





# 09.00 – 10.30 Tuesday 23 April 2013 SESSION

09.00 – 10.30	New insights on the pathogenesis and treatment of crystal arthritis   Hall 1 Chairs: Dr Edward Roddy, Arthritis Research UK, Keele University, Keele and Prof George Nuki, University of Edinburgh, Edinburgh
Aim: Outcome 1: Outcome 2: Outcome 3:	Provide an update on the causes and optimal treatments of common crystal arthropathies Understand the genetic and environmental risk factors for crystal arthritis Understand the potential importance of treating to target for gout Update on existing and new therapeutic options
09.00	Gout: should we treat to target?  Prof Pascal Richette, Universite Paris 7, Paris, France
09.30	Pathogenesis and treatment of pyrophosphate arthropathy Prof Geraldine McCarthy, Mater Misericordiae University Hospital, Dublin, Ireland
10.00	Genetic and environmental risk for hyperuricaemia and gout  Prof Michael Doherty, University of Nottingham, Nottingham
09.00 – 10.30	Faster, safer, cheaper? Advances in orthopaedic science   Hall 10 Chairs: Dr Fraser Birrell, Newcastle University, Newcastle and Prof George Peat, Keele University, Keele
Aim:	Joint surgery is undergoing a scientific revolution, with dogma being replaced by evidence based practice.  The aim of this session is to highlight some key advances:
Outcome 1:	Delegates will know about the introduction of fast track surgery (which has reduced complication rates)
Outcome 2:	Delegates will understand the National Joint registry (which has guided use of particular implants), and the shift in focus towards Patient Reported Outcome Measures (PROMS)
Outcome 3:	Delegates will recognise the problems with resurfacing procedures
09.00	Fast-track hip and knee arthroplasty: current status and future challenges  Mr Henrik Husted, Hvidovre University Hospital, Hvidovre, Denmark
09.25	Lessons from the national joint registry and patient reported outcome measures (PROMS)
09.50	Mr Simon Jameson, James Cook University Hospital, Middlesbrough Insights into articular resurfacing and what happened with metal on metal implants Mr Mike Reed, Northumbria Healthcare NHS Foundation Trust, Ashington
10.15	Panel Discussion

09.30

10.00

Outcome 1:

Outcome 2:

09.00

09.15

09.30

09.00	- 1	.0.3	0

09.00 – 10.30	An embarrassment of riches: clinical research in rheumatoid arthritis   Hall 4 Chair: Prof John Isaacs, Newcastle University, Newcastle
Aim: To highlight the patient benefits of research involvement, and to raise the notion that recruitment patients into research should be considered a 'quality measure'	
Outcome 1:	To demonstrate patient benefits of involvement in clinical research
Outcome 2:	To highlight, contrast and raise awareness of the wide variety of research opportunities for RA patients
Outcome 3:	To stimulate debate around distinct research opportunities – is a phase III pharmaceutical industry trial
	better for my patients than a phase I experimental medicine study? Should economic considerations

09.00 How clinical research improves patient outcomes Dr A Murray Brunt, University Hospital of North Staffordshire, Stoke-on-Trent

09.15 How research changed my life Mrs Ailsa Bosworth, Chief Executive, National Rheumatoid Arthritis Society, Berkshire

Should it be standard of care to offer entry to research trials at each therapeutic decision stage of the patient journey?

influence my decision? Should trial recruitment become an auditable quality measure for rheumatologists?

Dr Maya Buch, University of Leeds, Leeds

09.45 Research opportunities for the RA patient, their rheumatologist, and their AHP, including economic aspects

Prof Deborah Symmons, University of Manchester, Manchester

Recruitment of RA patients into research should provide an auditable quality measure Dr Peter Dawes, Haywood Hospital, Stoke-on-Trent and Dr Ian Rowe, Worcestershire Royal Hospital, Worcester

09.00 - 10.30BHPR: The experience of living with musculoskeletal problems and other conditions | Hall 5

Chairs: Prof Bie Nio Ong, Keele University, Keele and Mrs Jenny Ratcliffe, East Cheshire NHS Trust, Macclesfield

To appreciate the complex nature of multimorbidity, in particular, that it can consist of many different combinations of conditions and thus result in a wide range of impacts on individuals' quality of life and their use of health care

Through discussion begin to formulate how health professionals can best respond to the complexity of multimorbidity

Multimorbidity in patients with arthritis: experience of care and self-management Prof Peter Bower, University of Manchester, Manchester The role of patients' social networks in shaping the experience of musculoskeletal conditions

and multimorbidity Mr Tom Porter, Keele University, Keele

Patient priorities in osteoarthritis and comorbid conditions

Dr Sudeh Cheraghi-Sohi, Keele University, Keele

09.00 – 10.30	Oral abstracts: Connective tissue disease   Hall 9 Chairs: Dr Bridget Griffiths, Freeman Hospital, Newcastle and Dr John Ioannou, University College London, London
09.00	Long-term outcomes of children born to mothers with SLE  Dr Mary Gayed, Sandwell and West Birmingham Hospitals, Birmingham
09.15	Higher corticosteroid doses early in disease have a long-term influence on metabolic syndrome in systemic lupus erythematosus: data from an international inception cohort.  Dr Benjamin Parker, University of Manchester, Manchester
09.30	Simple insoles for managing foot problems in people with SSC: the Pisces randomized controlled trial  Dr Anthony Redmond, University of Leeds, Leeds
09.45	A retrospective study of long-term outcome in 152 patients with primary Sjögren's syndrome – 25 year experience
10.00	Ms Esha Abrol, University College London, London Successful use of Tocilizumab in the treatment of refractory FDG PET positive large vessel vasculitis: a case series Dr Sanam Kia, Southend Hospital, Southend-on-Sea
10.15	Factors associated with long-term damage in the ANCA-associated vasculitides: an analysis of cohorts from the European vasculitis study group (EUVAS) therapeutic trials  Dr Joanna Robson, University of Oxford, Oxford
09.00 – 10.30	SIG: Spondyloarthropathy   Hall 8b Chairs: Dr Raj Sengupta, Royal National Hospital for Rheumatic Disease NHS Foundation Trust, Bath and Prof Dennis McGonagle, University of Leeds, Leeds
Aim: Outcome 1: Outcome 2:	To increase awareness of advances in diagnosis and management of spondyloarthritis  Attendees will understand the treatment of axial spondyloarthritis  Attendees will be updated on newer biologic treatments in spondyloarthritis
Outcome 3: 09.00	Attendees will be updated on the possible development of a British Spondyloarthritis Group  Welcome and introduction
09.00	Prof Dennis McGonagle, University of Leeds, Leeds and Dr Raj Sengupta, Royal National Hospital for Rheumatic Disease NHS Foundation Trust, Bath
09.10	Treating non radiographic axial spondyloarthritis?  Dr Lesley Kay, Newcastle University, Newcastle
09.30	Update on new biologics in PsA Prof Dennis McGonagle, University of Leeds, Leeds
09.50	The BRITSpA proposal  Dr Helena Marzo-Ortega, University of Leeds, Leeds

#### 09.00 - 10.30

#### BHPR SIG: Connective tissue disease | Hall 8a

Chair: Ms Sue Brown, Royal National Hospital for Rheumatic Disease NHS Foundation Trust, Bath

Aim:

09.40

Outcome 1:

Outcome 2: Outcome 3: To address musculoskeletal health in pregnancy and explore the role of the multi-disciplinary team To give an overview of the important aspects of managing women in pregnancy and when to act on red flags

To consider the important role of physiotherapists and nurses in managing pregnancy in rheumatology To provide information about medications that are safe to use in pregnancy and discuss some of the potential problems that may arise due to medication

09.00 Setting up a rheumatology pregnancy clinic

Dr Maddy Piper, Royal National Hospital for Rheumatic Disease NHS Foundation Trust, Bath

09.20 Pre-pregnancy counselling: the role of the nurse

Ms Sue Brown, Royal National Hospital for Rheumatic Disease NHS Foundation Trust, Bath

Physiotherapy interventions in managing musculoskeletal pain in pregnancy

Dr Yvonne Coldron, Croydon University Hospital, Croydon

10.00 Medications in pregnancy

Dr Mary Gayed, University of Birmingham, Birmingham

#### 10.30 - 11.30

#### Poster viewing and exhibition | Tea and Coffee

#### **Categories**

Case reports

**Imaging** 

Metabolic and crystal arthropathies

Rheumatoid arthritis: pathogenesis and animal models

Rheumatoid arthritis: treatment Rheumatoid arthritis: clinical features Rheumatoid arthritis: comorbidities

#### **Poster Tours**

RA clinical RA pathogenesis Case reports

#### 11.00 - 11.30

#### **NEW - Innovation theatre: Roche**

ANCA - associated vasculitis for rheumatologists

Prof David Scott, Norfolk and Norwich University Hospital, Norwich

#### 11.30 - 13.00

#### BSR/BHPR: Facilitating adherence to treatment in rheumatology | Hall 5

Chairs: Prof Anne Barton, University of Manchester, Manchester and Ms Karen Vinall-Collier, University of Leeds. Leeds

#### Aim:

To provide clinicians with an overview of the patient factors that could affect adherence to treatment and how this information could be used to facilitate adherence

#### Outcome 1: Outcome 2:

Attendees will understand some of the health beliefs which may impact on non-adherence to treatment Attendees will understand some of the behaviour change strategies which may be employed in clinical practice to facilitate adherence to pharmacological and physical therapies

11.30

Patient non-adherence to treatment: what causes it and what can be done about it Prof John Weinman, Institute of Psychiatry, London

12.00

Adherence and adaptation: targeting beliefs and behaviour in optimising self management Dr Lis Cordingley, University of Manchester, Manchester

12.30

The clinical application of behaviour change strategies to facilitate adherence to treatment Dr Sarah Dean, University of Exeter, Exeter

#### 11.30 - 13.00

#### Osteoporosis: an update | Hall 4

Chair: Dr Emma Clark, University of Bristol, Bristol

#### Aim:

Outcome 1:

Outcome 2:

Outcome 3:

11.30

12.00

12.30

To provide general rheumatologists and trainees with an update on metabolic bone disease

To understand investigation and management of renal bone disease

To highlight the emerging idea of sarcopaenia and its importance to bone

To discuss the role of drug holidays for bisphosphonates

Investigation and management of renal bone disease

Prof David Hosking, City Hospital, Nottingham

Sarcopaenia: is it a disease and can it be treated?

Prof Avan Aihie Sayer, University of Southampton, Southampton

Bisphosphonate therapy: what is the optimal duration?

Prof Juliet Compston, University of Cambridge, Cambridge



**Twitter** @RheumatologyUK #Rheum2013



**LinkedIn Groups BSR** Rheumatology 2013



**Facebook** The British Society for Rheumatology

# 11.30 – 13.00 Tuesday 23 April 2013 SESSION BHPR

11.30 – 13.00	Biologics in connective tissue disease   Hall 1 Chairs: Dr Hector Chinoy, University of Manchester, Manchester and Dr Benjamin Parker, University of Manchester, Manchester
Outcome 1: Outcome 2: Outcome 3:	To discuss recent clinical trials of rituximab in ANCA-associated vasculitis  To review the use of available biologics in SLE and introduce emerging therapies  To review the use of novel biologic agents in severe haematological manifestations of CTD
11.30 12.00	Rituximab in ANCA-associated vasculitis  Dr Chetan Mukhtyar, Norfolk and Norwich University Hospital, Norwich  Current and emerging biologics in SLE  Prof lan Bruce, University of Manchester, Manchester
12.30	Novel biologics in severe haematological manifestations of connective tissue disorders  Dr Jecko Thachil, Manchester Royal Infirmary, Manchester
11.30 – 13.00	BHPR: Interactive panel discussion and problem solving to optimise work participation   Hall 10 Ms Victoria Chamberlain, Trafford Hospitals, Central Manchester University Hospitals Foundation NHS Trust, Manchester and Mr Federico Moscogiuri, ARMA, London
Aim: Outcome 1: Outcome 2: Outcome 3:	To provide delegates with the opportunity to discuss ways to optimise work participation To review the determinants of reduced work participation for adults with musculoskeletal conditions To outline ways to reduce the barriers and improve work participation To identify issues which need further review by clinicians and policy makers e.g. Department for Work and Pensions to improve work participation
11.30 11.45	Work and musculoskeletal conditions: the key issues  Dr Ross Wilkie, Keele University, Keele  Work Capability Assessment: development and implications for patients with musculoskeletal
12.15	conditions  Dr David Walker, Consultant Rheumatologist, Freeman Hospital, Newcastle-upon-Tyne Interactive panel discussion and problem solving to optimise work participation  Mr David Frost CBE, former Director General, British Chambers of Commerce, London, Dr Bill Gunnyeon, Department for Work and Pensions, London, Dr David Walker, Freeman Hospital, Newcastle and Ms Adele Higginbottom, Keele University, Keele

11.30 - 13.00	Oral abstracts: Pathogenesis   Hall 9 Chairs: Dr Andrew Filer, University of Birmingham, Birmingham and Prof Justin Mason, Imperial College London, London
11.30 11.45 12.00 12.15 12.30 12.45	Characterising type 17 immune responses in ankylosing spondylitis  Dr Mohammad Hussein Al-Mossawi, University of Oxford, Oxford  Synovial lymphocyte aggregates in early inflammatory arthritis: correlation with diagnosis, disease activity and antibody status  Dr Maria Di Cicco, Queen Mary University of London, London  Early treatment-naive rheumatoid arthritis (RA) is characterised by qualitative changes of the INKT regulatory cell repertoire  Prof Stephan Gadola, University of Southampton and UHS NHS Foundation Trust, Southampton  Widespread citrullination in healthy and inflamed lung tissue as a priming site for autoimmunity in RA  Dr Elena Lugli, Kennedy Institute of Rheumatology, University of Oxford, Oxford  How does PTPN22 regulate T cell effector responses in inflammatory arthritis?  Dr Cristina Sanchez-Blanco, King's College London, London  Clinical significance of IL-6 and CCL2 upregulation in serum and renal biopsies from cases of scleroderma renal crisis  Dr Cassandra Hong, King's College Hospital, London
11.30 - 13.00	SIG: Musculoskeletal pain   Hall 8a Chair: Dr Nicholas Shenker, Cambridge University Hospitals, Cambridge
Aim: Outcome 1:	Engagement for members to understand and develop commissioning for musculoskeletal pain services; opportunity for clinical research studies to be discussed, from inception through to delivery; plan for the future of the MSK pain SIG  To be able to understand what projects are currently being developed and what clinical trials have come to
Outcome 2:	fruition from the Arthritis Research UK pain study group. To understand the process of how to engage with this and take forward ideas  To be able to understand the commissioning environment. To be able to come up to date with the national pathways that have been developed as part of the British Pain Society's endeavours working with the
Outcome 3:	Department of Health  To engage with the SIG members as to what they would want a SIG to include, whether that be audits, surveys, support or newsletters. To request for volunteers who wish to be included in this to commit time and resources as necessary
11.30 12.00	Arthritis Research UK's Musculoskeletal pain study group: current trials and how to get involved  Prof Elaine Hay, Keele University, Keele  The commissioning climate for musculoskeletal pain services
12.30	Dr Benjamin Ellis, King's College Hospital, London  Musculoskeletal Pain SIG: what do we want from it?  Dr Nicholas Shenker, Cambridge University Hospitals, Cambridge

