8 weeks for up to 2 years. Complete response was assessed for canakinumab-naïve patients at Day 8 and in case of residual symptoms patients could be maintained on a more intense dosing regimen (increase dose up to 600 mg s.c. or 8 mg/kg s.c. [≤ 40 kg] and/or increase of dosing frequency). Complete response was defined as physician's global assessment of disease activity (PGDA) and skin assessment score \leq minimal and normal CRP and/or SAA values (< 10 mg/L). Relapse was defined for patients with prior complete response as serum levels of CRP and/or SAA > 30 mg/L and PGDA $>$ minimal or PGDA = minimal plus skin assessment $>$ minimal.

TABLE 1.

Outcomes	Entire cohort (n=550)	Anti-TNF naïve (n=87)	Anti-TNF failures (n=463)	P value ^a	Sero-positive (n=373)	Sero-negative (n=177)	P value ^b	RTX + MTX (n=286)	RTX mono-therapy (n=125)	RTX + Other DMARDs (n=138)	P value ^c
Mean change in DAS28 (95% CI)	-1.4 (-1.5, -1.3)	-1.7 (-2.0, -1.4)	-1.3 (-1.5, -1.2)	0.05*	-1.4 (-1.6, -1.3)	-1.2 (-1.4, -1.0)	0.18*	-1.4 (-1.6, -1.2)	-1.5 (-1.7, -1.2)	-1.3 (-1.6, -1.0)	0.62 [†]
EULAR response, n (%)											
Good	90 (16)	19 (22)	71 (15)	0.06 [‡]	65 (17)	25 (14)	0.30 [‡]	48 (17)	17 (14)	25 (18)	0.78 [‡]
Moderate	236 (43)	42 (48)	194 (42)		164 (44)	72 (41)		124 (43)	57 (45)	54 (39)	
None	224 (41)	26 (30)	198 (43)		144 (39)	80 (45)		114 (40)	51 (41)	59 (43)	
Mean change in HAQ (95% CI)	-0.1 (-0.2, -0.1)	-0.2 (-0.2, -0.1)	-0.1 (-0.2, -0.1)	0.32*	-0.1 (-0.2, -0.1)	-0.1 (-0.2, 0.0)	0.78*	-0.1 (-0.2, -0.1)	-0.1 (-0.2, -0.1)	-0.1 (-0.2, 0.0)	0.90 [†]

^atest of significance between anti-TNF failures and anti-TNF naïve patients, ^bbetween sero-negative and positive patients, ^camong patients with different concurrent nbDMARDs. *Two independent samples t-test, [†]One-way analysis of variance, [‡]Pearson Chi square test

Results: Of 47 paediatric (3–17 years) patients (1 patient did not have CAPS and was discontinued [protocol violation] and of the remaining 46 patients there were 5 FCAS, 23 MWS, 18 MWS/NOMID [includes 8 NOMID/CINCA] patients), 38 were canakinumab-naïve, while 9 had been pre-treated with canakinumab. The study was completed by 43 (91%) patients and 3 patients discontinued the study (1 due to adverse event [AE]). The median duration of exposure to study drug was 290 days (range: 29–625 days). Complete response was achieved in most (68%, n=26) of canakinumab-naïve paediatric patients. The majority of canakinumab-treated paediatric patients were relapse-free (83% [29 out of 35 patients who were included in the relapse assessment]) and 6 patients experienced a relapse. Dosing adjustments were required in 17(36%) patients. In canakinumab-naïve patients median CRP and SAA levels rapidly decreased within 7 days (2.5 and 7.4 mg/L [baseline levels were 16.5 and 53.5 mg/L, respectively]) and these levels were maintained at normal levels (<10 mg/L) during the study (both in naïve and roll-over patients). The most frequent AEs were rhinitis, nasopharyngitis and headache. Serious AEs were reported in 6 paediatric patients. Most patients (n=43, 91%) had no injection site reactions.

Conclusions: Canakinumab s.c. every 8 weeks induced rapid and sustained clinical and biochemical remission in paediatric patients across all severity phenotypes of CAPS. Adjustment of dosing regimen is an effective approach in paediatric CAPS patients to achieve disease control. Canakinumab showed favorable long-term tolerability and safety profile.

