EULAR unveils recommendations for cancer immunotherapy adverse events

Over the past decade there has been increasing success of treating patients with cancer with immunotherapy. The arrival of checkpoint inhibitors, for example, has given many patients with advanced or unresectable disease a much-needed treatment option. While some unprecedented responses have been seen, the use of such drugs has not been without the development of some seriously immune-related adverse events (irAEs). These include those that may mimic or become genuine rheumatic and musculoskeletal diseases (RMDs).

“The main cancer immunotherapies causing rheumatic complications are the immune checkpoint inhibitors,” Dr. Marie Kostine, of the department of rheumatology at Bordeaux University Hospital in France, said in an interview. A growing number of patients are affected, with a recent prospective series estimating the prevalence to be 6.6%.

“Arthralgia and myalgia were commonly reported rheumatic irAEs in clinical trials, with a prevalence ranging from 1% to 43% and from 2% to 21%, respectively. In clinical practice, the two major clinical entities observed are polymyalgia rheumatica-like syndromes and rheumatoid arthritis–like syndromes,” Dr. Kostine said. Indeed, these rheumatic irAEs often present with atypical features of common RMDs, notably with the lack of inflammatory markers or autoantibodies. Moreover, the whole spectrum of RMDs can occur, such as sicca syndrome.

EULAR develops a framework to apply Big Data to RMDs

Big Data is a concept that has captured the attention of the medical community, but recommendations from medical societies and other authorities on how to leverage Big Data are not yet commonplace. The term “Big Data” itself has a broad definition, and could define the large-scale data sets that include imaging data, electronic health records, or administrative claim records, among others. Big Data also is sometimes also used to refer to specific analytics and statistical methods, such as artificial intelligence and machine learning.

For health professionals, Big Data has the potential to change how they practice. In the case of rheumatologists, recordings of daily activity may help predict rheumatoid arthritis or spondyloarthritis flares. Diabetes specialists could predict diabetic retinopathy from fundus images. In the future, we also could potentially predict depression based on a patient’s social media use.

Unacceptable pain often remains in PsA despite inflammation control

A considerable number of patients with psoriatic arthritis starting their first biologic treatment report unacceptable pain throughout the first year of treatment, even when their inflammation is controlled, according to Swedish researchers.

“Despite this often-efficient therapy, 40% of patients still had unacceptable pain after 1 year, and pain with features indicative of a noninflammatory mechanism accounted for more than 60% of this pain load,” said senior study author Dr. Tor Olofsson of Lund (Sweden) University. He will discuss the study and its implications this morning.

“Within rheumatology, today we are generally very good at treating inflammation in many of the arthritides, but we have a lot of patients with persistent pain despite being well treated for their inflammation,” Dr. Olofsson said. “In psoriatic arthritis patients, this re-
Measuring radiographic progression remains important

Three presentations at a session this morning will discuss whether structural damage progression of rheumatoid arthritis, axial spondyloarthritis, and psoriatic arthritis is still clinically meaningful measurements for these diseases.

“Average data on progression of structural damage may be misleading,” Prof. Désirée van der Heijde, of the department of rheumatology at Leiden (Netherlands) University Medical Centre, said in an interview. “It is still important to be informed about structural damage in clinical trials, as this differentiates drugs with a disease-modifying capacity from symptom-modifying drugs only.” In clinical practice, it is also important to know whether patients have structural damage progression because patients undergoing treat-to-target strategies will still show important progression, she added.

Prof. van der Heijde will present these points at her session titled, “Structural damage progression in RA – does it still matter with improved medical and non-medical treatments.” Dr. Denis Poddubnyy of the departments of gastroenterology, infectious diseases and rheumatology at Charité – Universitätsmedizin Berlin, will follow with his presentation titled, “Structural damage progression in axSpA.” Prof. Philip Helliwell, of the Leeds (UK) Institute of Rheumatic and Musculoskeletal Medicine, will end the session with his presentation titled “Structural damage progression in PsA.”

In the first presentation, Prof. van der Heijde will discuss data from observational cohorts and clinical trials that show a reduction in radiographic progression for patients with rheumatoid arthritis (RA) over the last decades. This overall reduction in radiographic progression is the consequence of early referral of patients, immediate initiation of an appropriate dose of methotrexate, the availability of biologic and targeted synthetic disease-modifying antirheumatic drugs (bDMARDs and tsDMARDs), and the use of treat-to-target strategies.