11.30 – 13.00	SIG: Foot and ankle   Hall 8b Chair: Dr Anthony Redmond, University of Leeds, Leeds
Aim: Outcome 1:	The session will focus on gout, the arthritis most typically characterised by foot involvement. Delegates will be updated about how and why gout affects the foot and the emerging role of ultrasound for assessing joint involvement in gout Delegates will gain knowledge of how the foot is affected by gout, both in the acute attack and chronically
Outcome 2:	Delegates will understand the pathophysiological mechanisms underlying the predilection of gout for the joints of the foot
Outcome 3:	Delegates will appreciate the potential role of ultrasound in the diagnosis and assessment of gout
11.30	Gout and the foot: a clinical overview  Dr Kelsey Jordan, Brighton and Sussex University Hospitals, Brighton
11.50	The role of footwear in gout Prof Keith Rome, Auckland University of Technology, Auckland, New Zealand
12.10	Why does gout target the foot: a critical role for osteoarthritis?  Dr Edward Roddy, Arthritis Research UK Primary Care Centre, Keele
12.30	Ultrasound assessment of the foot in gout Prof Pascal Richette, Universite Paris 7, Paris, France
13.00 - 14.00	Exhibition   Lunch
13.00 - 13.30	<b>NEW – Innovation theatre: AbbVie</b> Talking AS, online ankylosing spondylitis assessment for your patients Dr Raj Sengupta Royal National Hospital for Rheumatic Diseases NHS Foundation Trust, Bath
13.30 - 14.00	<b>NEW – Innovation theatre: Savient</b> Management of chronic tophaceous gout  Dr Robert T Keenan, Duke University, Durham, North Carolina

# 13.00 – 14.00 **Tuesday 23 April 2013**

#### 13.00 - 14.00

#### Registers open meeting | Hall 5

Chair: Dr Alex MacGregor, University of East Anglia, Norwich

Aim:

Outcome 1:

Outcome 2:

Outcome 3:

To inform all those wanting to understand the implications of Register Research for their practice Update members on the latest results and analysis from the RA and AS registers

Update the membership on the how to recruit and how to access data from the registries for audit and research

**SESSION** 

Provide insight into how the registers will develop in the coming years with the advent of electronic data

Open to all with an interest in the Biologics Registers, whether as a contributor of patient data or as a researcher interested in accessing the data. There will be an update of the latest news on recruitment and research

13.10

13.30

Anti-TNF therapies and the risk of malignancy: lessons from the BSRBR-RA

Dr Kimme Hyrich, University of Manchester, Manchester

What the AS register will tell us and how it will inform practice

Dr Andrew Keat, Northwick Park Hospital, Harrow





England, Bristol

# 13.00 - 14.00

# BSR/BHPR: Post graduate research student network | Hall 9

Chairs: Dr Annette Bishop, Arthritis Research UK, Keele University, Keele and Prof Sarah Hewlett, University of the West of England Bristol

	or the West of England, Bristol
Aim:	To provide a coordinated network for early career researchers that facilitates peer group discussion and support from a range of leading academics
Outcome 1:	Attendees will participate in a structured networking event with different seniority levels of researchers to find common interests and build future collaborations
Outcome 2:	Attendees will practice effectively communicating their current research study
Outcome 3:	Attendees will contribute to a networking database that will be circulated after the event to enable contacts to become established
13.00	Introduction Prof Sarah Hewlett, University of the West of England, Bristol
13.05	Planning your elevator pitch  Dr Caroline Flurey, University of the West of England, Bristol
13.10	Structured 'speed dating' educational networking facilitated by academics  Dr Caroline Flurey, University of West of England, Bristol and Prof Sarah Hewlett, University of West of

14.00 – 16.00	Jewels in the Crown   Hall 1 Chairs: Dr Chris Deighton, President BSR and Mr Robert Field, President BHPR
14.00	Introduction
14.05	Dr Chris Deighton, President BSR and Mr Robert Field, President BHPR  The new commissioning landscape: opportunities and challenges  Mr Bob Ricketts, Director of NHS Provider Transition (Department of Health) and Director of
14.40	Commissioning Support Strategy and Market Development (NHS Commissioning Board), London  Michael Mason Prize Winner: Osteoarthritis: a multisystem approach to understanding disease  pathophysiology
14.55	Dr Nidhi Sofat, St George's University of London, London  Garrod Prize Winner: Domain I, the hidden face of antiphospholipid syndrome  Dr Charis Pericleous, University College London, London
15.10	Randomised controlled trial of tumour-necrosis-factor inhibitors (TNFis) against combination intensive therapy with conventional disease modifying anti-rheumatic drugs (cDMARDs) in established rheumatoid arthritis (RA): the TACIT trial  Prof David Scott, King's College London, London
15.25	Epigenetic regulation of the IL23R locus in ankylosing spondylitis  Dr Carla Cohen, University of Oxford, Oxford
15.40	SARAH: strengthening and stretching for people with rheumatoid arthritis of the hands: a randomised controlled trial  Dr Mark Williams, University of Warwick, Coventry
15.40	randomised controlled trial

16.00 - 16.30

# Exhibition | Tea and coffee

16.30 - 17.30

#### **Heberden Round | Hall 1**

Unmasking lupus: Changing perceptions of the disease and its treatment

Prof Caroline Gordon, University of Birmingham, Birmingham

17.30 –	- 17.45	Industry supported symposium catering
17.45 -	- 19.15	Industry supported symposium: Roche Products Ltd / Chugai Pharma UK Ltd   Hall 5 Is disease remission achievable for rheumatoid arthritis patients on therapy without methotrexate?  Chair: Prof Ernest Choy, Cardiff University of Medicine, Cardiff
	18.00	Welcome and introduction Prof Ernest Choy, Cardiff University School of Medicine, Cardiff
	18.05	Mission Remission: do expectations reflect published data?  Dr Maya Buch, National Institute for Health Research Leeds, Musculoskeletal Biomedical Research Unit, Leeds
	18.25	Optimising care for rheumatoid arthritis patients who could benefit from biologic treatment without methotrexate  Prof Ernest Choy, Cardiff University School of Medicine, Cardiff
	18.45	Is remission in rheumatoid arthritis achievable for patients on therapy without methotrexate?  Prof John Isaacs, Newcastle University/Freeman Hospital, Newcastle
	19.05	Question and answer session, followed by and summary and close

PRESCRIBING INFORMATION RoActemra® (tocilizumab) in Rheumatoid Arthritis (RA): Please refer to RoActemra SPC for full prescribing information.

Indication: RoActemra, in combination with methotrexate (MTX), is indicated for the treatment of moderate to severe active rheumatoid arthritis (RA) in adult patients who have either responded inadequately to, or who were intolerant to, previous therapy with one or more disease-modifying anti-rheumatic drugs (DMARDs) or tumour necrosis factor (TNF) antagonists. In these patients, RoActemra can be given as monotherapy in case of intolerance to MTX or where continued treatment with MTX is inappropriate. RoActemra has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function when given in combination with MTX.

Dosage and Administration: Patients should be given the Patient Alert Card. 8mg/kg iv infusion given once every 4 weeks. Doses exceeding 800mg per infusion are not recommended

Dose adjustments: Dose reduction to 4mg/kg, or interruptions, are recommended in the event of raised liver enzymes, low absolute neutrophil count (ANC) or low platelet count. RoActemra should not be initiated in patients with ANC count below 2x109/L.

Contraindications: Hypersensitivity to any component of the product: active, severe infections.

Precautions: Infections: Cases of serious and sometimes fatal infections have been reported; interrupt therapy until controlled. Caution in patients with recurring/chronic infections, or other conditions which may predispose to infection. Tuberculosis (TB): Screen for and treat latent TB prior to starting therapy. There is a risk of false negative tuberculin skin and interferon-gamma TB blood test results, especially in patients who are severely ill or immunocompromised. Patients should be instructed to seek medical advice if signs/symptoms of a tuberculosis infection occur during or after therapy with RoActemra. Hypersensitivity reactions: Serious hypersensitivity reactions have been reported and

may be more severe and potentially fatal in patients who have experienced hypersensitivity reactions with previous infusions even if they have received premedication with steroids and antihistamines. Appropriate treatment should be available for immediate use if anaphylaxis occurs. If an anaphylactic reaction or other serious hypersensitivity/serious infusion related reaction occurs, permanently discontinue RoActemra. Hepatic disease/impairment: Use with caution in patients with active hepatic disease/impairment. Transaminase elevations: Not recommended in patients with ALT or AST >5xULN; caution in patients with ALT or AST >1.5xULN. Haematological abnormalities: Caution in patients with platelet count <100x103/µL. Continued treatment not recommended in patients with ANC < 0.5 x 109/L or platelet count  $<50 \times 10^3/\mu L$ . Lipid parameters: If elevated. follow local guidelines for managing hyperlipidaemia. Vaccinations: Live and live attenuated vaccines should not be given concurrently. Combined with other biologic treatments: Not recommended. Viral reactivation: Has been reported with biologics. Diverticulitis: Caution in patients with a history of intestinal ulceration or diverticulitis. Patients with symptoms of complicated diverticulitis should be evaluated promptly.

Interactions: Patients taking other medicines which are metabolised via CYP450 3A4, 1A2, or 2C9 should be monitored as doses may need to be adjusted.

Pregnancy and Lactation: Women should use contraception during and for 3 months after treatment. A decision on whether to continue/discontinue breastfeeding on RoActemra therapy should take into account relative benefits to mother and child.

Undesirable effects: Prescribers should consult SPC for full details of ADRs. Very common ADRs (≥ 1/10): URTI, hypercholesterolaemia. Common ADRs (  $\geq 1/100$  to < 1/10): cellulitis, pneumonia, oral herpes simplex, herpes zoster, abdominal pain, mouth ulceration, gastritis, rash, pruritus, urticaria, headache, dizziness, increased hepatic transaminases, increased weight and increased total bilirubin. hypertension, leukopenia, neutropenia, peripheral oedema, hypersensitivity reactions, conjunctivitis, cough, dyspnoea. Medically significant events: Infections: Opportunistic and serious infections have been reported, some serious infections had a fatal outcome. Impaired lung function may increase the risk of developing infections. There have been post-marketing reports of interstitial lung disease, some of which had a fatal outcome, GI perforations: Primarily reported as complications of diverticulitis. Infusion reactions: Clinically significant hypersensitivity reactions requiring treatment discontinuation were reported and were generally observed during the 2<sup>nd</sup> - 5<sup>th</sup> infusions. Fatal anaphylaxis has been reported. Other: Decreased neutrophil count, decreased platelet count, hepatic transaminase elevations, lipid parameter increases, very rare cases of pancytopenia.

Legal Category: POM

Presentations and Basic NHS Costs: 80mg of tocilizumab in 4mL (20mg/mL) 1 vial: £102.40, 200mg of tocilizumab in 10mL (20mg/mL) 1 vial: £256.00, 400mg of tocilizumab in 20mL (20mg/mL) 1 vial: £512.00.

Marketing Authorisation Numbers: EU/1/08/492/01 (80mg), EU/1/08/492/03 (200mg), EU/1/08/492/05 (400mg).

Marketing Authorisation Holder: Roche Registration Limited, 6 Falcon Way, Welwyn Garden City, Herts AL7 1TW. RoActemra is a registered trade mark.

Date of Preparation: February 2013 RCUKMEDI00022

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Roche Products Limited. Please contact UK Drug Safety Centre on: 01707 367554

> Date of preparation: March 2013 RCUKACTE00859

# Is disease remission achievable for rheumatoid arthritis patients on biologic therapy without methotrexate?

REMISSION

A Roche Products Ltd / Chugai Pharma UK Ltd Sponsored Symposium



#### Mission Remission - do expectations reflect published data?

Dr Maya Buch, Senior Lecturer/Honorary Consultant Rheumatologist, National Institute for Health, Research Leeds Musculoskeletal Biomedical Research Unit Leeds

# Optimising care for rheumatoid arthritis patients who could benefit from biologic treatment without methotrexate

Professor Ernest Choy, Professor of Rheumatology, Cardiff University School of Medicine, Cardiff (Chair)

## Is remission in rheumatoid arthritis achievable for patients on therapy without methotrexate?

Professor John Isaacs, Institute Director. Newcastle University/Freeman Hospital, Newcastle

#### BSR Annual Conference 2013, Hall 5; ICC, Birmingham Tuesday 23 April 2013, 17:45 - 19:15

Mission Remission is an educational initiative and has been funded and initiated by Roche Products Ltd and Chugai Pharma UK Ltd Date of Preparation: February 2013 RCUKACTE00859a

## PRESCRIBING INFORMATION RoActemra® (tocilizumab) in Rheumatoid Arthritis (RA): Please refer to RoActemra SPC for full prescribing information.

Indications: RoActemra, in combination with methotrexate (MTX), is indicated for the treatment of moderate to severe active rheumatoid arthritis (RA) in adult patients who have either responded inadequately to, or who were intolerant to, previous therapy with one or more disease-modifying antirheumatic drugs (DMARDs) or tumour necrosis factor (TNF) antagonists. In these patients, RoActemra can be given as monotherapy in case of intolerance to MTX or where continued treatment with MTX is inappropriate. RoActemra has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function when given in combination with MTX.

Dosage and Administration: Patients should be given the Patient Alert Card. 8mg/kg iv infusion given once every 4 weeks. Doses exceeding 800mg per infusion are not recommended.

Dose adjustments: Dose reduction to 4mg/kg, or interruptions, are recommended in the event of raised liver enzymes, low absolute neutrophil count (ANC) or low platelet count. RoActemra should not be initiated in patients with ANC count below 2x109/L.

Contraindications: Hypersensitivity to any component of the product; active, severe infections. **Precautions:** Infections: Cases of serious and sometimes

fatal infections have been reported; interrupt therapy until controlled. Caution in patients with recurring/chronic infections, or other conditions which may predispose to infection. Tuberculosis (TB): Screen for and treat latent TB prior to starting therapy. There is a risk of false negative tuberculin skin and interferon-gamma TB blood test results, especially in patients who are severely ill or immunocompromised.

Patients should be instructed to seek medical advice if signs/symptoms of a tuberculosis infection occur during or after therapy with RoActemra. *Hypersensitivity reactions*: Serious hypersensitivity reactions have been reported and may be more severe and potentially fatal in patients who have experienced hypersensitivity reactions with previous infusions even if they have received premedication with steroids and antihistamines. Appropriate treatment should be available for immediate use if anaphylaxis occurs. If an anaphylactic reaction or other serious hypersensitivity/ serious infusion related reaction occurs, permanently discontinue RoActemra. Hepatic disease/impairment: Use with caution in patients with active hepatic disease/ impairment. Transaminase elevations: Not recommended in patients with ALT or AST >5xULN; caution in patients with ALT or AST >1.5xULN. Haematological abnormalities: Caution in patients with platelet count <100x10<sup>3</sup>/µL. Continued treatment not recommended in patients with ANC

< 0.5 x  $10^9/L$  or platelet count < 50 x  $10^9/\mu L$ . Lipid parameters: If elevated, follow local guidelines for managing hyperlipidaemia. Vaccinations: Live and live attenuated vaccines should not be given concurrently Combined with other biologic treatments: Not recommended. Viral reactivation: Has been reported with biologics. Diverticulitis: Caution in patients with a history of intestinal ulceration or diverticulitis. Patients with symptoms of complicated diverticulitis should be evaluated promptly.

Interactions: Patients taking other medicines which are metabolised via CYP450 3A4, 1A2, or 2C9 should be monitored as doses may need to be adjusted. **Pregnancy and Lactation:** Women should use

contraception during and for 3 months after treatment. A decision on whether to continue/discontinue breastfeeding on RoActemra therapy should take into account relative benefits to mother and child.