Disclosure statement: R.C. is/has been a member of speakers' bureaus for GlaxoSmithKline, Sanofi-Aventis, Pfizer, Inc. and UCB, and has received consultancy fees from Novartis Pharmaceuticals Corporation. I.F., E.H., P.H. and I.K. have received consultancy fees from Novartis Pharmaceuticals Corporation. M.G. is/has been a member of a speakers' bureau for Novartis Pharmaceuticals Corporation. E.I. and G.K. are shareholders and employees of Novartis Pharma AG. J.K. has received a research grant and consultancy fee from Novartis Pharmaceuticals Corporation. H.L. has received a research grant from the EU framework and a consultancy fee from Novartis Pharmaceuticals Corporation. R.P. is a shareholder and employee of Novartis Pharmaceuticals Corporation. P.Q. has received a research grant and consultancy fee from Novartis Pharmaceuticals Corporation. All other authors have declared no conflicts of interest.

OP6. CANAKINUMAB (ACZ885) RELIEVES PAIN AND CONTROLS INFLAMMATION RAPIDLY IN PATIENTS WITH DIFFICULT-TO-TREAT GOUTY ARTHRITIS: COMPARISON WITH TRIAMCINOLONE ACETONIDE

Alexander So¹, M. De Meulemeester², A. Pikhlak³, A. E. Yücel⁴, B. Bodalia⁵, J. Kerrane⁶, U. Arulmani⁷, D. Richard⁷, V. Murphy⁷, P. Sallstig⁷ and N. Schlesinger⁸

¹Deapartement de l'Appareil Locomoteur, University of Lausanne, Lausanne, Switzerland; ²Private Practice, Private Practice Demeulemeester, Gozée, Belgium; ³Clinical Research Centre Anthrology, Moscow State University of Medicine and Dentistry, Moscow, Russian Federation; ⁴Baskent University Medical Faculty, Baskent University, Ankara, Turkey; ⁵General Practice, The Gables Medicentre, Coventry, United Kingdom; ⁶General Practice, Layton Medical Centre, Blackpool, United Kingdom; ⁷Integrated Health Care, Novartis Pharma AG, Basel, Switzerland; ⁸UMDNJ, Robert Wood Johnson Medical School, New Brunswick, NJ, USA

Background: Monosodium urate (MSU) crystals stimulate the production of interleukin-1 β (IL-1 β), a potent inflammatory cytokine. Targeted IL-1 β blockade with canakinumab, a fully human monoclonal anti-IL-1 β antibody, is a novel treatment for gouty arthritis. Its effects on pain and inflammation in acute gouty arthritis flares were compared with triamcinolone acetonide (TA). TA has been shown to be effective in the treatment of acute gouty arthritis flares.

Methods: This was an 8-week, dose-ranging, multicenter, blinded, active-controlled trial. Patients ≥ 18 to ≤ 80 years with an acute gouty arthritis flare, refractory to or contraindicated to NSAIDs and/or colchicine were randomized to one subcutaneous dose of canakinumab (10, 25, 50, 90, or 150 mg; n=143) or one intramuscular dose of TA (40 mg; n=57). Primary outcome was pain intensity at 72 hours post dose on VAS scale (0–100 mm). Secondary outcomes included C-reactive protein (CRP), serum amyloid A (SAA), and physician's assessment of tenderness, swelling and erythema of target joint at 72 hours, 7 days, 4 and 8-weeks post dose.

Results: 191/200 patients completed the study. Canakinumab showed a statistically significant dose response at 72 hours. The 150 mg dose group reached superior pain relief compared to TA group starting from 24 hours as previously reported. At 72 hours post dose,

78% of canakinumab 150 mg treated patients achieved $\geq 75\%$ and 96% achieved $\geq 50\%$ reduction in pain from baseline. In contrast, 45% and 61% of patients treated with TA achieved $\geq 75\%$ and $\geq 50\%$ pain reduction, respectively. Median CRP/SAA levels were normalized by Day 7 for all canakinumab doses above 10 mg and remained below the upper limit of normal [(ULN): CRP 3.0 mg/L; SAA 6.7 mg/L] for rest of the study. In TA group, median CRP levels remained above the ULN throughout the study while median SAA levels decreased below ULN only 28 days after first dose. At 72 hours post dose, canakinumab 150 mg group was 3.2 (95% CI, 1.27–7.89) times more likely to have less joint tenderness and 2.7 (95% CI, 1.09–6.5) times more likely to have less joint swelling than TA group (p<0.05). At 72 hours post dose, erythema disappeared in 74.1% of patients receiving canakinumab 150 mg and 69.6% of patients receiving TA. At 7 days post dose, erythema was absent in 96.3% of canakinumab 150 mg treated patients vs. 83.9% of patients receiving TA. The overall incidence of AEs was similar for canakinumab (41%) and triamcinolone acetonide (42%). Serious AEs (canakinumab treatment groups n=4, TA n=1) were not considered treatment-related by investigators. No discontinuations due to AEs occurred.