“Based on the low average progression rates it may be concluded that structural damage is no longer important,” she said. “However, average information provides misleading information as many patients have no or limited progression but a small proportion of the patients have still major progression.” It is these patients with significant progression for whom treatment needs to be adjusted.

In psoriatic arthritis, measuring radiographic progression can be challenging because the arthritis is less frequent than in diseases such as RA and the rate of radiographic progression is slower. In addition, there are limited data on how ultrasound and MRI – which may be more sensitive or responsive to these changes – can effectively measure radiographic progression.

Structural damage also remains a relevant data point in axial spondyloarthritis (axSpA), Dr. Poddubnyy said. “Structural damage in the spine is an important long-term determinant of spinal mobility and functional status in axial SpA.”

Structural damage and inflammatory activity are linked, and new bone formation (syndesmophytes) that can result in bony ankylosis of the spine develops in areas affected by inflammation in the past. “Early, effective, and long-term suppression of inflammation is currently the best way to prevent and/or retard structural damage progression in the spine in axSpA,” Dr. Poddubnyy said.

“Tight control of inflammatory activity, with remission as a main target, is especially important in patients who are at high risk for rapid progression of structural damage in the spine,” such as those with high inflammatory activity and syndesmophyte development within the first years of disease, he said.

Prof. van der Heijde is a consultant for more than 20 pharmaceutical companies. Dr. Poddubnyy reported receiving grants and/or research support and/or serving as a consultant to or on the speakers bureau for many pharmaceutical companies. Prof. Helliwell reported receiving grant and/or research support and serving as a consultant to multiple pharmaceutical companies.

Rheumatic immune-related adverse event recommendations

Continued from // 1

Abstract Session

Other orphan diseases

Thursday, 10:15 – 11:45
N111/N112

Dr. Kostine will present the recommendations for the first time this morning during the “Other orphan diseases” abstract session.

The EULAR recommendations are guided by four overarching principles, three of which emphasise the need for close collaboration with oncologists to manage patients presenting with rheumatic and musculoskeletal signs and symptoms.

There are 10 recommendations, including the prompt assessment of patients who are experiencing rheumatic irAEs by a rheumatologist; the recommendations also give advice on management, such as when and how to use glucocorticoids and conventional synthetic and biologic disease-modifying antirheumatic drugs.

There is also guidance on how to manage patients who have pre-existing autoimmune rheumatic or connective tissue disease and then develop cancer, and when to test for the presence of autoantibodies.

“Compared to existing recommendations produced by our oncology colleagues, EULAR recommendations will be different by adding the opinion and expertise of several leaders in rheumatology or immunology from different countries to the current literature,” Dr. Kostine observed.

“With their knowledge of rheumatic and autoimmune diseases, as well as their familiarity with immunosuppressive/immunomodulatory drugs, rheumatologists should play a central role in developing such recommendations.”

Dr. Kostine and some of the other members of the recommendations task force reported numerous relationships with pharmaceutical companies.
Addressing **Real-World Practice Gaps** in the Management of RA

**FRIDAY, 14 JUNE 2019 / ROOM N117+118**

www.RMEI.com/EULAR2019

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**ACCREDITED PROGRAM AGENDA**

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| 18:00 – 18:10 | Welcome and Introductions  
*Paul Emery, MA, MD, FRCP, FMedSci* |
| 18:10 – 18:20 | Data from EULAR 2018:  
*What Do Current Gaps Mean for Patients?*  
*Paul Emery, MA, MD, FRCP, FMedSci* |
| 18:20 – 18:30 | Panel Discussion #1: Pathologic Mechanisms in RA and Implications for Management  
*All Faculty* |
| 18:30 – 18:40 | Q&A Session with Attendees |
| 18:40 – 18:50 | Panel Discussion #2: Standards for Disease Monitoring to Guide Treatment  
*All Faculty* |
| 18:50 – 19:00 | Q&A Session with Attendees |
| 19:00 – 19:20 | Panel Discussion #3: Switching versus Cycling and the Role of New Treatment Options  
*All Faculty* |
| 19:20 – 19:30 | Closing Remarks |

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**ACCREDITATION STATEMENT**

An application has been made to the UEMS EACCME® for CME accreditation of this event.