Undesirable effects: Prescribers should consult SPC for full details of ADRs. Very common ADRs ( $\geq$  1/10): URTI, hypercholesterolaemia. Common ADRs ( $\geq$  1/100 to < 1/10): cellulitis, pneumonia, oral herpes simplex, herpes zoster, abdominal pain, mouth ulceration, gastritis, rash,

pruritus, urticaria, headache, dizziness, increased hepatic transaminases, increased weight and increased total bilirubin, hypertension, leukopenia, neutropenia, peripheral oedema, hypersensitivity reactions, conjunctivitis, cough, dyspnoea. Medically significant events: Infections: Opportunistic and serious infections have been reported, some serious infections had a fatal outcome. Impaired lung function may increase the risk of developing infections. There have been post-marketing reports of interstitial lung disease, some of which had a fatal outcome. GI perforations: Primarily reported as complications of diverticulitis. Infusion reactions: Clinically significant hypersensitivity reactions requiring treatment discontinuation were reported and were generally observed during the 2<sup>nd</sup> - 5<sup>th</sup> infusions. Fatal anaphylaxis has been reported. Other: Decreased neutrophil count, decreased platelet count, hepatic transaminase elevations, lipid parameter increases, very rare cases of pancytopenia. Legal Category: POM

Presentations and Basic NHS Costs: 80mg of tocilizumab in 4mL (20mg/mL) 1 vial: £102.40, 200mg of tocilizumab in 10mL (20mg/mL) 1 vial: £256.00, 400mg of tocilizumab in 20mL (20mg/mL) 1 vial: £512.00.

Marketing Authorisation Numbers: EU/1/08/492/01 (80mg), EU/1/08/492/03 (200mg), EU/1/08/492/05 (400mg). **Marketing Authorisation Holder:** Roche Registration Limited, 6 Falcon Way, Welwyn Garden City, Herts AL7 1TW. RoActemra is a registered trade mark. **Date of Preparation:** February 2013 RCUKMEDI00022

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard Adverse events should also be reported to Roche Products Limited. Please contact UK Drug Safety Centre on: 01707 367554



# 11.30 – 14.00 **Tuesday 23 April 2013**

**SPECIAL INTEREST GROUPS BSR/BHPR JOINT SESSION** 

19.30 - 21.30

#### Presidents' reception | Birmingham Town Hall

The presidents of BSR and BHPR invite you to join them at this dedicated networking event at the nearby Birmingham Town Hall, which will provide the perfect opportunity to meet and continue your discussions with rheumatology colleagues and industry peers in a relaxed and informal setting.

Drinks and canapés will be provided | This event is free to attend for registered delegates



# BSR and BHPR oral presentations of abstracts | Tuesday 23 April 2013



#### **CONNECTIVE TISSUE DISEASE**

09.00-10.30

#### LONG-TERM OUTCOMES OF CHILDREN BORN TO 01 MOTHERS WITH SLE

Mary Gayed<sup>1</sup>, Francesca Leone<sup>2</sup>, Veronica Toescu<sup>1</sup>, lan Bruce<sup>3</sup>, Ian Giles<sup>4</sup>, Lee-Suan Teh<sup>5</sup>, Neil McHugh<sup>6</sup>, Christopher Edwards<sup>7</sup>, Mohammed Akil<sup>8</sup>, Munther Khamashta<sup>2</sup>, Caroline Gordon<sup>1</sup>

<sup>1</sup>University of Birmingham, Birmingham, United Kingdom; <sup>2</sup>Rheumatology, St Thomas's Hospital, London, United Kingdom; <sup>3</sup>Rheumatology, Manchester Royal Infirmary, Manchester, United Kingdom; <sup>4</sup>Rheumatology, University College London, London, United Kingdom; 5Rheumatology, Royal Blackburn Hospital, Blackburn, United Kingdom; <sup>6</sup>Rheumatology, Royal National Hospital for Rheumatic Diseases, Bath, United Kingdom; <sup>7</sup>Rheumatology, Southampton University Hospital, Southampton, United Kingdom; 8Rheumatology, Royal Hallamshire Hospital, Sheffield, United Kingdom

02 HIGHER CORTICOSTEROID DOSES EARLY IN DISEASE HAVE A LONG-TERM INFLUENCE ON METABOLIC SYNDROME IN SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM AN INTERNATIONAL INCEPTION COHORT Benjamin Parker<sup>1</sup>, Murray Urowitz<sup>2</sup>, Dafna Gladman<sup>2</sup>, Mark Lunt<sup>1,3</sup>, Ian Bruce<sup>1,3</sup>

> <sup>1</sup>Arthritis Research UK Epidemiology Unit, University of Manchester, Manchester, United Kingdom; <sup>2</sup>Centre for Prognosis Studies in the Rheumatic Diseases, University of Toronto, Toronto, ON, Canada; 3NIHR Manchester Musculoskeletal Biomedical Research Unit, University of Manchester, Manchester, United Kingdom

#### 03 SIMPLE INSOLES FOR MANAGING FOOT PROBLEMS IN PEOPLE WITH SSC: THE PISCES RANDOMIZED CONTROLLED TRIAL

Anthony Redmond<sup>1,2</sup>, Begonya Alcacer-Pitarch<sup>1</sup>, Janine Gray<sup>3</sup>, Christopher Denton<sup>4</sup>, Ariane Herrick<sup>5</sup>, Nuria Navarro-Coy<sup>3</sup>, Howard Collier<sup>3</sup>, Lorraine Loughrey<sup>1</sup>, Sue Pavitt<sup>6</sup>, Heidi Siddle<sup>1</sup>, Jonathan Wright<sup>3</sup>, Philip Helliwell<sup>1</sup>, Paul Emery<sup>1,2</sup>, Maya Buch<sup>1</sup>

<sup>1</sup>Division of Rheumatology and Musculoskeletal Disease. University of Leeds, Leeds, United Kingdom; <sup>2</sup>Leeds NIHR Musculoskeletal Biomedical Research Unit, Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom; <sup>3</sup>Clinical Trials Research Unit. University of Leeds. Leeds. United Kingdom: <sup>4</sup>Centre for Rheumatology, Royal Free Campus, University College London, London, United Kingdom; 5Centre for Musculoskeletal Research, University of Manchester, Manchester, United Kingdom; 6Leeds Institute of Health Sciences, University of Leeds, Leeds, United Kingdom



# Medical student bursary winner

# A RETROSPECTIVE STUDY OF LONG-TERM OUTCOME IN 152 PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME: 25 YEAR EXPERIENCE

Esha Abrol<sup>1</sup>, Cristina G. Pulido<sup>2</sup>, David A. Isenberg<sup>3</sup>

<sup>1</sup>Department of Medicine, University College London Medical School, London, United Kingdom; <sup>2</sup>Internal Medicine Department, University Hospital Virgen del Rocío, Seville, Spain; <sup>3</sup>Centre for Rheumatology Research, University College London, London, United Kingdom

#### 05 SUCCESSFUL USE OF TOCILIZUMAB IN THE TREATMENT OF REFRACTORY FDG PET-POSITIVE LARGE VESSEL **VASCULITIS: A CASE SERIES**

Sanam Kia<sup>1</sup>, Pravin Patil<sup>1</sup>, Mark Williams<sup>1</sup>, Tochi Adizie<sup>1</sup>, Dimitrios Christidis<sup>1</sup>, Tania Gordon<sup>1</sup>, Frances A. Borg<sup>1</sup>, Shaifali Jain<sup>1</sup> and Bhaskar Dasgupta<sup>1</sup>

<sup>1</sup>Rheumatology, Southend Hospital, Southend-on-Sea, United Kingdom

# BSR and BHPR oral presentations of abstracts | Tuesday 23 April 2013

#### 06 FACTORS ASSOCIATED WITH LONG-TERM DAMAGE IN THE ANCA-ASSOCIATED VASCULITIDES: AN ANALYSIS OF COHORTS FROM THE EUROPEAN VASCULITIS STUDY **GROUP THERAPEUTIC TRIALS**

Joanna Robson<sup>1</sup>, Helen Doll<sup>2</sup>, Stephen Yew<sup>3</sup>, Oliver Flossmann<sup>3</sup>, Ravi Suppiah<sup>1</sup>, Lorraine Harper<sup>4</sup>, Peter Hoglund<sup>5</sup>. David Javne<sup>3</sup>. Chetan Mukhtvar<sup>6</sup>. Kerstin Westman<sup>5</sup>. Raashid Lugmani<sup>1</sup>

<sup>1</sup>Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, United Kingdom: <sup>2</sup>Rheumatology, University of East Anglia. Norwich, United Kingdom; <sup>3</sup>Vasculitis and Lupus Clinic, Addenbrooke's Hospital, Cambridge, United Kingdom: <sup>4</sup>Renal Department, University of Birmingham, Birmingham, United Kingdom; <sup>5</sup>Renal Department, Lund University, Lund, Sweden; <sup>6</sup>Rheumatology, Norfolk and Norwich University Hospital, Norwich, United Kingdom

#### **PATHOGENESIS**

11.30-13.00

#### 07 CHARACTERISING TYPE 17 IMMUNE RESPONSES IN ANKYLOSING SPONDYLITIS

Mohammad Hussein Al-Mossawi<sup>1</sup>, Anna Ridlev<sup>1,2</sup>, Isobel Wong<sup>2</sup>, Simon Kollnberger<sup>1</sup>, Jacqueline Shaw<sup>1</sup>. Paul Bowness<sup>1</sup>

<sup>1</sup>Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, United Kingdom; <sup>2</sup>MRC Human Immunology Unit, Weatherall Institute of Molecular Medicine, Oxford, United Kingdom

#### 08 SYNOVIAL LYMPHOCYTE AGGREGATES IN EARLY INFLAMMATORY ARTHRITIS: CORRELATION WITH DIAGNOSIS, DISEASE ACTIVITY AND ANTIBODY STATUS

Maria Di Cicco<sup>1</sup>, Frances Humby<sup>1</sup>, Stephen Kelly<sup>1</sup>, Nora Ng<sup>1</sup>, Rebecca Hands<sup>1</sup>, Sabrina Dadoun<sup>1</sup>, Chris Buckley<sup>2</sup>, lain B. McInnes<sup>3</sup>, Peter Taylor<sup>4</sup>, Michele Bombardieri<sup>1</sup>, Costantino Pitzalis<sup>1</sup>

<sup>1</sup>Rheumatology, Queen Mary University of London, London, United Kingdom; <sup>2</sup>Division of Immunity and Infection, University of Birmingham, Birmingham, United Kingdom; <sup>3</sup>Glasgow Biomedical Research Centre, University of Glasgow, Glasgow, United Kingdom; 4Kennedy Institute of Rheumatology, University of Oxford, Oxford, United Kingdom

# EARLY TREATMENT-NAIVE RHEUMATOID ARTHRITIS IS CHARACTERISED BY OUALITATIVE CHANGES OF THE **INKT REGULATORY CELL REPERTOIRE**

Salah Mansour<sup>1,2</sup>, Anna Tocheva<sup>1</sup>, Lyndsey Goulston<sup>2,3</sup>, Helen Platten<sup>2,3</sup>, Christopher Edwards<sup>2,3</sup>, Cyrus Cooper<sup>3,4</sup>, Stephan D. Gadola<sup>1,3</sup>

<sup>1</sup>Clinical and Experimental Sciences, Faculty of Medicine, University of Southampton, Southampton, United Kingdom; <sup>2</sup>Southampton Musculoskeletal shadow BRU, University of Southampton and UHS NHS FT, Southampton, United Kingdom; <sup>3</sup>Rheumatology, University of Southampton and UHS NHS FT, Southampton, United Kingdom; 4MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom

#### Young investigator award winner

# 010 WIDESPREAD CITRULLINATION IN HEALTHY AND INFLAMED LUNG TISSUE AS A PRIMING SITE FOR **AUTOIMMUNITY IN RA**

Elena Lugli<sup>1</sup>, Karin Lundberg<sup>2</sup>, Ken Bracke<sup>3</sup>, Guy Brusselle<sup>3</sup>, Patrick J. Venables<sup>1</sup>

<sup>1</sup>NDORMS, Kennedy Institute of Rheumatology, University of Oxford, London, United Kingdom; <sup>2</sup>Rheumatology Unit, Department of Medicine, Karolinska Institute, Stockholm, Sweden; <sup>3</sup>Laboratory for Translational Research of Obstructive Pulmonary Disease, Universitair Ziekenhuis Gent, Gent, Belgium

#### 011 HOW DOES PTPN22 REGULATE T-CELL EFFECTOR RESPONSES IN INFLAMMATORY ARTHRITIS?

Cristina Sanchez-Blanco<sup>1</sup>, Georgina Cornish<sup>1</sup>, Garth Burn<sup>1</sup>, Manoj Saini<sup>1</sup>, Rebecca Brownlie<sup>2</sup>, Linda Klavinskis<sup>3</sup>, Richard Williams<sup>4</sup>, Stephen Thompson<sup>1</sup>, Lena Svensson<sup>5</sup>, Rose Zamoyska<sup>2</sup>, Andrew Cope<sup>1</sup>

<sup>1</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom; <sup>2</sup>Institute of Immunology and Infection Research, University of Edinburgh, Edinburgh, United Kingdom: 3Peter Gorer Department of Immunobiology, King's College London, London, United Kingdom; <sup>4</sup>Kennedy Institute of Rheumatology, University of Oxford, Oxford, United Kingdom; 5Department of Experimental Medical Sciences, Lund University, Lund, Sweden

# BSR and BHPR oral presentations of abstracts | Tuesday 23 April 2013

# 012 CLINICAL SIGNIFICANCE OF IL-6 AND CCL2 UPREGULATION IN SERUM AND RENAL BIOPSIES FROM CASES OF SCLERODERMA RENAL CRISIS

Cassandra F. Hong<sup>1</sup>, Korsa Khan<sup>2</sup>, Rebecca Alade<sup>2</sup>, Svetlana I. Nihtyanova<sup>2</sup>, Voon H. Ong<sup>2</sup>, Christopher P. Denton<sup>2</sup>

<sup>1</sup>Rheumatology, King's College Hospital, King's College London, London, United Kingdom; <sup>2</sup>Rheumatology, Royal Free Hospital, University College London, London, United Kingdom

#### **BSR/BHPR PLENARY ABTRACTS**

14.00-16.00

P1 RANDOMISED CONTROLLED TRIAL OF TUMOUR-NECROSIS-FACTOR INHIBITORS AGAINST COMBINATION INTENSIVE THERAPY WITH CONVENTIONAL DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS IN ESTABLISHED RHEUMATOID ARTHRITIS: THE TACIT TRIAL David L. Scott<sup>1,2</sup>. Fowzia Ibrahim<sup>1</sup>. Clive Kellv<sup>3</sup>. Fraser Birrell<sup>4</sup>, Kuntal Chakravarty<sup>5</sup>, David Walker<sup>6</sup>, Peter Maddison<sup>7</sup>, Gabrielle Kingsley<sup>1,8</sup>;

<sup>1</sup>Rheumatology, King's College London, London, United Kingdom; <sup>2</sup>Rheumatology, King's College Hospital, London, United Kingdom; <sup>3</sup>Rheumatology, Queen Elizabeth Hospital, Gateshead, United Kingdom; <sup>4</sup>Rheumatology, Northumbria Healthcare, Hexham, United Kingdom; 5Rheumatology, Queen's Hospital, Romford, United Kingdom; <sup>6</sup>Rheumatology, Freeman Hospital, Newcastle, United Kingdom; <sup>7</sup>School of Medical Sciences, Bangor University, Bangor, United Kingdom; 8Rheumatology, University Hospital Lewisham, London, United Kingdom