Conclusions: Canakinumab 150 mg provided superior pain relief compared to TA for acute flares in difficult-to-treat gouty arthritis patients. Canakinumab provided rapid normalization of markers of inflammation accompanied by reduction of clinical signs and symptoms of inflammation.

Disclosure statement: U.A., V.M., D.R. and P.S. are shareholders and employees of Novartis Pharma AG. A.P. has received research support from Novartis Pharma AG. N.S. has received research support from and acts as a consultant for Novartis Pharmaceuticals Corporation, has served on advisory boards for Novartis, Takeda, Savient, URL Pharma and Enzyme Rx, and is/has been a member of a speakers' bureau for Takeda. A.S. has received consultancy fees from Novartis Pharma AG, Abbott, Wyeth, UCB, Roche, MSD, Pfizer, Essex and Bristol-Myers Squibb. All other authors have declared no conflicts of interest.

OP7. SUCCESSFUL USE OF IL-6 BLOCKADE WITH TOCILIZUMAB IN LARGE VESSEL GIANT CELL ARTERITIS OF POLYMYALGIC ONSET

Dimitrios Christidis¹, Nada Hassan¹, Sarah Mapplebeck¹ and Bhaskar Dasgupta¹

¹Rheumatology, Southend University Hospital, Westcliff-On-Sea, United Kingdom

Background: Interleukin-6 has been found to be significantly elevated in patients with both Polymyalgia rheumatica (PMR) and Giant cell arteritis (GCA). Serum IL6 was identified in several studies as a marker of relapse and recurrence of the disease with studies revealing over-expression of IL-6 messenger RNA in temporal artery biopsies (TAB). This may explain the systemic inflammatory response seen in these diseases.

The main stay of treatment of GCA and PMR is steroid therapy. Steroid sparing strategies with methotrexate and azathioprine are currently recommended in resistant cases. Anti TNF therapy with etanercept, infliximab or adalimumab is not of therapeutic benefit. There is one reported case in the literature on the use of Tocilizumab (TCZ) in a patient with resistant PMR with an excellent outcome.

Large vessel involvement of the aorta and major blood vessels is a well recognised complication of both GCA and PMR. We report the successful use of TCZ in such a case.

Methods: A 63-year-old female, diagnosed with PMR in 2003, on continuous steroids, presented with a 12 week history of worsening proximal pain and stiffness. She was given steroid sparing agents on different occasions including methotrexate, leflunomide and azathioprine, with no benefit and was unable to wean-off her steroids.

In August 2010 her symptoms worsened with new onset headache, fatigue, loss of appetite and weight and transient visual loss. TAB showed granulomatous inflammation and intimal hyperplasia and an ultrasound showed the typical 'Halo' sign in both temporal as well as axillary arteries. FDG PET CT showed extensive up-take in the ascending aorta, aortic arch, descending aorta, common iliacs, femorals, axillary and vertebral arteries in keeping with wide-spread large vessel involvement.

Results: Due to the disease severity, the failure of previous DMARDs and steroid related side-effects, we decided to treat her with intravenous TCZ 8 mg/Kg monthly infusions after obtaining formal consent.

Immediately after her first infusion, the patient reported excellent response (100% improvement in global wellbeing) and resolution of PMR symptoms and headaches with normalisation of her inflammatory

markers (C-reactive protein decreased from 78 mg/L to 1 mg/L). Prednisolone dose is currently tapered to 5 mg, with a gradual wean. **Conclusions:** We report the successful use of TCZ in a case of resistant large vessel biopsy positive GCA complicating PMR. There is an unmet need for better treatment of GCA and PMR due to frequent relapses adverse events seen with steroid therapy. The pathogenesis of the conditions suggests that IL-6 is a good target for newer therapies and our case substantiates this impression. We propose a multi-centre randomised controlled trial of TCZ in active PMR and GCA resistant to steroid therapy. **Disclosure statement:** The authors have declared no conflicts of interest.