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**FUNDING SUPPORT**

Supported by an educational grant from Sanofi Genzyme and Regeneron Pharmaceuticals.
New data support biomarkers’ predictive power for psoriatic arthritis

Changes in DNA methylation occurred in psoriasis patients approximately 4 years before a psoriatic arthritis diagnosis in a study of psoriasis patients who did and did not develop psoriatic arthritis. “It was important to conduct this study now because we know that epigenetics plays an important role in immune regulation, but we know very little about how epigenetic deregulation contributes to the development of psoriatic arthritis [PsA] in patients with psoriasis,” Remy Pollock, PhD, of University Health Network, Toronto, said in an interview.

The findings support the potential role of DNA methylation in the development of disease, said Dr. Pollock, who will present the full study results this afternoon.

To identify potential predictive biomarkers for PsA, Dr. Pollock and colleagues conducted an epigenome-wide comparison of DNA methylation in blood samples from 60 psoriasis patients who developed PsA and 60 who did not. The groups were taken from a longitudinal cohort and matched for age, sex, duration of psoriasis, and duration of follow-up.

“We found very subtle but detectable DNA methylation changes in psoriasis patients a median of 4.2 years prior to PsA diagnosis. This is somewhat surprising because it suggests that molecular changes may be occurring in psoriasis patients years before clinical manifestations of PsA appear,” Dr. Pollock said.

A total of 68 individual CpG sites were differentially methylated between patients who developed PsA and those who did not, after controlling for cell type heterogeneity. The researchers found changes in genes involved in processes including lysosomal degradation, bone homeostasis, and mediation of apoptosis of activated B cells.

In addition, the researchers found that several CpG sites mapped to protein-protein interaction subnetworks involved in areas of Th17 differentiation (IRF4 and MAF), tumour necrosis factor-alpha signaling (IKBKE, REL, MAVS, TRAF7, MAFF), and Toll-like receptor signaling (TLR1, IRAK2, MYD88, TOLLIP, TICAM1, TRAM1). Although approximately 30% of psoriasis patients develop PsA, often within 10 years of their psoriasis diagnosis, a large population of PsA remains undiagnosed, the researchers said.

“The major take-home message is that we may one day be able to use molecular markers such as DNA methylation as prognostic markers of future onset of arthritis in psoriasis patients,” Dr. Pollock said. For the future, “the next steps are to determine how these DNA methylation patterns change once patients are diagnosed with PsA, and also see whether methylation marks correlate with gene and protein expression of inflammatory pathways.”

Dr. Pollock had no financial conflicts to disclose. Several coauthors reported relationships with multiple companies, including AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Lilly, Novartis, Pfizer, Galapagos, Gilead, Janssen, and UCB.
‘A Vision for Lupus’ was published on World Lupus Day 2019 by a Global Multidisciplinary Steering Committee in collaboration with GSK. Aimed at highlighting current gaps and inconsistencies, the report outlines patient-centred calls to action, creates a future vision for lupus care and highlights key areas of opportunity to help in the management of patients.

Come to this interactive symposium to hear perspectives from the report and help contribute towards its evolution.

You can download the report via the links below.

**Date and time:**
08:15 – 09:45, 14th June 2019

**Venue:**
Room, N111/N112, IFEMA Feria de Madrid

**Symposium Faculty:**
- **(Chair) Dr Chiara Tani**, Rheumatologist, University of Pisa, Italy
- **Dr Patricia Cagnoli**, Rheumatologist, University of Michigan, US
- **Prof Chris Edwards**, Consultant Rheumatologist, University Hospital Southampton, UK

**Disease Awareness:**
*What is needed, how and why*
Hear about initiatives making a difference to disease awareness

**Integrated Service Delivery:**
*The reality and what is possible*
Learn from the experience of specialist lupus centres based in Europe and the US

**Clinical Research:**
*Preparing the future together*
Hear about the learnings for clinical research based on experience gained from the largest programme conducted in different lupus patients within multiple trial settings

**Transforming the course of immuno-inflammation to help people Live The Best Day, Every Day.**

This symposium has been organised and funded by GSK
**Breakfast / refreshments will be provided**

Date of preparation: May 2019
Job code: NP-GBL-LPU-JRNA-190001

Download the report here: [www.visionforlupus.org](http://www.visionforlupus.org)
Data from a randomised, controlled trial of patients with carpometacarpal osteoarthritis (OA) support the core interventional treatments of patient education, hand exercises, assistive devices, and orthoses that are found in the most recently updated EULAR treatment recommendations for hand OA. The results of the study indicate that these core treatments reduce pain, improve function, and potentially reduce the need for surgery, according to Prof. Ingvild Kjeken of the National advisory unit on rehabilitation in health services research with the department at Diakonhjemmet Hospital in Oslo.