#### P2 EPIGENETIC REGULATION OF THE IL23R LOCUS IN ANKYLOSING SPONDYLITIS

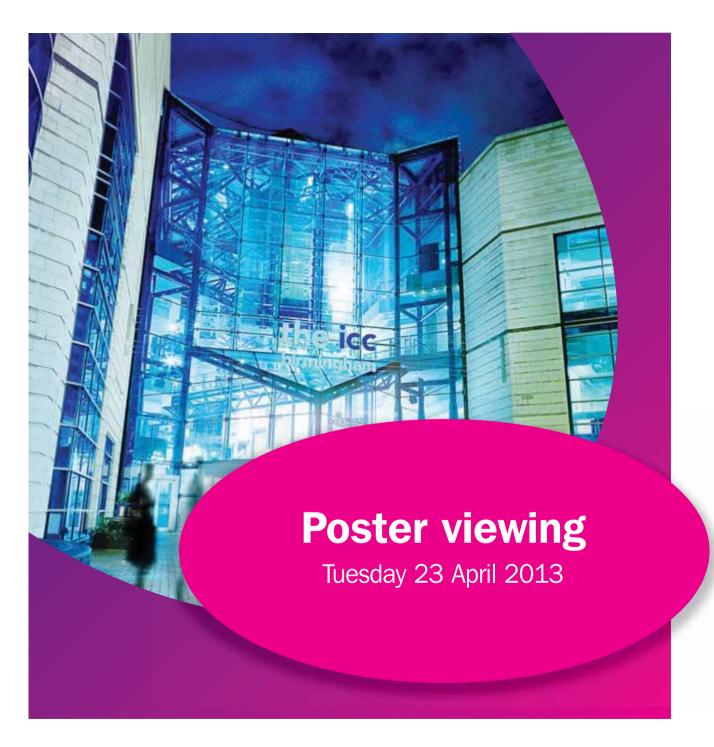
Carla Cohen<sup>1</sup>, Tugce Karaderi<sup>1</sup>, Louise Appleton<sup>1</sup>, Sarah Keidel<sup>1</sup>, Jenny Pointon<sup>1</sup>, Anna Ridley<sup>2</sup>, Paul Bowness<sup>2</sup>, Paul Wordsworth<sup>1</sup>

<sup>1</sup>NIHR Oxford Musculoskeletal BRU and Comprehensive Biomedical Research Centre, University of Oxford, Oxford, United Kingdom; <sup>2</sup>Medical Research Council Human Immunology Unit, Weatherall Institute of Molecular Medicine, University of Oxford, Oxford, United Kingdom

#### P3 SARAH: STRENGTHENING AND STRETCHING FOR PEOPLE WITH RHEUMATOID ARTHRITIS OF THE HANDS: A RANDOMISED CONTROLLED TRIAL

Mark A. Williams<sup>1</sup>, Peter J. Heine<sup>1</sup>, Christopher McConkey<sup>1</sup>, Joanne Lord<sup>2</sup>, Sukhdeep Dosanjh<sup>1</sup>, Esther Williamson<sup>1</sup>, Jo Adams<sup>3</sup>, Martin Underwood<sup>1</sup>, Sarah E. Lamb<sup>1,4</sup>, Sarah Trial Team<sup>1</sup>

<sup>1</sup>Warwick Clinical Trials Unit, University of Warwick, Coventry, United Kingdom; <sup>2</sup>Health Economics Research Group, Brunel University, Uxbridge, United Kingdom; <sup>3</sup>Faculty of Health Sciences, University of Southampton, Southampton, United Kingdom; <sup>4</sup>Kadoorie Critical Care Research Centre, University of Oxford Hospitals NHS Trust, Oxford, United Kingdom











#### **CASE REPORT**

# 1 A LATE PRESENTATION OF LOEYS-DIETZ SYNDROME: BEWARE OF TGF BETA RECEPTOR MUTATIONS IN 'BENIGN' JOINT HYPERMOBILITY

Puja Mehta<sup>1</sup>, Susan Holder<sup>2</sup>, Benjamin Fisher<sup>3</sup>, Tonia Vincent<sup>1</sup>

<sup>1</sup>Rheumatology, Imperial College Healthcare NHS Trust, London, United Kingdom; <sup>2</sup>North West Thames Regional Genetics Service, NWLH NHS Trust, London, United Kingdom; <sup>3</sup>Rheumatology Research Group, University of Birmingham, Birmingham, United Kingdom

## 2 A CASE OF POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME IN A PATIENT WITH SLE

Kavitha Nadesalingam<sup>1</sup>, Helen Maciver<sup>1</sup>, Wendy Shingler<sup>1</sup>

<sup>1</sup>Rheumatology, Bradford Teaching Hospitals, Bradford, United Kingdom

# 3 RITUXIMAB THERAPY IN REFRACTORY MACROPHAGE ACTIVATION SYNDROME SECONDARY TO SLE



Jyoti Bakshi<sup>1</sup>, Sadon Hassan<sup>2</sup>, David D'Cruz<sup>3</sup>, Antoni Chan<sup>1</sup>

<sup>1</sup>Rheumatology, Royal Berkshire Hospital, Reading, United Kingdom; <sup>2</sup>Haematology, Royal Berkshire Hospital, Reading, United Kingdom; <sup>3</sup>Rheumatology, St Thomas's Hospital, London, United Kingdom

# 4 NATURAL KILLER T-CELL LYMPHOMA: FATAL MIMIC OF GIANT CELL ARTERITIS

Anna E. Litwic<sup>1</sup>, Fiona McCrae<sup>2</sup>

<sup>1</sup>Rheumatology, The Royal Bournemouth and Christchurch Hospitals NHS Trust, Bournemouth, United Kingdom; <sup>2</sup>Rheumatology, Queen Alexandra Hospital Portsmouth Hospitals NHS Trust, Portsmouth, United Kingdom

# 5 SILASTIC SYNOVITIS: A CASE AND REVIEW OF THE LITERATURE

Rakhi Seth<sup>1</sup>, Fiona McCrae<sup>1</sup>

<sup>1</sup>Rheumatology Department, Queen Alexandra Hospital, Portsmouth, United Kingdom

# 6 HEART FAILURE IN A WOMAN WITH SLE AND ANTI-PHOSPHOLIPID SYNDROME AND FABRY'S DISEASE

Anupama Nandagudi<sup>1</sup>, Elizabeth Jury<sup>2</sup>, David Isenberg<sup>1,2</sup>

<sup>1</sup>Department of Rheumatology, University College Hospital, London, United Kingdom; <sup>2</sup>Centre for Rheumatology Research, Department of Medicine, University College London, London, United Kingdom

# 7 REFRACTORY MULTISYSTEM SARCOIDOSIS INVOLVING PELVIC BONE RESPONDING TO INFLIXIMAB



Uma Karjigi<sup>1</sup>, Anupam Paul<sup>1</sup>

<sup>1</sup>Rheumatology, James Cook University Hospital, Middlesbrough, United Kingdom

# 8 A FATAL CASE OF ANTI-MDA5 CLINICALLY AMYOPATHIC DERMATOMYOSITIS

Frances Rees<sup>1</sup>, Emma O'Dowd<sup>1</sup>, William Kinnear<sup>1</sup>, Simon Johnson<sup>1</sup>, Peter Lanyon<sup>1</sup>

<sup>1</sup>Rheumatology Department, Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom

# 9 RITUXIMAB IN RECURRENT THROMBOEMBOLIC DISEASE IN APS



Jyoti Bakshi<sup>1</sup>, Richard Stevens<sup>1</sup>

<sup>1</sup>Rheumatology, Buckinghamshire Hospital NHS Trust, Buckinghamshire, United Kingdom

# 10 BEHÇET'S DISEASE ASSOCIATED WITH IDIOPATHIC INTRACRANIAL HYPERTENSION

Nehal Narayan<sup>1</sup>, Christopher Marguerie<sup>1</sup>

<sup>1</sup>Rheumatology, Warwick Hospital, Warwick, United Kingdom

# 11 SEROPOSITIVE NON-EROSIVE RHEUMATOID ARTHRITIS PRESENTING WITH 'THE CUTANEOUS ROPE SIGN' (INTERSTITIAL GRANULOMATOUS DERMATITIS) AND SUBLCINICAL SYNOVITIS RESPONSIVE TO STEROIDS AND METHOTREXATE

Helena Robinson<sup>1</sup>, Lorrette Folkes<sup>1</sup>, Fiona Worsnop<sup>1</sup>, Lucy Ostlere<sup>1</sup>, Patrick Kiely<sup>1</sup>

 $^{1}\!\text{Rheumatology},$  St George's Healthcare NHS Trust, London, United Kingdom

## A CASE OF ULCERATIVE LUPUS PROFUNDUS **RESPONDING TO RITUXIMAB**

Chethana Dharmapalaiah<sup>1</sup>. Nada Hassan<sup>1</sup>. Anupama Nandagudi<sup>1</sup>, Anurag Bharadwai<sup>1</sup>, Malgorzata Skibinska<sup>2</sup>, Nagui Gendi<sup>1</sup>

<sup>1</sup>Rheumatology, Essex and Thurrock University Hospitals NHS Foundation Trust, Essex, United Kingdom: <sup>2</sup>Dermatology, Essex and Thurrock University Hospitals NHS Foundation Trust, Essex, United Kingdom

#### TOCILIZUMAB FOR THE TREATMENT OF 13 **AUTOINFLAMMATORY DISEASE**

Emma J. Davies<sup>1</sup>, Mohammed Akil<sup>1</sup>, Rachael Kilding<sup>1</sup>

<sup>1</sup>Rheumatology, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom

# ATYPICAL MYCOBACTERIAL INFECTION IN THE IMMUNOCOMPROMISED: BEWARE OF THE SKIN



Jagdish Ramachandran Nair<sup>1</sup>, Maeve Walsh<sup>2</sup>, Wendy Farrar<sup>3</sup>, Robert N. Thompson<sup>1</sup>

<sup>1</sup>Rheumatology, Aintree University Hospital, Liverpool, United Kingdom; <sup>2</sup>Dermatology, Broadgreen University Hospital, Liverpool, United Kingdom; <sup>3</sup>Dermatology, Aintree University Hospital, Liverpool, United Kingdom

#### DRESS SYNDROME CAUSED BY NAPROXEN

Liubov Borukhson<sup>1</sup>, Charles McFadyen<sup>1</sup>, Deepwant Singh<sup>1</sup>, Vivek Rajagopal<sup>1</sup>

<sup>1</sup>West Suffolk Hospital, Bury St Edmunds, United Kingdom

# AN UNEXPECTED CAUSE OF SEVERE HYPOKALAEMIA IN A PATIENT WITH SJÖGREN'S SYNDROME: A CASE REPORT

Angela Marie L. Chan<sup>1</sup>, Li Wearn Koh<sup>1</sup>

<sup>1</sup>Rheumatology, Allergy and Immunology, Tan Tock Seng Hospital, Singapore, Singapore

#### 17 SUCCESSFUL TREATMENT OF SCHNITZLER'S SYNDROME WITH ANAKINRA, COMPLICATED BY THE DEVELOPMENT OF ANTI-NUCLEAR ANTIBODIES

Jennifer D. Christie<sup>1</sup>. Lorraine Croot<sup>1</sup>

<sup>1</sup>Rheumatology, Barnsley Hospital NHS Trust, Barnsley, United Kingdom

#### 18 CETROLIZUMAB-INDUCED ACUTE LIVER FAILURE



Mary Gayed<sup>1</sup>, Benjamin Disney<sup>2</sup>, Saket Singhal<sup>2</sup>, Karl Grindulis<sup>1</sup>

<sup>1</sup>Rheumatology, Sandwell and West Birmingham Hospitals, Birmingham, United Kingdom; <sup>2</sup>Gastroenterology, Sandwell and West Birmingham Hospitals, Birmingham, United Kingdom

#### 19 GRANULOMATOSIS WITH POLYANGIITIS PRESENTING WITH A RIGHT-SIDED RENAL MASS

Timothy D. Reynolds<sup>1</sup>

<sup>1</sup>Medical Directorate, University Hospital of Wales, Cardiff, United Kingdom

#### 20 RHEUMATOLOGISTS BEWARE: SERIOUS ADVERSE REACTION BETWEEN INJECTED TRIAMCINOLONE AND RITONAVIR, COMMONLY USED FOR TREATMENT OF HIV



Katie Conway<sup>1</sup>, Debbie Williams<sup>1</sup>, John Quin<sup>1</sup>, Gillian Dean<sup>1</sup>, Duncan Churchill<sup>1</sup>, Karen E. Walker-Bone<sup>2</sup>

<sup>1</sup>HIV/GU Medicine, Royal Sussex County Hospital, Brighton, United Kingdom; <sup>2</sup>Rheumatology, Brighton and Sussex Medical School, Brighton, United Kingdom

#### 21 TAKO-TSUBO CARDIOMYOPATHY ASSOCIATED WITH SYSTEMIC SCLEROSIS: A SIGN OF MYOCARDIAL RAYNAUD'S PHENOMENON?

lain Goff<sup>1,2</sup>, Gary Reynolds<sup>2</sup>, Matthew Grove<sup>3</sup>

<sup>1</sup>Department of Rheumatology, Newcastle Hospitals NHS Trust, Newcastle, United Kingdom; <sup>2</sup>Institute of Cellular Medicine, University of Newcastle, Newcastle, United Kingdom; <sup>3</sup>Department of Rheumatology, Northumbria Healthcare NHS Trust, North Shields, United Kingdom

#### 22 **NECROTIZING BALANITIS DUE TO POLYARTERITIS NODOSA**

Priva Patel<sup>1</sup>. Mark N. Lazarus<sup>1</sup>. Frederico Roncaroli<sup>2</sup>. Carolyn Gabriel<sup>3</sup>, Anne R. Kinderlerer<sup>1</sup>

<sup>1</sup>Rheumatology, St. Mary's Hospital, London, United Kingdom; <sup>2</sup>Histology, St. Mary's Hospital, London, United Kingdom; <sup>3</sup>Neurology, St. Mary's Hospital, London, United Kingdom

#### 23 IMPROVEMENT OF COELIAC DISEASE IN A PATIENT WITH SJÖGREN'S SYNDROME TREATED WITH RITUXIMAB



Elena Nikiphorou<sup>1</sup>, Frances C. Hall<sup>1</sup>

<sup>1</sup>Rheumatology, Cambridge University Hospitals Foundation Trust, Cambridge, United Kingdom

#### 24 AN UNUSUAL CASE OF BILATERAL PAROTID AND SUBMANDIBULAR GLAND INVOLVEMENT IN ANCA ASSOCIATED VASCULITIS, REFRACTORY TO CYCLOPHOSPHAMIDE BUT SUCCESSFULLY TREATED WITH RITUXIMAB

Ellen Bruce<sup>1</sup>, Leanne Gray<sup>1</sup>, Maria Krutikov<sup>1</sup>, Surabhi Wig<sup>1</sup>, Ian Bruce1

<sup>1</sup>Rheumatology, Manchester Royal Infirmary, Central Manchester University Hospitals, Manchester, United Kingdom

#### **IMAGING**

#### 25 EARLY RESPONSE TO ABATACEPT PLUS MTX IN MTX-IR RA PATIENTS USING POWER DOPPLER ULTRASONOGRAPHY: AN OPEN-LABEL STUDY

Maria A. D'Agostino1, Richard Wakefield2, Hilde Berner Hammer<sup>3</sup>, Olivier Vittecog<sup>4</sup>, Mauro Galeazzi<sup>5</sup>, Peter Balint<sup>6</sup>, Emilio Filippucci<sup>7</sup>, Ingrid Moller<sup>8</sup>, Annamaria lagnocco9, Esperanza Naredo10, Mikkel Ostergaard<sup>11</sup>, Corine Gaillez<sup>12</sup>, Wendy Kerselaers<sup>13</sup>, Karina Van Holder<sup>14</sup>, Manuela Le Bars<sup>12</sup>, OMERACT US Task Force<sup>1</sup>