OP8. LONG-TERM EXTENSION STUDIES OF TOCILIZUMAB IN RA: SAFETY AND TOLERABILITY

Mark C. Genovese¹, Anthony Sebba², Andrea Rubbert-Roth³, Juan Scallí⁴, Moshe Zilberstein⁵, Emma Vernon⁶ and Ronald Vollenhoven⁷
¹Immunology & Rheumatology, Stanford University Medical Center, Palo Alto, CA, USA; ²Rheumatology, University of South Florida, Palm Harbor, FL; ³Rheumatology, University of Cologne, Cologne, Germany; ⁴Rheumatology, Durand University Hospital, Buenos Aires, Argentina; ⁵Rheumatology, Roche, Nutley, NJ, USA; ⁶Rheumatology, Roche, Welwyn, United Kingdom; ⁷Rheumatology, Karolinska University Hospital, Stockholm, Sweden

Background: The humanised monoclonal antibody tocilizumab (TCZ) targets the interleukin-6 receptor and is an effective therapy for RA. Using pooled data from Phase III clinical trials (OPTION, TOWARD, RADIATE, AMBITION and LITHE) and ongoing long-term extension studies, the present analysis assessed the longer-term safety of TCZ in RA patients.

Methods: Patients receiving ≥ 1 dose of TCZ in the core trials or their extension studies (GROWTH95 and GROWTH96) were included in a pooled analysis of data from initial exposure through to Aug 28 2009.

Results: 4,009 patients received treatment with TCZ; total duration of observation was 10,994 patient-years (PY) and median (mean) treatment duration was 3.1 (2.7) years. AEs occurred at a rate of 321.1/100PY (95% CI: 317.8, 324.5) and the SAE rate was 14.6/100PY (95% CI: 13.9, 15.4); infections were the most frequent AEs (70.7/100PY). Infections were also the most common SAE, occurring at a rate of 4.5/100PY (95% CI: 4.1, 4.9). Rates of SAEs and serious infections were stable over time. The fatality rate was 0.4/100PY (95% CI: 0.3, 0.6). The rate of malignancies (excluding non-melanoma skin cancer [NMSC]) was 0.8/100PY; the rate of NMSC was 0.3/100PY. The overall rate of malignancies did not exceed background rates in the SEER database and remained stable with continued TCZ therapy. The rate of gastro-intestinal (GI) perforations (including potential sequelae from GI perforations, e.g. abscess, strictures) was 2.6/1,000PY (95% CI: 1.8, 3.8); patients with colonic diverticular perforations accounted for 59% (17/29) of this total. Preliminary epidemiological data indicate a higher perforation rate than in the general population, but similar to that in RA patient populations. Myocardial infarction and stroke occurred at rates of 0.3 (95% CI: 0.2, 0.4) and 0.2 (95% CI: 0.1, 0.3) per 100PY, respectively. Rates were stable over time and did not exceed expected rates in the RA population (myocardial infarction, 0.3-0.8/100PY; stroke, 0.5-0.7/100PY). Eight patients withdrew from the study for anaphylactic reactions. The rate of withdrawals due to AEs was 5.4/100PY, with the most common causes being laboratory abnormalities (1.2/100PY, primarily transaminase elevations), infections/infestations (1.0/100PY) and neoplasms (benign, malignant, unspecified, 0.7/100PY).

Conclusions: These results indicate that the longer-term safety profile of TCZ is consistent with that established in the Phase III studies, based on stable rates of SAEs, serious infections, malignancies and cardiovascular events, with continued exposure to TCZ.

Disclosure statement: M.G. has received research grant and consultancy fees from Roche. A.R. has received consultancy fees from Abbott Laboratories, Chugai, Essex, Roche, UCB, Inc. and Wyeth, research grants from Roche and Wyeth Pharmaceuticals, and is/has been a member of a speakers' bureau for Roche. A.S. has received research grants from Amgen, Inc., Bristol-Myers Squibb, Genentech and Biogen Idec, Inc., Novartis Pharmaceuticals Corporation and Roche, consultancy fees from Amgen, Inc., Novartis Pharmaceuticals Corporation and Roche, as is/has been a member of speakers' bureaus for Abbott Laboratories and Roche. E.V. and M.Z. are employees of Roche. R.V. has received research grants and consultancy fees from Roche. All other authors have declared no conflicts of interest.