Else Marit Holen Gravås, a PhD candidate and occupational therapist also from Diakonhjemmet Hospital, will discuss those results this morning in a presentation titled, “Does occupational therapy delay or reduce the proportion of patients who receive thumb carpometacarpal surgery? A randomized controlled trial.” Prof. Kjeken will follow this presentation with a secondary analysis in a session titled, “Short-term effect of occupational therapy intervention on hand function and pain in patients with thumb base osteoarthritis – Secondary analyses of a randomised controlled trial.”

Prof. Kjeken said the researchers at Diakonhjemmet Hospital encountered the question of whether occupational therapy helps delay thumb carpometacarpal (CMC1) surgery when meeting with occupational therapists who work with these patients. “They experienced that surgeons increasingly referred patients with CMC1 osteoarthritis for provision of orthoses and hand exercises;” she said. “They also got positive feedback from patients that these interventions reduced pain and helped them to manage their daily activities, but as we know, such feedback may not give the whole picture, as patients who are satisfied are more prone to give feedback than those who are not.”

In a randomised, controlled trial, 180 patients from three Norwegian rheumatology departments received information on hand OA, while 90 participants in the occupational therapy group additionally received a hand exercise programme, day and night orthoses, and assistive devices. They also registered days of exercise and use of orthoses into a treatment diary. Patients had a follow-up visit at 4 months, 18 months, and 24 months.

The researchers found that 22 of 90 patients (24%) in the occupational therapy group and 28 of 90 patients (32%) in the control group received surgery (P = .32) prior to 2-year follow-up, and the likelihood of receiving surgery in the occupational therapy group was 43% lower (P = .15); however, the results were not statistically significant.

Dr. Kjeken noted that the results may not have been statistically significant because of the lack of data from studies on how many referrals led to surgery. The assumption of a 70% surgery rate used in the sample size calculation was therefore based on surgeons’ assumptions rather than facts,” she said. “As the results show, a much lower proportion had received surgery after 2 years. Thus, even if the dropout rate in our study was lower than expected, it was probably underpowered to detect the suggested 20% difference between groups with the assigned power and significance level.”

The median time to surgery in the occupational surgery group was longer (350 days; interquartile range, 210-540), compared with the control group (297 days; IQR, 188-428 days). Predictors of surgery included a higher motivation for surgery (odds ratio, 1.22; 95% confidence interval, 1.07-1.38) and previous non-pharmacologic treatment (OR, 2.70; 95% CI, 1.16-6.27). Hand pain, reduced function, or degree of CMC1-OA were not predictors.

In secondary analyses at 4 months, there were significant between-group differences in pain at rest, grip strength, pain after grip, in patient-reported measure activity performance of the hand (MAP-Hand) and in Quick Disabilities of the Arm, Shoulder, and Hand Score (QuickDASH), with the occupational therapy group showing greater improvement, which for most outcomes was clinically relevant (P less than .01).

The results also showed a gap between treatment recommendations for hand OA and clinical practice. Prof. Kjeken said, as only 21% of the participants had received non-pharmacologic treatment before being referred to surgical consultation. “The updated EULAR treatment recommendations for hand OA states that patient education, hand exercises, assistive devices, and orthoses are the core interventional treatments for people with hand OA, and that surgery should be considered only when other treatment modalities (including medication) have failed,” she said. “This study thereby supports that the recommended core treatment reduces pain and improves function, and potentially reduces the need for surgery, which is a more costly intervention.”

One of the authors reported grant or research support from Pfizer and being a consultant and on the advisory board for AbbVie. The other authors reported no relevant conflicts of interest.

**HPR abstract presenters garner awards**

Else Marit H. Gravås and Lindsay Bearne, PhD, are the first authors of two of the top Health Professionals in Rheumatology (HPR) abstracts presented at this year’s congress. Each is receiving an award prize of EUR 1,000.

**Else Marit H. Gravås** is a PhD candidate and occupational therapist from Diakonhjemmet Hospital in Oslo, who will present the results of a randomised, controlled trial showing that a combination of occupational therapy interventions could reduce pain, improve function, and potentially reduce the need for surgery for thumb base osteoarthritis. (See article above.)