<sup>1</sup>Service de Rhumatologie, AP-HP Ambroise Pare Hospital. Boulogne-Billancourt, France: 2Department of Rheumatology, University of Leeds, Leeds, United Kingdom; <sup>3</sup>Department of Rheumatology, Diakonhiemmet Hospital. Oslo, Norway; <sup>4</sup>Department of Rheumatology, University Hospital, Rouen, France: 5Institute of Rheumatology. University Hospital, Siena, Italy; 6Rheumatology Department, National Institute of Rheumatology and Physiotherapy, Budapest, Hungary; <sup>7</sup>Clinica Reumatologica, University Politecnica delle Marche, Ancona, Italy: 8Rheumatology Institute, Instituto Poal, Barcelona, Spain: 9Dipartimento di Clinica e Terapia Medica Applicata, University La Sapienza. Rome, Italy: 10 Department of Rheumatology, Hospital Severo Ochoa, Madrid, Spain: 11 Department of Rheumatology. University Hospital, Copenhagen, Denmark: 12 Medical Affairs, Bristol-Myers Squibb, Rueil-Malmaison, France: <sup>13</sup>Global Biometric Sciences, Bristol-Myers Squibb, Braine-L'Alleud, Belgium; 14Global Clinical Operations and Strategy, Bristol-Myers Squibb, Braine-L'Alleud, Belgium

#### TWINS UK HERITABILITY STUDY OF CANDIDATE LOW 26 BACK PAIN PHENOTYPE SHOWS VERTEBRAL ENDPLATE ABNORMALITIES TO BE HERITABLE

Millicent A. Stone<sup>1,2</sup>, Francis Williams<sup>2</sup>, Lisa Wolber<sup>2</sup>, Jaro Karppinen<sup>3</sup>, Juhani Maatta<sup>3</sup>

<sup>1</sup>Pharmacy and Pharmacology, University of Bath, Bath, United Kingdom; <sup>2</sup>Department of Twin Research and Genetic Epidemiology, King's College London, London, United Kingdom; <sup>3</sup>Department of Medical Biochemistry and Molecular Biology, University of Oulu, Oulu, Finland

#### CURRENT PRACTICE IN MUSCULOSKELETAL ULTRASOUND 27 IN THE NORTHERN REGION

Ben Thompson<sup>1</sup>, Ismael Atchia<sup>2</sup>, Alice Lorenzi<sup>1</sup>, Graham Raftery3, Phil Platt1

<sup>1</sup>Musculoskeletal Unit, Newcastle Hospitals NHS Foundation Trust, Newcastle, United Kingdom; <sup>2</sup>Department of Rheumatology, Northumbria Healthcare NHS Foundation Trust, Whitley Bay, United Kingdom; <sup>3</sup>Department of Rheumatology, City Hospitals Sunderland NHS Foundation Trust, Sunderland, United Kingdom

#### 28 THE PREDICTIVE VALUE OF MUSCULOSKELETAL ULTRASOUND IN UNSELECTED EARLY ARTHRITIS CLINIC PATIENTS WITH POLYARTHRALGIA

Philip N. Platt<sup>1</sup>, Arthur Pratt<sup>1</sup>

<sup>1</sup>Rheumatology, Freeman Hospital, Newcastle, United Kingdom

# 3D CORTICAL THICKNESS MAPPING OF THE HIP AS A NEW IMAGING BIOMARKER OF OSTEOARTHRITIS

Thomas D. Turmezei<sup>1</sup>, Graham M. Treece<sup>1</sup>, Andrew H. Gee<sup>1</sup>, Kenneth E. Poole<sup>1</sup>

<sup>1</sup>University of Cambridge, Cambridge, United Kingdom

#### **METABOLIC AND CRYSTAL ARTHROPATHIES**

#### **HEALTH-RELATED QUALITY OF LIFE IN GOUT:** A SYSTEMATIC REVIEW

Priyanka N. Chandratre<sup>1</sup>, Edward Roddy<sup>1</sup>, Lorna Clarson<sup>1</sup>, Jane Richardson<sup>1</sup>, Samantha Hider<sup>1</sup>, Christian Mallen<sup>1</sup>

<sup>1</sup>Research Institute for Primary Care and Health Sciences, Keele University, Keele, United Kingdom

#### THE BURDEN OF GOUT-RELATED ADMISSIONS TO A DISTRICT GENERAL HOSPITAL

Abigail Lieberman<sup>1</sup>, Peter J. Prouse<sup>1</sup>

<sup>1</sup>Rheumatology, Basingstoke and North Hampshire Hospital, Basingstoke, United Kingdom

#### 32 RISK FACTORS FOR HYPERURICAEMIA AMONG A LARGE COHORT OF HIV-INFECTED MEN

Prini Mahendran<sup>1</sup>, Amanda Samarawickrama<sup>1</sup>, Duncan Churchill<sup>1</sup>, Karen E. Walker-Bone<sup>2</sup>

<sup>1</sup>HIV/GU Medicine, Royal Sussex County Hospital, Brighton, United Kingdom; <sup>2</sup>Rheumatology, Brighton and Sussex Medical School, Brighton, United Kingdom

## EFFECT OF PEGLOTICASE ON RENAL FUNCTION IN PATIENTS WITH CHRONIC KIDNEY DISEASE

Faith D. Ottery<sup>1</sup>, Robert Yood<sup>2</sup>, Marsha Wolfson<sup>3</sup>

<sup>1</sup>Global Medical Affairs, Savient Pharmaceuticals, Inc. Bridgewater, NJ, USA; <sup>2</sup>Rheumatology, Reliant Medical Group, Worchester, MA, USA; 3Clinical Affairs, Savient Pharmaceuticals, Bridgewater, NJ, USA

# **AUDIT OF ARMA 2012 STANDARDS OF CARE FOR PEOPLE** WITH GOUT IN PRIMARY CARE IN EDINBURGH AND THE **LOTHIANS**

Andrea Ang<sup>1</sup>, Philip Riches<sup>1</sup>, Janet Thomson<sup>1</sup>, George Nuki<sup>1</sup>

<sup>1</sup>University of Edinburgh, Rheumatic Diseases Unit, Western General Hospital, Edinburgh, United Kingdom

#### RHEUMATOID ARTHRITIS: CLINICAL FEATURES

# HIGH POSITIVE ANTIBODY STATUS IS ASSOCIATED WITH INCREASED MORTALITY IN PATIENTS WITH **EARLY INFLAMMATORY ARTHRITIS: RESULTS** FROM THE NORFOLK ARTHRITIS REGISTER

Jennifer Humphreys<sup>1</sup>, Suzanne M. Verstappen<sup>1</sup>, Jacqueline Chipping<sup>2</sup>, Kimme Hyrich<sup>1</sup>, Tarnya Marshall<sup>2</sup>, Deborah P. Symmons<sup>1</sup>

<sup>1</sup>Arthritis Research UK Epidemiology Unit, School of Translational Medicine, University of Manchester, Manchester, United Kingdom; <sup>2</sup>Rheumatology Department, Norfolk and Norwich Hospital, Norwich, United Kingdom

#### 36 THE FALLING PREVALENCE OF EROSIVE DISEASE IN RHEUMATOID ARTHRITIS: A CLINICAL **EXPERIENCE**



Matthew Roy<sup>1</sup>, John R. Kirwan<sup>1</sup>, Robert W. Marshall<sup>1</sup>

<sup>1</sup>Academic Rheumatology Unit, University Hospitals of Bristol NHS Foundation Trust, Bristol, United Kingdom

# THE IMPACT OF RHEUMATOID ARTHRITIS ON QUALITY OF LIFE ASSESSED USING THE SF-36: A SYSTEMATIC **REVIEW AND META-ANALYSIS**

Faith Matcham<sup>1</sup>, Ian C. Scott<sup>2</sup>, Lauren Rayner<sup>1</sup>, Matthew Hotopf<sup>1</sup>, Gabrielle H. Kingsley<sup>3,4</sup>, David L. Scott<sup>5</sup>, Sophia Steer<sup>5</sup>

<sup>1</sup>Department of Psychological Medicine, Institute of Psychiatry, King's College London, London, United Kingdom; <sup>2</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom; <sup>3</sup>Department of Rheumatology, King's College London School of Medicine, London, United Kingdom; <sup>4</sup>Department of Rheumatology, University Hospital Lewisham, London, United Kingdom; <sup>5</sup>Department of Rheumatology, King's College Hospital, London, United Kingdom

# SEROLOGICAL STATUS: A ROLE IN PERSONALISED MEDICINE FOR RHEUMATOID ARTHRITIS

Margaret H. Ma<sup>1</sup>. Chanaka Dahanayake<sup>1</sup>. Ian C. Scott<sup>2</sup>. Gabrielle Kingslev<sup>1</sup>, Andrew Cope<sup>1</sup>, David L. Scott<sup>1</sup>

<sup>1</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom; <sup>2</sup>Medical and Molecular Genetics, King's College London, London, United Kingdom

#### RHEUMATOID FACTOR IGA AND ANTI-CYCLIC 39 CITRULLINATED PEPTIDE ANTIBODIES: PREDICTORS OF RADIOGRAPHIC PROGRESSION

Chanaka Dahanayake<sup>1</sup>, Margaret H. Ma<sup>1</sup>, Ian C. Scott<sup>2</sup>, Gabrielle H. Kingsley<sup>1</sup>, Andrew Cope<sup>1</sup>, David L. Scott<sup>1</sup>

<sup>1</sup>Rheumatology, King's College London, London, United Kingdom; <sup>2</sup>Medical and Molecular Genetics, King's College London, London, United Kingdom

#### SHOULD THERE BE DIFFERENT DISEASE ACTIVITY 40 CRITERIA FOR ASSESSMENT OF PATIENTS WITH RHEUMATOID ARTHRITIS ACCORDING TO ETHNIC **BACKGROUNDS?**

Aaron Wernham<sup>1</sup>, Lorna Ward<sup>1,2</sup>, David Carruthers<sup>1</sup>, Alison Deeming<sup>1</sup>, Christopher Buckley<sup>1,2</sup>, Karim Raza<sup>1,2</sup>, Paola De Pablo<sup>2,3</sup>

<sup>1</sup>Department of Rheumatology, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, United Kingdom; <sup>2</sup>Division of Infection and Immunity, School of Medicine, University of Birmingham, Birmingham, United Kingdom; <sup>3</sup>Department of Rheumatology, Queen Elizabeth Hospital, Birmingham, United Kingdom

#### 41 CAN RADIOGRAPHIC SCORES OF HANDS AND FEET IN THE FIRST THREE YEARS OF RA PREDICT EVENTUAL NEED FOR ORTHOPAEDIC SURGERY OF HAND AND FOOT JOINTS? RESULTS FROM A LONG-TERM INCEPTION **COHORT**

Elena Nikiphorou<sup>1</sup>, Lewis Carpenter<sup>2</sup>, Keeranur Jayakumar<sup>1</sup>, Csilla Solymossy<sup>1</sup>, Josh Dixey<sup>3</sup>, Adam Young<sup>1</sup>

<sup>1</sup>Rheumatology, ERAS, St Albans, United Kingdom; <sup>2</sup>Centre for Lifespan and Chronic Illness Research, University of Hertfordshire, Hatfield, United Kingdom; <sup>3</sup>Rheumatology, New Cross Hospital, Wolverhampton, United Kingdom

# ETHNIC AND SMOKING VARIATIONS IN EARLY RHEUMATOID ARTHRITIS: EXPERIENCE FROM A LARGE SECONDARY CARE CENTRE

Animesh Singh<sup>1</sup>, Henry Penn<sup>1</sup>

<sup>1</sup>Rheumatology, Northwick Park Hospital, London, United Kingdom

#### 43 COMORBIDITY AND OBESITY ARE INDEPENDENTLY ASSOCIATED WITH FAILURE TO ACHIEVE REMISSION IN PATIENTS WITH RHEUMATOID **ARTHRITIS**

Nicholas Ellerby<sup>1</sup>, Derek L. Mattey<sup>1</sup>, Jonathan Packham<sup>1</sup>, Peter Dawes<sup>1</sup>, Samantha L. Hider<sup>1,2</sup>

<sup>1</sup>Haywood Rheumatology Centre, Haywood Hospital, Stoke on Trent, United Kingdom; <sup>2</sup>Arthritis Research UK Primary Care Centre, Keele University, Keele, United Kingdom

#### 44 CLINICAL, IMAGING AND HISTOLOGICAL CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS AT DIFFERENT STAGES OF DISEASE PROGRESSION



Nora Ng1, Frances Humby1, Michele Bombardieri1. Stephen Kelly<sup>1</sup>, Maria Di Cicco<sup>1</sup>, Sabrina Dadoun<sup>1</sup>, Rebecca Hands<sup>1</sup>, Vidalba Rocher<sup>1</sup>, Bruce Kidd<sup>2</sup>, Dev Pyne<sup>2</sup>, Costantino Pitzalis1

<sup>1</sup>Centre of Experimental Medicine and Rheumatology, Queen Mary University of London, London, United Kingdom; <sup>2</sup>Rheumatology Department, Royal London Hospital, Barts Health NHS Trust, London, United Kingdom

45 SHOULD WE CONTINUE TO GROUP ALL SEROPOSITIVE RA PATIENTS TOGETHER? A VERY STRONGLY POSITIVE ANTI-CCP IN THE PRESENCE OF A NEGATIVE/WEAKLY POSITIVE RF: A SEROLOGICAL PERMUTATION WITH AN ATYPICAL CLINICAL PRESENTATION?

Sophie Poore<sup>1</sup>, David Hutchinson<sup>1</sup>

<sup>1</sup>Rheumatology Department, Royal Cornwall Hospital, Truro, United Kingdom

#### RHEUMATOID ARTHRITIS: COMORBIDITIES

# ASSOCIATION OF ANTI-TNF THERAPY AND THE RISK OF ISCHAEMIC STROKE IN SUBJECTS WITH RHEUMATOID ARTHRITIS: RESULTS FROM THE BSRBR-RA

Audrev Low<sup>1</sup>, Mark Lunt<sup>1</sup>, Louise Mercer<sup>1</sup>, James Gallowav<sup>2</sup>, Rebecca Davies<sup>1</sup>, Kath Watson<sup>1</sup>, British Society for Rheumatology Biologics Register Control Centre Consortium<sup>1</sup>, Will Dixon<sup>1</sup>, Deborah Symmons<sup>1,3</sup>, Kimme Hyrich<sup>1</sup>, on behalf of the British Society for Rheumatology Biologics Registers<sup>4</sup>

<sup>1</sup>Arthritis Research UK Epidemiology Unit, Manchester Academic Health Science Centre. The University of Manchester, Manchester, United Kingdom, <sup>2</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom, <sup>3</sup>NIHR, Manchester Musculoskeletal Biomedical Research Unit, Manchester, United Kingdom, <sup>4</sup>British Society for Rheumatology, Bride House, London, United Kingdom

#### THE RISK OF LYMPHOMA IN PATIENTS RECEIVING 47 ANTI-THE THERAPY FOR RHEUMATOID ARTHRITIS: RESULTS FROM THE BSRBR-RA

Louise Mercer<sup>1</sup>, Mark Lunt<sup>1</sup>, Audrey Low<sup>1</sup>, James Galloway<sup>2</sup>, Kath D. Watson<sup>1</sup>, William G. Dixon<sup>1</sup>, BSRBR Control Centre Consortium<sup>1</sup>, Deborah Symmons<sup>1,3</sup> and Kimme L. Hyrich<sup>1</sup> on behalf of the BSRBR

<sup>1</sup>Arthritis Research UK Epidemiology Unit, Manchester Academic Health Science Centre, The University of Manchester, Manchester, United Kingdom; <sup>2</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom; <sup>3</sup>NIHR, Manchester Musculoskeletal BRU, Manchester, United Kingdom

#### RELATIONSHIP BETWEEN ANTI-TNF THERAPY AND RISK 48 OF MYOCARDIAL INFARCTION IN SUBJECTS WITH RHEUMATOID ARTHRITIS: RESULTS FROM THE BSRBR-RA