TABLE 1. Event rate per 100 PY (95% CI) by 12-month periods

	0-12	13-24	25-36	37-48
AEs	416.6 (409.8, 423.4)	296.5 (290.4, 302.7)	271.7 (265.4, 278.0)	250.7 (243.0, 258.5)
SAEs	15.7 (14.4, 17.1)	13.7 (12.4, 15.1)	15.1 (13.6, 16.6)	13.6 (11.8, 15.5)
Serious infections	4.6 (3.9, 5.4)	3.9 (3.2, 4.6)	5.1 (4.3, 6.1)	4.6 (3.6, 5.8)
Malignancies*	0.9 (0.6, 1.3)	1.1 (0.8, 1.5)	1.3 (0.9, 1.8)	1.4 (0.9, 2.1)
Myocardial infarction	0.3 (0.1, 0.5)	0.2 (0.1, 0.4)	0.3 (0.1, 0.5)	0.5 (0.2, 1.0)
Stroke	0.3 (0.1, 0.5)	0.1 (0.0, 0.3)	0.2 (0.1, 0.4)	0

* Including NMSC.

OP9. ONE-YEAR RANDOMISED CONTROLLED TRIAL OF SECOND LINE AGENTS IN MYOSITIS (SELAM): ADDITIONAL IMMUNOSUPPRESSION IS INEFFECTIVE IN PATIENTS WHO HAVE PARTIALLY RESPONDED TO STEROIDS

Ernest Choy¹, Beverley White-Alaó¹, Fowzia Ibrahim¹, Anna Kowalczyk¹, Patrick Gordon¹, Alan Hakim², George Kitas³, David Isenberg⁴, Bridget Griffiths⁵, Bryan Lecky⁶, Kuntal Chakravarty⁷, John Winer⁸, Katalin Danko⁹, Robert G. Cooper¹⁰ and David L. Scott¹
¹Rheumatology, King's College London, London, United Kingdom; ²Rheumatology, Whipps Cross University Hospital, London, United Kingdom; ³Rheumatology, Russells Hall Hospital, Dudley Group of Hospitals NHS Foundation Trust, Dudley, United Kingdom; ⁴Rheumatology, University College London Hospitals, London, United Kingdom; ⁵Musculoskeletal Unit, Freeman Hospital, Newcastle, United Kingdom; ⁶Neurology, Walton Centre for Neurology and Neurosurgery, Liverpool, United Kingdom; ⁷Rheumatology, Queen's Hospital, Romford, United Kingdom; ⁸Neurology, The Queen Elizabeth Hospital Neuroscience Centre, Birmingham, United Kingdom; ⁹Department of Internal Medicine, Medical University of Debrecen, Debrecen, Hungary; ¹⁰Rheumatic Diseases Centre, Salford Royal NHS Foundation Trust, Manchester, United Kingdom

Background: Idiopathic inflammatory myopathies (IIM), which includes dermatomyositis and polymyositis, are conventionally treated with steroids. Immunosuppressives like ciclosporin and methotrexate are often used when patients respond incompletely to steroids. Their efficacies have not been proven in randomised controlled trials (RCTs). SELAM evaluated their benefits in a placebo-controlled factorial RCT of two immunosuppressives.

Methods: A 56 week multicentre factorial-design double-blind placebo-controlled RCT compared steroids alone with added methotrexate (15-25 mg weekly), ciclosporin (5 mg/kg/day) and both immunosuppressives. Adults with IIM by Bohan and Peter criteria receiving corticosteroids were enrolled if they had active disease (4/5 muscle weakness by manual muscle strength testing (MMT) in 2 or more muscle groups) and functional deficits (one or more activities of daily living). Patients with inclusion body myositis and muscular dystrophies were specifically excluded. MMT at 12 months was the primary outcome. Secondary outcomes comprised a Functional Rating Scale (FRS), 30 metre walking time (WT), creatine kinase (CK) and ESR. The primary outcome was analysed using a linear mixed model. Paired t-tests identified significant changes between baseline and 12 months in all primary and secondary outcomes.

Results: 58 patients were randomised. They comprised 18 males and 40 females of mean age 50 years: and mean disease duration 2 years. 33 (57%) completed 12 months treatment. Full data was collected in 50 (86%). Analysis of all observed data at 12 months showed no evidence any immunosuppressive treatment was more effective than placebo therapy. The mean comparisons of MMT and all secondary outcomes by active/placebo ciclosporin and methotrexate showed no significant treatment effects. The combination of both treatments was also no more effective than placebo (Table 1).

Paired t tests showed the patients improved significantly over 12 months as follows: MMT 15% improvement ($p < 0.001$), FRS 11% ($p < 0.001$), WT 13% ($p = 0.001$) and CK 9% ($p = 0.024$). Only changes in CK were different in early (under 3 months) than established (4-220 months) IIM.

Conclusions: SELAM - one of the largest RCTs of immunosuppressives in IIM - shows no evidence they give more benefits than corticosteroids alone. Using immunosuppressives in IIM, in line with management of other rheumatic diseases, appears questionable. We need a different therapeutic approach.

Disclosure statement: The authors have declared no conflicts of interest.

TABLE 1. Initial and 12 months changes in key observed outcomes by trial group. Data are presented as mean (s.d.).

	Placebo (n=15)	Methotrexate (n=12)	Ciclosporin (n=16)	Methotrexate And Ciclosporin (n=15)
Manual Muscle Testing				
Baseline	65 (10)	68 (9)	66 (13)	63 (7)
Change	14 (9)	7 (11)	6 (13)	10 (98)
30 Metre Walk				
Baseline	31 (21)	35 (23)	37 (24)	35 (20)
Change	6 (16)	8 (10)	6 (13)	9 (12)
Functional Rating Scale				
Baseline	35 (4)	32 (4)	32 (5)	32 (6)
Change	2 (4)	3 (3)	3 (5)	4 (6)

Concurrent oral 2 - BHPR audit/ service delivery and research

OP10. NEGOTIATING TARGETS FOR TREATMENT OF RA WITH PATIENTS

Sandra Robinson¹ and David Walker¹

¹Musculoskeletal Research,
Newcastle Upon Tyne Hospitals NHS
Foundation Trust, Newcastle Upon Tyne,
United Kingdom



Background: The new NICE guidance on the management of RA suggests that a target for treatment is negotiated with patients. This seems to be a fusion between the “treat to target” studies that have suggested that multiple treatments are effective and the stated aim of putting the patient at the centre of their treatment. The details of how this should be done are not specified. We have previously found that patients have little understanding of the DAS score and that symptoms are too subjective to be used in this context. Restriction of a desired activity was suggested from the previous interviews. We were interested to explore this by negotiating targets with patients to see if it was possible in a clinic situation and what patients would specify as targets.

Methods: 50 consecutive patients with RA were seen in selected clinics, and were asked to specify a target that could be used to assess how satisfactory their response to treatment was. They were asked if they understood what the DAS was and about their employment status and any impact of their arthritis on paid work.

Results: None of the patients understood the DAS and only one had heard of it. All but 2 patients were able to express a target in terms of restricted activity. The negotiation added a total of 1 minute to the average consultation.

48 expressed a target as either “maintaining” or “regaining” an activity. Six patients who were unhappy with their condition and wished to regain an activity, had their treatment increased. The remaining patients were content with their condition and did not want a change in therapy.

The targets expressed by the 42 patients wishing to “maintain” their condition were: A distance they could walk 26 (62%); a leisure activity 6 (14%); a domestic activity 5 (12%); remaining at work 4 (10%) and personal care for 1 (2%).

For the 6 wishing to “regain activities the targets were: A distance they could walk 2 (33%); a leisure activity 1 (17%) and a domestic activity 3 (50%).

Of 16 who were of working age, 5 were employed. 4 said that maintaining function to work was their target. 1 identified leisure activities. None of the patients who had lost their jobs because of arthritis expressed getting back to work as a target.

Conclusions: Generally patients do not understand the DAS score and if they are to be used as targets there will need to be huge educational effort and may not be suitable for some patients. Patients are able to specify activities that are personal to them and could be used as targets to indicate whether change of treatment is necessary or has been successful. Patients who are happy with their condition express it as maintaining something whereas those unhappy express it as regain. How realistic and sensitive these targets are will take a follow-up study.