Audrey Low<sup>1</sup>, Mark Lunt<sup>1</sup>, Louise Mercer<sup>1</sup>, Ellen Bruce<sup>1</sup>, British Society for Rheumatology Biologics Registers Control Centre Consortium<sup>1</sup>, Will Dixon<sup>1</sup>, Kimme Hyrich<sup>1</sup> and Deborah Symmons<sup>1,2</sup> on behalf of the British Society for Rheumatology Biologics Registers

<sup>1</sup>Arthritis Research UK Epidemiology Unit, Manchester Academic Health Science Centre. The University of Manchester, Manchester, United Kingdom; <sup>2</sup>NIHR, Manchester Musculoskeletal Biomedical Research Unit, Manchester, United Kingdom

#### HAS THE CAUSE OF DEATH IN RHEUMATOID ARTHRITIS 49 PATIENTS CHANGED RECENTLY?

Saadia P. Malik<sup>1</sup>, Clive Kelly<sup>2</sup>, Jennifer Hamilton<sup>2</sup>, Carol Hevcock<sup>2</sup>, Vadivelu Saravanan<sup>2</sup>, Martin Rvnne<sup>2</sup>

<sup>1</sup>Rheumatology, Freeman Hospital, Newcastle, United Kingdom; <sup>2</sup>Rheumatology, Queen Elizabeth Hospital, Gateshead, United Kingdom

#### 50 SUCCESS OF A SMOKING AND RHEUMATOID ARTHRITIS AWARENESS CAMPAIGN IN FIFE, SCOTLAND

Helen E. Harris<sup>1</sup>, Fiona Tweedie<sup>1</sup>, Yiannis Skaparis<sup>2</sup>, Marie White<sup>1</sup>, Nicola Scott<sup>1</sup>, Kay Samson<sup>3</sup>

<sup>1</sup>Fife Rheumatic Diseases Unit, NHS Fife, Kirkcaldy, United Kingdom; <sup>2</sup>Department of Medicine, University of Dundee, Dundee, United Kingdom; <sup>3</sup>Smoking Cessation Team, NHS Fife, Kirkcaldy, United Kingdom

#### 51 FRACTURE RISK MANAGEMENT IN PATIENTS WITH NEWLY DIAGNOSED RHEUMATOID ARTHRITIS: RESULTS FROM A **CARE PATHWAY**

Cecilia Mercieca<sup>1</sup>, Shane Clarke<sup>1</sup>

<sup>1</sup>Academic Rheumatology Unit, Bristol, United Kingdom



#### Medical student bursary winner

# ARE PATIENTS WITH INFLAMMATORY POLYARTHRITIS EXPERIENCING THE SAME REDUCTIONS IN CARDIOVASCULAR-SPECIFIC MORTALITY AS THE **GENERAL POPULATION?**

Alexander J. Warner<sup>1</sup>, Jennifer Humphreys<sup>1</sup>, Mark Lunt<sup>2</sup>, Tarnya Marshall<sup>3</sup>, Deborah Symmons<sup>1</sup>, Suzanne Verstappen<sup>2</sup>

<sup>1</sup>Arthritis Research UK Epidemiology Unit, The University of Manchester, Manchester, United Kingdom; <sup>2</sup>Arthritis Research UK Epidemiology Unit, Manchester Academic Health Science Centre, Manchester, United Kingdom; <sup>3</sup>Norfolk and Norwich University Hospitals, Norfolk and Norwich University Hospitals Trust, Norwich, United Kingdom

#### 53 RA-RELATED INTERSTITIAL LUNG DISEASE: WHICH FACTORS PREDICT ITS DEVELOPMENT?

Esther Chan<sup>1</sup>, Clive Kelly<sup>1</sup>, Felix A. Woodhead<sup>2</sup>, Mohamed Nisar<sup>3</sup>, S. Arthanari<sup>3</sup>, Julie Dawson<sup>4</sup>, Nav Sathi<sup>4</sup>, Yasmeen Ahmad<sup>5</sup>, Gouri Koduri<sup>6</sup>, Adam Young<sup>6</sup>

<sup>1</sup>Rheumatology, Queen Elizabeth Hospital, Gateshead, United Kingdom: <sup>2</sup>Chest Medicine, University Hospital, Coventry, United Kingdom; <sup>3</sup>Rheumatology, Queens Hospital, Burton, United Kingdom; <sup>4</sup>Rheumatology, Knowsley Hospital, St Helens, United Kingdom: 5Rheumatology, BCU Hospital. North Wales, United Kingdom; 6Rheumatology, ERAS/ERAN City Hospital, St Albans, United Kingdom

#### 54 RA-RELATED INTERSTITIAL LUNG DISEASE: SURVIVAL **TRENDS OVER 25 YEARS**

Clive Kelly<sup>1</sup>, Esther Chan<sup>1</sup>, Yasmeen Ahmad<sup>2</sup>, Felix A. Woodhead<sup>3</sup>, Mohamed Nisar<sup>4</sup>, S. Arthanari<sup>4</sup>, Julie Dawson<sup>5</sup>, Nav Sathi<sup>5</sup>, Gouri Koduri<sup>6</sup>, Adam Young<sup>6</sup>

<sup>1</sup>Rheumatology, Queen Elizabeth Hospital, Gateshead, United Kingdom; <sup>2</sup>Rheumatology, BCU Hospital, North Wales, United Kingdom; <sup>3</sup>Chest Medicine, University Hospital, Coventry, United Kingdom; 4Rheumatology, Queens Hospital, Burton, United Kingdom; 5Rheumatology, Knowsley Hospital, St Helens, United Kingdom; 6Rheumatology, ERAN/ERAS City Hospital, St Albans, United Kingdom

#### 55 ANALYSIS OF CO-MORBIDITIES REPORTED BY PEOPLE LIVING WITH ARTHRITIS CONTACTING A NATIONAL **HELPLINE SERVICE**

Jo Cumming<sup>1</sup>, Peter Stannett<sup>1</sup>, Richard Hull<sup>2</sup>

<sup>1</sup>Information and Helplines, Arthritis Care, London, United Kingdom: <sup>2</sup>CMAB, Arthritis Care, London, United Kingdom

#### 56 THE EFFECTS OF INDIVIDUALISED AEROBIC AND STRENGTH TRAINING ON CARDIOVASCULAR OUTCOMES IN PATIENTS WITH RHEUMATOID ARTHRITIS

George Metsios<sup>1,2</sup>, Antonios Stavropoulos Kalinoglou<sup>2</sup>, Jet J. Veldhuijzen van Zanten<sup>2</sup>, Peter Nightingale<sup>2</sup>, Yiannis Koutedakis<sup>1</sup>, George D. Kitas<sup>2</sup>

<sup>1</sup>Physical Activity and Health, University of Wolverhampton, Walsall, United Kingdom; <sup>2</sup>Rheumatology, Dudley Group of Hospitals, Birmingham, United Kingdom

# OSTEOPOROTIC FRACTURE IN RHEUMATOID ARTHRITIS: A STUDY OF INCIDENCE, PREDICTIVE FACTORS AND ECONOMIC BURDEN FROM TWO UK INCEPTION COHORTS

Elena Nikiphorou<sup>1</sup>, Josh Dixey<sup>2</sup>, Peter Williams<sup>3</sup>, Patrick Kiely<sup>4</sup>, David Walsh<sup>5,6</sup>, Lewis Carpenter<sup>7</sup>, Adam Young1

<sup>1</sup>ERAS. Department of Rheumatology, St Albans City Hospital, St Albans, United Kingdom; <sup>2</sup>Rheumatology, New Cross Hospital, Wolverhampton, United Kingdom; <sup>3</sup>Rheumatology, Medway Maritime Hospital, Gillingham, United Kingdom; <sup>4</sup>Rheumatology, St George's Healthcare NHS Trust, London, United Kingdom; 5Rheumatology, Sherwood Forest Hospitals NHS Trust, Sutton-in-Ashfield, United Kingdom; <sup>6</sup>Academic Rheumatology, University of Nottingham, Nottingham, United Kingdom; <sup>7</sup>Centre for Lifespan and Chronic Illness Research, University of Hertfordshire, Hatfield, United Kingdom

#### NATURAL HISTORY, DISEASE CHARACTERISTICS AND 58 AUTOANTIBODY POSITIVITY IN PATIENTS WITH BRONCHIECTASIS AND RA: IS THE LUNG AN INITIATING SITE OF AUTOIMMUNITY IN RHEUMATOID ARTHRITIS?

Elizabeth Perry<sup>1,2</sup>, Clive Kelly<sup>1</sup>, Anthony de-Soyza<sup>3</sup>, Thomas Moullaali1, Paul Eggleton2, David Hutchinson4

<sup>1</sup>Rheumatology Department, Oueen Elizabeth Hospital. Gateshead, United Kingdom; <sup>2</sup>Peninsula Medical School, University of Exeter, Exeter, United Kingdom: <sup>3</sup>William Leech Centre. The Freeman Hospital. Newcastle. United Kingdom: <sup>4</sup>Rheumatology Department, Royal Cornwall Hospital, Truro, United Kingdom

#### 59 **ENDOTHELIAL FUNCTION IN PATIENTS WITH RHEUMATOID** ARTHRITIS: THE EFFECTS OF EXERCISE AND ANTI-TNF TREATMENT

Jet J. Veldhuiizen van Zanten<sup>1,2</sup>. George Metsios<sup>2,3</sup>. Antonios Stavropoulos-Kalinoglou<sup>2,4</sup>, Aamer Sandoo<sup>2</sup>, George D. Kitas<sup>2</sup>

<sup>1</sup>Sport and Exercise Sciences, University of Birmingham, Birmingham, United Kingdom; <sup>2</sup>Rheumatology Department, Dudley Group of Hospitals NHS Foundation Trust, Dudley, United Kingdom; 3School of Sport, Performing Arts and Leisure, Wolverhampton University, Wolverhampton, United Kingdom; <sup>4</sup>Sport and Exercise Science, University of Thessaly, Trikala, Greece

#### 60 INCIDENCE OF DIABETES AND EFFECT OF ETANERCEPT AND ADALIMUMAB ON HBA1C OVER 1 YEAR: DATA FROM A RANDOMISED TRIAL IN PATIENTS WITH RHEUMATOID **ARTHRITIS**

Paola de Pablo<sup>1,2</sup>, Fiona Maggs<sup>2</sup>, David Carruthers<sup>1,3</sup>, Abdul Faizal<sup>4</sup>, Mark Pugh<sup>5</sup>, Paresh Jobanputra<sup>1,2</sup>

<sup>1</sup>Rheumatology Research Group, University of Birmingham, Birmingham, United Kingdom; <sup>2</sup>Department of Rheumatology, Queen Elizabeth Hospital, UHB NHS Foundation Trust, Birmingham, United Kingdom; <sup>3</sup>Department of Rheumatology, City Hospital, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, United Kingdom; <sup>4</sup>Department of Rheumatology, Solihull Hospital, Heart of England NHS Foundation Trust, Birmingham, United Kingdom; <sup>5</sup>Department of Rheumatology, St Mary's Hospital, Newport, Isle of Wight, Birmingham, United Kingdom

# RHEUMATOID ARTHRITIS: PATHOGENESIS AND **ANIMAL MODELS**

INTRA-ARTICULAR INJECTION OF MESENCHYMAL STEM CELLS LEADS TO REDUCED **INFLAMMATION IN ANTIGEN-INDUCED ARTHRITIS** 



Oksana Kehoe<sup>1</sup>, Alison Cartwright<sup>1</sup>, Ayman Askari<sup>2</sup>, Alicia El Haj<sup>3</sup>, Jim Middleton<sup>1,4</sup>

<sup>1</sup>ISTM, Keele University at RJAH Orthopaedic Hospital, Oswestry, United Kingdom; <sup>2</sup>Rheumatology, RJAH Orthopaedic and District Hospital, Oswestry, United Kingdom; <sup>3</sup>ISTM, Keele University, Hartshill, Stoke on Trent, United Kingdom; <sup>4</sup>Faculty of Medicine and Dentistry, University of Bristol, Bristol, United Kingdom

# MACROPHAGES IN HYPOXIC RHEUMATOID JOINTS PREFERENTIALLY EXPRESS HYPOXIA-INDUCIBLE TRANSCRIPTION FACTOR-2



Sarah Aynsley<sup>1</sup>, Jacob Hardy<sup>1</sup>, Douglas Veale<sup>2</sup>, Ursula Fearon<sup>2</sup>, Gerry Wilson<sup>1</sup>, Munitta Muthana<sup>1</sup>

<sup>1</sup>Infection and Immunity, University of Sheffield, Sheffield, United Kingdom; <sup>2</sup>Department of Rheumatology, The Conway Institute of Biomolecular and Biomedical Research, Dublin, United Kingdom

# THE EFFECTS OF ANTI-TUMOR NECROSIS FACTOR AGENTS ON THE EXPANSION OF T HELPER-TYPE 17 CELLS DRIVEN BY LIPOPOLYSACCHARIDE-STIMULATED MONOCYTES



G. Fossati<sup>1</sup>, L. Healy<sup>1</sup>, A. Nesbitt<sup>1</sup>

<sup>1</sup>UCB, Slough, United Kingdom

RELATIONSHIP OF BAFF-BINDING RECEPTORS WITH SERUM BAFF LEVELS IN PATIENTS WITH RHEUMATOID ARTHRITIS RELAPSING AFTER RITUXIMAB

Elena Becerra<sup>1</sup>, Maria J. Leandro<sup>1</sup>, Inmaculada De La Torre<sup>1,2</sup>, Geraldine Cambridge<sup>1</sup>

<sup>1</sup>Rheumatology, University College London, London, United Kingdom; <sup>2</sup>Rheumatology, Gregorio Maranon Hospital, Madrid, Spain

65 IgG ANTIBODIES TO ENDOGENOUS VIRAL MATRIX SEGMENT OF HERV-K10 AND POTENTIAL IgG1Fc VIRAL MIMICS IN RHEUMATOID ARTHRITIS



P. N. Nelson<sup>1</sup>, D. Roden<sup>1</sup>, M. Shaw<sup>1</sup>, Hora Davari Ejtehadi<sup>2</sup>, A. Nevill<sup>3</sup>, G. Freimanis<sup>1</sup>, P. Hooley<sup>1</sup>, S. Bowman<sup>4</sup>, A. Alavi<sup>5</sup>, J. Axford<sup>5</sup>, A. M. Veitch<sup>6</sup>, N. Tugnet<sup>7</sup>, P. B. Rylance<sup>7</sup>

<sup>1</sup>Immunology Research Group, Research Institute in Healthcare Sciences, University of Wolverhampton, Wolverhampton, United Kingdom; <sup>2</sup>Faculty of Health, Birmingham City University, Birmingham, United Kingdom; <sup>3</sup>School of Performing Arts and Leisure, University of Wolverhampton, Wolverhampton, United Kingdom; <sup>4</sup>Department of Rheumatology, Selly Oak Hospital, Birmingham, United Kingdom; 5Sir Joseph Hotung Centre for Musculoskeletal Disorders, St. George's University of London and NHS Trust, London, United Kingdom; <sup>6</sup>Department of Gastroenterology, The Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom; <sup>7</sup>The Renal Unit, The Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom

#### 66 INVESTIGATION OF THE ROLE OF HISTONE **DEACETYLASES IN RHEUMATOID ARTHRITIS** SYNOVIAL FIBROBLASTS



Sarah Hawtree<sup>1</sup>, Munitta Muthana<sup>1</sup>, Sarah Aynsley<sup>1</sup>, J Mark Wilkinson<sup>2</sup>, Anthony G, Wilson<sup>1</sup>

<sup>1</sup>Infection and Immunity, University of Sheffield, Sheffield, United Kingdom; <sup>2</sup>Academic Unit of Bone Metabolism, Northern General Hospital, Sheffield, United Kingdom

#### 67 MEMBRANE-BOUND AND SOLUBLE BAFF **EXPRESSION BY HUMAN RHEUMATOID** FIBROBLAST-LIKE SYNOVIOCYTES IN RESPONSE TO TLR STIMULATION



Ngar Woon Kam<sup>1</sup>, Andrew Filter<sup>2</sup>, Christopher Buckley<sup>2</sup>, Costantino Pitzalis<sup>1</sup>, Michele Bombardieri<sup>1</sup>

<sup>1</sup>Centre for Experimental Medicine and Rheumatology. William Harvey Research Institute, London, United Kingdom; <sup>2</sup>Division of Immunity and Infection, College of Medical and Dental Science, Birmingham, United Kingdom

#### 68 SYNOVIAL FIBROBLASTS FROM PATIENTS WITH RHEUMATOID ARTHRITIS DIFFERENTIATE INTO DISTINCT FIBROBLAST SUBSETS IN THE PRESENCE OF CARTILAGE



Adam P. Croft<sup>1</sup>, Amy Naylor<sup>1</sup>, Birgit Zimmermann<sup>2</sup>, Debbie Hardie<sup>1</sup>, Guillaume Desanti<sup>1</sup>, Maria Jaurez<sup>1</sup>, Ulf Muller-Ladner<sup>2</sup>, Andrew Filer<sup>1</sup>, Elena Neumann<sup>2</sup>, Christopher Buckley<sup>1</sup>

<sup>1</sup>Centre for Translational Inflammation Research, University of Birmingham, Birmingham, United Kingdom; <sup>2</sup>Internal Medicine and Rheumatology, Justus-Liebig-University Gie en, Kerckhoff-Klinik, Bad Nauheim, Germany

#### RHEUMATOID ARTHRITIS: TREATMENT

# ORAL GLUCOCORTICOIDS AND THE RISK OF INCIDENT TYPE II DIABETES MELLITUS IN PATIENTS WITH RHEUMATOID ARTHRITIS

Mohammad Movahedi<sup>1</sup>, Mark Lunt<sup>1</sup>, David W. Ray<sup>2</sup>, William G. Dixon<sup>1</sup>

<sup>1</sup>Arthritis Research UK Epidemiology Unit, Manchester Academic Health Science Centre, The University of Manchester, Manchester, United Kingdom; <sup>2</sup>Institute of Human Development, Manchester Academic Health Science Centre, The University of Manchester, Manchester, United Kingdom

#### 70 LONG-TERM EFFECTIVENESS AND SAFETY OF ADALIMUMAB IN PATIENTS WITH MODERATE VERSUS SEVERE RHEUMATOID ARTHRITIS

Gerd R. Burmester<sup>1</sup>. Marco Matucci-Cerinic<sup>2</sup>. Francisco Navarro-Blasco<sup>3</sup>, Sonja Kary<sup>4</sup>, Kristina Unnebrink<sup>5</sup>, Hartmut Kupper<sup>4</sup>

<sup>1</sup>Clinic for Rheumatology and Clinical Immunology, Charité - Universitätsmedizin Berlin, Berlin, Germany; <sup>2</sup>Rheumatology, Azienda Ospdaliera Careggi, Firenze, Italy; <sup>3</sup>Hospital General, Universitario de Elche, Alicante, Spain; <sup>4</sup>Immunology Development, AbbVie GmbH and Co KG, Ludwigshafen, Germany; 5Data and Statistical Sciences, AbbVie GmbH and Co. KG, Ludwigshafen, Germany

# HIGH RETENTION ON METHOTREXATE AT 1 YEAR FOLLOWING TIGHT CONTROL OF RHEUMATOID ARTHRITIS

Sandeep Mukherjee<sup>1</sup>, Patricia Cornell<sup>1</sup>, Selwyn Richards<sup>1</sup>, Fouz Rahmeh<sup>1</sup>, Paul W. Thompson<sup>1</sup>, Sarah L. Westlake<sup>1</sup>

<sup>1</sup>Rheumatology Department, Poole Hospital NHS Foundation Trust, Poole, United Kingdom

#### 72 LATITUDE BUT NOT SEASON OF INITIATION PREDICTS CLINICAL RESPONSE TO THE THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS: THE BSR BIOLOGICS **REGISTER-RA**

Muhammad K. Javaid<sup>1</sup>. Raibir Batra<sup>1</sup>. Jasroop Chana<sup>1</sup>. Gemma Round<sup>1</sup>. Andrew Judge<sup>1</sup>. Peter Taylor<sup>1</sup>. Sanieev Patel2, Cyrus Cooper1

<sup>1</sup>NDORMS, University of Oxford, Oxford, United Kingdom; <sup>2</sup>Rheumatology, St George's Hospital Medical School, London, United Kingdom

#### 73 IMPACT OF RHEUMATOID ARTHRITIS DISEASE EDUCATION ON ADHERENCE TO THERAPY AND FOLLOW-UPS: A PROSPECTIVE CONTROLLED STUDY FROM INDIA

Vinod Ravindran<sup>1,2</sup>

<sup>1</sup>Department of Rheumatology, MES Academy of Medical Sciences, Perinthalmanna, India; <sup>2</sup>Department of Rheumatology, National Hospital, Kozhikode, India

PREDICTORS OF SIGNIFICANT DISEASE ACTIVITY SCORE-28 (USING C-REACTIVE PROTEIN) REMISSION ACHIEVED WITH INTRAVENOUS GOLIMUMAB IN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS DESPITE METHOTREXATE THERAPY: RESULTS OF THE PHASE III. MULTICENTER, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL

Clifton O. Bingham<sup>1</sup>, Michael E. Weinblatt<sup>2</sup>, Alan Mendelsohn<sup>3</sup>, Lilianne Kim<sup>4</sup>, Michael Mack<sup>4</sup>, Jiandong Lu<sup>4</sup>, Daniel Baker<sup>3</sup>, Rene Westhovens<sup>5</sup>

<sup>1</sup>Department of Rheumatology, Johns Hopkins University, Baltimore, MD, USA; <sup>2</sup>Department of Rheumatology, Brigham and Women's Hospital, Boston, MA, USA; <sup>3</sup>Immunology, Janssen Research and Development, LLC., Spring House, PA, USA; 4Biostatistics, Janssen Research and Development, LLC., Spring House, PA, USA; <sup>5</sup>Department of Musculoskeletal Sciences, UZ Gasthuisberg, Leuven, Belgium

#### RHEUMATOID ARTHRITIS RESPONSIBILITY DEAL 75 Jamie Hewitt<sup>1</sup>

<sup>1</sup>National Rheumatoid Arthritis Society, Maidenhead, United Kingdom

**VALIDATION OF REMISSION OF RHEUMATOID ARTHRITIS** BY TRADITIONAL DISEASE ACTIVITY SCORE AND PROVISIONAL CRITERIA BY AMERICAN COLLEGE OF RHEUMATOLOGY AND EUROPEAN LEAGUE AGAINST RHEUMATISM: ANALYSIS BASED ON PATIENT-REPORTED **OUTCOMES ANALYZED FROM 3 PHASE III GOLIMUMAB CLINICAL TRIALS** 

Chenglong Han<sup>1</sup>, Edward C. Keystone<sup>2</sup>, Roy Fleischmann<sup>3</sup>, Josef Smolen<sup>4</sup>, Paul Emery<sup>5</sup>, Mark Genovese<sup>6</sup>, Mittie Doyle<sup>7,8</sup>, Elizabeth C. Hsia<sup>7,8</sup>

<sup>1</sup>Health Economics, Janssen Global Services, LLC., Malvern, PA, USA; <sup>2</sup>Rheumatology, University of Toronto, Toronto, ON, Canada; <sup>3</sup>Department of Medicine, Division of Rheumatology, University of Texas Southwestern Medical Centre at Dallas, Dallas, TX, USA; 4Division of Rheumatology, Department of Internal Medicine III, Medical University of Vienna and Hietzing Hospital, Vienna, Austria: <sup>5</sup>Division of Rheumatic and Musculoskeletal Disease. University of Leeds, Leeds, United Kingdom: 6Division of Immunology and Rheumatology, Stanford University, Palo Alto, CA, USA; 7Immunology, Janssen Research and Development, LLC., Spring House, PA, USA; 8Rheumatology, University of Pennsylvania, Philadelphia, PA, USA

INFECTIONS IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH RITUXIMAB ARE ASSOCIATED WITH MULTIPLE RISK FACTORS INCLUDING LOW IGM LEVELS

Jennifer C. Hart<sup>1</sup>, Mark N. Lazarus<sup>1</sup>, Anne R. Kinderlerer<sup>1</sup>

<sup>1</sup>Department of Rheumatology, St Mary's Hospital, London, United Kingdom

TOCILIZUMAB IN METHOTREXATE-INTOLERANT OR CONTRAINDICATED PATIENTS - A COST-UTILITY MODEL FOR THE UNITED KINGDOM

Dave Harland<sup>1</sup>, Carl Gibbons<sup>1</sup>, Hok Pang<sup>2</sup>, Catherine Huertas<sup>2</sup>, Alex Diamantopoulos<sup>3</sup>, Fred Dejonckheere<sup>4</sup>

<sup>1</sup>Health Economics and Strategic Pricing, Roche Products Limited, Welwyn Garden City, United Kingdom; <sup>2</sup>Medical Affairs, Roche Products Limited, Welwyn Garden City, United Kingdom: <sup>3</sup>Health Economics. Symmetron Limited, London. United Kingdom: 4Global Pricing and Market Access, F. Hoffmann-La Roche, Basel, Switzerland

79 **OUTCOMES OF PREGNANCY IN SUBJECTS EXPOSED TO CERTOLIZUMAB PEGOL** 

M. Clowse1, D. Wolf<sup>2</sup>, C. Stach<sup>3</sup>, G. Kosutic<sup>4</sup>, S. Williams<sup>4</sup>, I. Terpstra<sup>5</sup>, U. Mahadevan<sup>6</sup>

<sup>1</sup>Medicine, Duke University Medical Centre, Durham, NC. USA: <sup>2</sup>Atlanta Gastroenterology Association, Atlanta, GA. USA; <sup>3</sup>UCB Pharma, Monheim, Germany; <sup>4</sup>UCB Pharma, Raleigh, NC, USA; 5UCB Pharma, Brussels, Belgium; 6UCSF Medical Centre, San Francisco, CA, USA

#### 80 MAINTENANCE OF REMISSION IN RA PATIENTS WITH LOW-MODERATE DISEASE ACTIVITY FOLLOWING WITHDRAWAL OF CERTOLIZUMAB PEGOL TREATMENT: WEEK 52 RESULTS FROM THE CERTAIN STUDY

Josef Smolen<sup>1</sup>, Paul Emery<sup>2</sup>, G. Ferraccioli<sup>3</sup>, W. Samborski<sup>4</sup>, F. Berenbaum<sup>5</sup>. O. Davies<sup>6</sup>. W. Koetse<sup>6</sup>. B. Bennett<sup>7</sup>. H. Burkhardt8

<sup>1</sup>Medicine, Medical University of Vienna and Hietzing Hospital, Vienna, Austria: <sup>2</sup>Division of Rheumatic and Musculoskeletal Disease, University of Leeds, Leeds, United Kingdom: <sup>3</sup>Institute of Rheumatology, School of Medicine. Catholic University of the Sacred Heart, Rome, Italy: <sup>4</sup>University of Medical Sciences, Poznan, Poland: <sup>5</sup>Pierre and Marie Curie University, AP-HP St-Antoine Hospital, Paris, France: 6UCB Pharma, Raleigh, NC, USA: 7BABennett Consulting, Marietta, GA, USA; 8Johan Wolfgang Goethe University, Frankfurt am Main, Frankfurt, Germany

#### 81 TIMING AND MAGNITUDE OF INITIAL RESPONSE TO CERTOLIZUMAB PEGOL IN A BROAD POPULATION OF PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS PREDICTS LIKELIHOOD OF LDA AT WEEK 28

Michael E. Weinblatt<sup>1</sup>. Rov Fleischmann<sup>2</sup>. O. Davies<sup>3</sup>. K. Luiitens<sup>3</sup>. Desiree van der Heiide<sup>4</sup>

<sup>1</sup>Brigham and Women's Hospital, Boston, MA, USA; <sup>2</sup>University of Texas SW Medical Centre, Dallas, TX, USA; <sup>3</sup>UCB Pharma, Brussels, Belgium; <sup>4</sup>Department of Rheumatology, Leiden University Medical Centre, Leiden, Netherlands

#### SAFETY UPDATE ON CERTOLIZUMAB PEGOL IN PATIENTS 82 WITH ACTIVE RHEUMATOID ARTHRITIS WITH LONG-TERM **EXPOSURE**

X. Mariette<sup>1</sup>, Ronald F. van Vollenhoven<sup>2</sup>, V. Bykerk<sup>3</sup>, M. de Longueville<sup>4</sup>, C. Arendt<sup>4</sup>, K. Luijtens<sup>4</sup>, J. Cush<sup>5</sup>

<sup>1</sup>Paris-Sud University, Paris, France; <sup>2</sup>Karolinska Institute, Stockholm, Sweden; <sup>3</sup>Hospital for Special Surgery, New York, NY, USA; 4UCB Pharma, Brussels, Belgium; 5Baylor Research Institute, Dallas, TX, USA

#### 83 MANAGEMENT OF RHEUMATOID ARTHRITIS IN WALES: AN ALL-WALES AUDIT

Afsha Khan<sup>1</sup>, Zoe Maclaren<sup>2</sup>, Savam Dubash<sup>3</sup>

<sup>1</sup>Rheumatology, Princess of Wales Hospital, Bridgend, United Kingdom: <sup>2</sup>Rheumatology Department, Wrexham Maelor Hospital, Wrexham, United Kingdom: <sup>3</sup>Rheumatology Department, Hinchingbrooke Hospital, Cambridgeshire, United Kingdom

#### 84 A RETROSPECTIVE STUDY OF THE EFFECTS OF SWITCHING FROM ORAL TO SUBCUTANEOUS METHOTREXATE ON DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

Venkat C. Chalam<sup>1</sup>, Tom Sheeran<sup>1</sup>, Tom Price<sup>1</sup>, Sangeetha Baskar<sup>1</sup>. Diarmuid Mulherin<sup>1</sup>. Cauline Mollov<sup>1</sup>. Fiona Keay<sup>1</sup>, Caroline Heritage<sup>1</sup>, Barbara Douglas<sup>1</sup>

<sup>1</sup>Cannock Rheumatology Centre, Cannock, United Kingdom

# CHANGES IN PATIENT-REPORTED OUTCOMES IN RESPONSE TO SUBCUTANEOUS ABATACEPT OR ADALIMUMAB IN RHEUMATOID ARTHRITIS: RESULTS FROM THE AMPLE (ABATACEPT VERSUS ADALIMUMAB COMPARISON IN BIOLOGIC-NAIVE RA SUBJECTS WITH **BACKGROUND METHOTREXATE) TRIAL**

Roy Fleischmann<sup>1</sup>, Michael E. Weinblatt<sup>2</sup>, Michael H. Schiff<sup>3</sup>, Dinesh Khanna<sup>4</sup>, Daniel E. Furst<sup>5</sup>, Michael A. Maldonado<sup>6</sup>

<sup>1</sup>Department of Internal Medicine, University of Texas Southwestern Medical Centre, Dallas, TX, USA; <sup>2</sup>Rheumatology and Immunology, Brigham and Women's Hospital, Boston, MA, USA; <sup>3</sup>Rheumatology Division, University of Colorado, Denver, CO, USA; <sup>4</sup>Department of Internal Medicine, University of Michigan, Ann Arbor, MI, USA; 5Division of Rheumatology, University of California at Los Angeles, Los Angeles, CA, USA; 6Medical Affairs, Bristol-Myers Squibb, Princeton, NJ, USA