Work is a target for those in work, but once the work has been lost it soon ceases to be a target. This suggests that maintaining people in

work is likely to be more successful than trying to get them back to work later.

Disclosure statement: The authors have declared no conflicts of interest.

OP11. PHYSICAL INACTIVITY IN ADULTS WITH RHEUMATIC CONDITIONS



Victoria L. Manning¹, Michael Hurley²,
David Scott³ and Lindsay Bearn¹

¹Division of Health and Social Care Research, King's College
London, London, United Kingdom; ²Faculty of Health and Social
Care, St Georges University of London, London, United Kingdom;
³School of Medicine, King's College London, London,
United Kingdom

Background: The National Institute for Health and Clinical Excellence (NICE) recommend that healthcare professionals (HCP) encourage people with rheumatic conditions to participate in regular physical activity (PA) to improve aerobic fitness and general health status (NICE 2008, 2009). Public health guidelines advise that adults with chronic conditions complete a minimum of 30 minutes (of at least 10 minute bouts) of moderate intensity PA on five days of the week, or 20 minutes (of at least 10 minute bouts) of vigorous intensity PA on three days of the week (ACSM-AHA, 2007). Currently it is not known whether adults with rheumatic conditions meet these guidelines. This audit investigated whether adults with rheumatic conditions meet public health guidelines for PA, and whether HCP incorporate PA recommendation into the management of rheumatic conditions.

Methods: 511 (n = 119 males, n = 389 females, n = 3 unknown) adults (44.7% rheumatoid arthritis, 11.3% osteoarthritis, 5.4% psoriatic arthritis, 4.1% gout, 4.7% systemic lupus erythematosus; 2.3% ankylosing spondylitis, 4.1% fibromyalgia, 23.4% other (disease duration (years): mean 7.5, range 0-68)) were recruited from the rheumatology department of an inner city U.K hospital from July to October 2010. Participants completed the short format International Physical Activity Questionnaire (IPAQ), and two closed questions: 1. Has a doctor or other HCP ever suggested an increase in PA or exercise to help your arthritis or joint symptoms? 2. Would you like help from your doctor or health service to become more physically active? (Answers: yes, no, don't know/not sure, refused). Descriptive statistics were completed on all data. Respondents were categorized as: 1. Meeting PA guidelines (moderate-intensity PA ≥30 minutes/day on ≥5 days/week, or vigorous-intensity PA ≥20 minutes/day on ≥3 days/week); 2. Insufficiently active (moderate-intensity PA <30 minutes/day or <5 days/week, or vigorous-intensity PA <20 minutes/day or <3 days/week); 3. Inactive (none or <10 minutes moderate or vigorous-intensity PA/day/activity bout).

Results: 54.5% of respondents met the PA guidelines. The remaining 45.5% of respondents were insufficiently active (18.6%) or inactive (26.9%). 43.3% of respondents reported that they had been recommended PA by a HCP, yet 48.4% reported that PA had never been recommended. 7.8% weren't sure, and 0.4% had refused PA recommendation. 49.8% of respondents reported that they would welcome help from their doctor or health service to increase their PA; 34.5% would not, and 15.7% weren't sure.

Conclusions: Nearly half of respondents did not meet PA guidelines, the majority of whom were entirely inactive. Many respondents had never discussed PA with a HCP, yet would welcome help to become more physically active. Greater awareness of the safety and benefits of PA may increase activity levels, and recommending PA to meet current guidelines should form an integral part of the management of adults with rheumatic conditions.

Disclosure statement: The authors have declared no conflicts of interest.

OP12. DIFFERENT PHRASING OF THE PATIENT GLOBAL VISUAL ANALOGUE SCALE GIVES DIFFERENT RA DISEASE ACTIVITY SCORE RESULTS



Tracy French¹, Sarah Hewlett^{1,2}, John Kirwan^{1,3} and
Tessa Sanderson^{1,2}

¹Rheumatology, University Hospitals Bristol NHS Foundation Trust,
Bristol, United Kingdom; ²Nursing and Midwifery, University of the
West of England, Bristol, United Kingdom; ³Academic Rheumatology,
University of Bristol, Bristol, United Kingdom

Background: There are at least 5 different versions of the ‘Patient Global’ visual analogue scale (PG-VAS) used in the disease activity score (DAS). The originators of the DAS suggested the PG-VAS can be