# IMPACT OF A MULTI-BIOMARKER DISEASE ACTIVITY TEST ON RHEUMATOID ARTHRITIS DECISION AND THERAPY **USE**

Wanying Li<sup>1</sup>, Eric H. Sasso<sup>1</sup>, Daniel Emerling<sup>2</sup>, Guy Cavet<sup>1</sup>, Kerri Ford<sup>1</sup>

<sup>1</sup>Medical, Crescendo Bioscience Inc., South San Francisco, CA, USA; <sup>2</sup>Research, Biosimplify, El Cerrito, CA, USA

# STUCK IN THE MIDDLE WITH DAS: UNDERTREATMENT OF MODERATE RHEUMATOID ARTHRITIS

Bronwen Mackenzie-Green<sup>1</sup>, David Collins<sup>1</sup>, Elizabeth Price<sup>1</sup>, Lyn Williamson<sup>1</sup>

<sup>1</sup>Rheumatology, Great Western Hospital, Swindon, United Kingdom

# SHOULD MSK ULTRASOUND ASSESSMENT BE DONE ROUTINELY PRE-BIOLOGICS IN INFLAMMATORY ARTHRITIS MANAGEMENT?

Janardhana Golla<sup>1</sup>, Vipul Vagadia<sup>1</sup>

<sup>1</sup>University Hospital of North Tees, Stockton on Tees, United Kingdom

#### REGISTRY, AUDIT AND OBSERVATIONAL STUDY OF 89 GREATER GLASGOW AND CLYDE RHEUMATIC PATIENTS RECEIVING BIOLOGIC THERAPY: BASELINE FEATURES AND ADVERSE EVENT PROFILE IN PATIENTS WITH RHEUMATOID ARTHRITIS

Elaine Morrison<sup>1</sup>, Ann Tierney<sup>2</sup>, Hilary Wilson<sup>3</sup>, John Hunter<sup>4</sup>

<sup>1</sup>Rheumatology, Southern General Hospital, Glasgow, United Kingdom; <sup>2</sup>Centre for Rheumatic Diseases, Glasgow Royal Infirmary, Glasgow, United Kingdom; <sup>3</sup>Rheumatology, Stobhill Hospital, Glasgow, United Kingdom; <sup>4</sup>Rheumatology, Gartnavel General Hospital, Glasgow, United Kingdom

#### 90 SYSTEMATIC REVIEW COMPARING COMBINATION DMARD THERAPY WITH ANTI-TNF PLUS METHOTREXATE IN DRUG-RESISTANT RHEUMATOID ARTHRITIS

Margaret H. Ma1, David L. Scott1

<sup>1</sup>Academic Department of Rheumatology, King's College London, London, United Kingdom

#### 91 TOCILIZUMAB IS EFFECTIVE FOR THE TREATMENT OF ANTI-TNF- AND RITUXIMAB-REFRACTORY RHEUMATOID **ARTHRITIS**

Venkat Reddy<sup>1,2</sup>, Samantha Moore<sup>2</sup>, Michael Ehrenstein<sup>1,2</sup>

<sup>1</sup>Rheumatology, University College London, London, United Kingdom; <sup>2</sup>Rheumatology, University College Hospital, London, United Kingdom

#### 92 EFFICACY AND LONG-TERM SAFETY OF RITUXIMAB IN RHFUMATOID ARTHRITIS: 8 YEAR FOLLOW-UP OF THE FIRST 52 PATIENTS TREATED IN THE BELFAST TRUST RHEUMATOLOGY UNIT

Claire Benson<sup>1</sup>, Maria Wray<sup>1</sup>, Andrew Cairns<sup>1</sup>, Gary Wright<sup>1</sup>, Adrian Pendleton<sup>1</sup>, Michelle McHenry<sup>1</sup>, Allister Taggart<sup>1</sup>, Aubrey Bell<sup>1</sup>

<sup>1</sup>Department of Rheumatology, Belfast HSCT, Belfast, United Kingdom

#### 93 DEVLOPMENT OF PATIENT-REPORTED EXPERIENCE MEASURES FOR RHEUMATOID ARTHRITIS: RESULTS OF A PILOT STUDY

Ailsa Bosworth<sup>1</sup>, Maureen Cox<sup>2</sup>, Graeme Johnston<sup>1</sup>, Preeti Shah<sup>3</sup>, Anne O'Brien<sup>4</sup>, Peter Jones<sup>5</sup>, Ify Sargeant<sup>6</sup>, Marwan Bukhari7,8

<sup>1</sup>NRAS, National Rheumatoid Arthritis Society, Maidenhead, United Kingdom; <sup>2</sup>Rheumatology, Nuffield Orthopaedic Centre, Oxford, United Kingdom; <sup>3</sup>Rheumatology, Trafford General Hospital, Trafford, United Kingdom; 4School of Health and Rehabilitation, Keele University, Keele, United Kingdom; 5Statistics, Keele University, Keele, United Kingdom; 6Communications, Ismedica Ltd, Wrinehill, United Kingdom; <sup>7</sup>Rheumatology, Royal Lancaster Infirmary, Lancaster, United Kingdom; 8Clinical Sciences, University of Liverpool, Liverpool, United Kingdom

#### 94 REAL-WORLD EFFICACY AND SAFETY OF ABATACEPT TREATMENT FOR RHEUMATOID ARTHRITIS: 12-MONTH INTERIM ANALYSIS OF THE ACTION STUDY

Hubert Nusslein<sup>1</sup>, Rieke Alten<sup>2</sup>, Mauro Galeazzi<sup>3</sup>, Hannes M. Lorenz<sup>4</sup>, Dimitrios Boumpas<sup>5</sup>, Michael T. Nurmohamed<sup>6</sup>, William Bensen<sup>7</sup>, Gerd R. Burmester<sup>8</sup>, Hans-Hartmut Peter<sup>9</sup>, Franz Rainer<sup>10</sup>, Karel Pavelka<sup>11</sup>, Melanie Chartier<sup>12</sup>, Coralie Poncet<sup>13</sup>, Christiane Rauch<sup>14</sup>, Manuela Le Bars<sup>15</sup>

<sup>1</sup>Department of Clinical Immunology and Rheumatology. University Erlangen, Nürnberg, Germany: <sup>2</sup>Schlosspark-Klinik, University Medicine, Berlin, Germany; <sup>3</sup>Institute of Rheumatology, University Medicine, University of Siena, Italy; <sup>4</sup>Division of Rheumatology, University Hospital Heidelberg, Heidelberg, Germany: 5Rheumatology, Clinical Immunology and Allergy. Panepistimio Kritis. Rethymnon, Greece: 6VU University Medical Centre, Jan van Bremen Research Institute. Amsterdam. Netherlands: <sup>7</sup>Department of Medicine, St. Joseph's Hospital and McMaster University, Hamilton, ON, Canada: 8Department of Rheumatology and Clinical Immunology. Charité-Universitätsmedizin, Berlin, Germany: 9Centre of Chronic Immunodeficiency, University Medical Centre Freiburg, Freiburg, Germany; <sup>10</sup>Department of Internal Medicine, Hospital Barmherzige Brueder, Graz, Austria; <sup>11</sup>Institute and Clinic of Rheumatology, Charles University, Prague, Czech Republic; <sup>12</sup>Real World Research Department, Chiltern International, Neuilly, France; <sup>13</sup>Department of Biostatistics, Docs International, Sévres, France: <sup>14</sup>Medical Affairs Immunoscience. Bristol-Myers Squibb, Munich, Germany: 15 Medical Affairs, Bristol-Myers Squibb, Rueil-Malmaison, France

#### 95 **EXPECTATIONS OF NEW TREATMENT IN RHEUMATOID** ARTHRITIS: THE DEVELOPMENT OF A PATIENT-GENERATED SCALE

Heidi Lempp<sup>1,2</sup>, Darija Hofmann<sup>2</sup>, Aderonke Adu<sup>2</sup>, Carron Congreve<sup>2</sup>, Joanne Dobson<sup>2</sup>, Diana Rose<sup>3</sup>. Carol Simpson<sup>1</sup>, Til Wykes<sup>3</sup>, Andrew Cope<sup>1</sup>, David L. Scott<sup>1,2</sup>, Fowzia Ibrahim<sup>1</sup>

<sup>1</sup>Academic Rheumatology, School of Medicine, King's College London, London, United Kingdom; <sup>2</sup>Rheumatology, King's College Hospital NHS Foundation Trust, London, United Kingdom; <sup>3</sup>Health Service and Population Research Department, Institute of Psychiatry, King's College London, London, United Kingdom

#### 96 WEEKLY SUBCUTANEOUS ABATACEPT CONFERS COMPARABLE ONSET OF TREATMENT RESPONSE AND MAGNITUDE OF EFFICACY IMPROVEMENT OVER 6 MONTHS WHEN ADMINISTERED WITH OR WITHOUT AN INTRAVENOUS ABATACEPT LOADING DOSE

Michael Schiff<sup>1</sup>, Rieke Alten<sup>2</sup>, Michael E. Weinblatt<sup>3</sup>, Peter Nash<sup>4</sup>, Roy Fleischmann<sup>5</sup>, Patrick Durez<sup>6</sup>, Jeffrey Kaine<sup>7</sup>, Ingrid Delaet<sup>8</sup>, Sheila Kelly<sup>9</sup>, Michael Maldonado<sup>9</sup>, Salil Patel<sup>9</sup>, Mark Genovese<sup>10</sup>

<sup>1</sup>Rheumatology Division, University of Colorado, Denver, CO, USA; <sup>2</sup>Schlosspark-Klinik, University Medicine, Berlin, Germany; <sup>3</sup>Rheumatology and Immunology, Brigham and Women's Hospital, Boston, MA, USA; 4Department of Medicine, University of Queensland, Brisbane, QLD, Australia; <sup>5</sup>Department of Internal Medicine, University of Texas, Southwestern Medical Centre, Dallas, TX, USA; <sup>6</sup>Rheumatology Department, Université Catholique de Louvain, Brussels, Belgium; <sup>7</sup>Rheumatology, Sarasota Arthritis Research Centre, Sarasota, FL, USA; 8Global Clinical Research Immunology, Bristol-Myers Squibb, Princeton, NJ, USA; 9Medical Affairs, Bristol-Myers Squibb, Princeton, NJ, USA; <sup>10</sup>Division of Immunology and Rheumatology, Stanford University, Palo Alto, CA, USA

#### 97 LONG-TERM EFFICACY OF TOCILIZUMAB MONOTHERAPY IN PATIENTS WITH RA: AMBITION EXTENSION 240 WEEK **DATA**

Graeme Jones<sup>1</sup>, Anthony Sebba<sup>2</sup>, Denise Lepley<sup>3</sup>, Jenny Devenport<sup>3</sup>, Corrado Bernasconi<sup>4</sup>, Devi Smart<sup>5</sup>, Chiedzo Mpofu<sup>4</sup>, Juan J. Gomez-Reino<sup>6</sup>

<sup>1</sup>Rheumatology, Menzies Research Institute Tasmania, Hobart, TAS, Australia; <sup>2</sup>Rheumatology, University of South Florida, Tampa, FL, USA; 3Medical, Genentech, San Francisco, CA, USA; <sup>4</sup>Medical, Roche, Basel, Switzerland; <sup>5</sup>Medical, Roche Products Ltd, Welwyn Garden City, United Kingdom; <sup>6</sup>Rheumatology, Hospital Clinico Universitario, Santiago, Spain

#### 98 NITRIC OXIDE LEVELS IN RHEUMATOID ARTHRITIS **IMPROVES AFTER IL-6 BLOCKADE**

Inderjeet Verma<sup>1,2</sup>, Jaspreet Kaur<sup>1,3</sup>, Ashit Syngle<sup>2,3</sup>, Pawan Krishan<sup>1</sup>, Kanchan Vohra<sup>1</sup>, Ladbans Kaur<sup>4</sup>, Nidhi Garg<sup>1,2</sup>, Monica Chhabara<sup>3</sup>

<sup>1</sup>Department of Pharmaceutical Sciences and Drug Research, Punjabi University Patiala, Punjab, Patiala, India; <sup>2</sup>Rheumatology, Healing Touch City Clinic, Chandigarh, India; <sup>3</sup>Radiology, Fortis Multispecialty Hospital, Mohali, Punjab, India; <sup>4</sup>Radiology, Prime Diagnostics, Chandigarh, India

#### 99 FUNCTIONALLY OPTIMISED ORTHOSES FOR EARLY RHEUMATOID ARTHRITIS FOOT DISEASE: A FIRST-ON-MAN, PHASE I STUDY OF MECHANISMS AND PATIENT EXPERIENCE

Kellie Gibson<sup>1</sup>, James Woodburn<sup>1</sup>, Scott Telfer<sup>1</sup>

<sup>1</sup>Institute for Applied Health Research, School of Health and Life Sciences, Glasgow Caledonian University, Glasgow, United Kingdom

# 100 COMPARATIVE EFFICACY OF BIOLOGICS AS MONOTHERAPY AND IN COMBINATION WITH METHOTREXATE IN RHEUMATOID ARTHRITIS PATIENTS WITH AN INADEOUATE RESPONSE TO CONVENTIONAL **DMARDS: A NETWORK META-ANALYSIS**

Felicity Buckley<sup>1</sup>, Axel Finckh<sup>2</sup>, Tom W. Huizinga<sup>3</sup>. Fred Dejonckheere<sup>4</sup>, Jeroen P. Jansen<sup>1</sup>

<sup>1</sup>Consultancy, MAPI Consultancy, Boston, MA, USA; <sup>2</sup>Rheumatology, University Hospital of Geneva, Geneva, Switzerland; <sup>3</sup>Rheumatology, Leiden University Medical Centre, Leiden, Netherlands; 4Medical, F. Hoffmann-La Roche Ltd, Basel, Switzerland

## 101 LONG-TERM SAFETY OF TOCILIZUMAB IN RA PATIENTS TREATED FOR A MEAN DURATION OF 3.7 YEARS

Mark Genovese<sup>1</sup>, Anthony Sebba<sup>2</sup>, Andrea Rubbert-Roth<sup>3</sup>, Juan J. Scali<sup>4</sup>, Rieke Alten<sup>5</sup>, Joel M. Kremer<sup>6</sup>, Laura Pitts<sup>7</sup>, Emma Vernon<sup>7</sup>, Ronald F. van Vollenhoven<sup>8</sup>

<sup>1</sup>Immunology and Rheumatology, Stanford University Medical Centre, Palo Alto, CA, USA: <sup>2</sup>Rheumatology, University of South Florida, Tampa, FL, USA; <sup>3</sup>Internal Medicine, University of Cologne, Cologne, Germany; <sup>4</sup>Rheumatology, Durand University Hospital, Buenos Aires, Argentina; <sup>5</sup>Rheumatology, Schlosspark Klinik, University Medicine Berlin, Berlin, Germany; <sup>6</sup>Rheumatology, Albany Medical College, Albany, NY, USA; <sup>7</sup>Medical, Roche Products Ltd, Welwyn Garden City, United Kingdom; 8Medicine, Karolinska Institute, Stockholm, Sweden

## 102 DOSE REDUCTION IN RITUXIMAB RETREATMENT MAY DELAY ACHIEVEMENT OF OPTIMAL RESPONSES

Mohammed I. Sharif<sup>1</sup>, Sudipto Das<sup>2</sup>, Paul Emery<sup>2</sup>, Helen Maciver<sup>3</sup>, Wendy Shingler<sup>3</sup>, Philip Helliwell<sup>2</sup>, Katharina Sokoll<sup>3</sup>, Edward M. Vital<sup>2</sup>

<sup>1</sup>Rheumatology, East Surrey Hospital, Surrey, United Kingdom; <sup>2</sup>University of Leeds, Leeds, United Kingdom; <sup>3</sup>Rheumatology, Bradford Teaching Hospital, Bradford, United Kingdom