**Lindsay Bearne, PhD,** is a senior lecturer in health services research with the department of population health sciences at King’s College London, and on Friday she will present single-centre study results on 103 patients with primary antiphospholipid syndrome (pAPS) who described the extensive impact that fatigue has on their lives. About two-thirds reported clinically relevant fatigue, most of whom reported it as severe. There were five themes identified across subgroups of 10 patients with obstetric and 10 patients with thrombotic pAPS: unpredictability of fatigue; impact on daily life; physical activity matters; individual coping strategies; and acknowledgment and help with fatigue from clinicians. The significant predictors of fatigue severity included social support, mood, and physical activity. The authors suggested that the results warrant interventions to manage fatigue and support physical activity.
School of Rheumatology educates global audience

The EULAR School of Rheumatology continues the EULAR tradition of providing quality educational opportunities in the field of rheumatic diseases, not only for physicians and health professionals but also for patients and their families.

“EULAR has traditionally been a preeminent supplier of education in rheumatology for different target populations worldwide,” Prof. Annamaria Iagnocco, current EULAR treasurer, said in an interview.

“The EULAR School of Rheumatology was launched with the aim of offering various types of outstanding educational material for its three pillars: physicians, health professionals in rheumatology, and people with rheumatic and musculoskeletal diseases,” said Prof. Iagnocco, who also has served as chair of the EULAR Standing Committee on Education and Training. She will present more details about the EULAR School of Rheumatology and EULAR education at the “Challenging Projects in Education and Training” session this afternoon.

The EULAR School of Rheumatology’s notable accomplishments for 2018 include administering seven online courses, organising 12 live courses and meetings, updating two publications, and awarding many bursaries and grants for education and further study.

The subject areas for the School of Rheumatology’s online coursework in 2018 included rheumatic and musculoskeletal diseases (RMDs), connective tissue disease, paediatric rheumatology, artificial neural network was the most common (20 articles; 45%).

Dr. Kedra said only two of the selected articles defined Big Data, and the definitions were not the same in both papers. There also was a huge variation in the number of data points among studies, between 2,000 and 5 billion. “It appeared that there is no consensual definition of Big Data, and that it cannot be restricted to the size or volume of the data,” she said. There was also heterogeneity in the methods used, “underlying the need to collaborate with data scientists to choose the most appropriate method when designing a Big Data study.”

Based on the literature analysis, EULAR’s recommendations address general principles as well as ethical issues in Big Data for RMDs, particularly data sources, platforms, collection, and sharing, as well as privacy by design. EULAR also noted the Big Data field needs adequate reporting of methods and benchmarking, careful data interpretation, and implementation in clinical practice.

“In fact, none of our recommendations had a high level of evidence, mostly because there is little literature for now in this field to support our statements,” Dr. Kedra said. Another issue to consider is that some of these concepts, such as privacy by design, are not solvable through high-level evidence studies, Dr. Kedra said. But the field of Big Data is moving quickly, and the EULAR recommendations will likely need to be revised in several years if some of these questions are answered.

“The use of Big Data by AI, computational modelling, and machine learning is a rapidly evolving field with the potential to profoundly modify RMD research and patient care. These first EULAR-endorsed points to consider address key issues, including ethics, data sources, data storage, data analysis, AI, the need for benchmarking, adequate reporting of methods, and implementation of findings into clinical practice,” Dr. Kedra said. “We hope these points to consider will promote advances and homogeneity in the field of Big Data in RMDs and may be useful as guidance in other medical fields.”

Dr. Kedra had no disclosures.
MRI structural features predict radiographic knee OA

A large number of structural abnormalities identified by MRI in the knees of adults at risk for osteoarthritis were predictors of incident radiographic OA over a 10-year period, according to findings from a study that will be presented this afternoon by Dr. C. Kent Kwoh of the University of Arizona, Tucson, USA.

“Knee radiographs, which have been the standard for evaluating osteoarthritis, are limited in their ability to show the structural damage of osteoarthritis,” Dr. Kwoh said in an interview. “We know now that osteoarthritis is a disease of the whole joint. Identification of MRI-detected structural features may highlight potential targets for disease-modifying osteoarthritis drugs (DMOADs),” he said.

“We have previously shown that structural abnormalities on MRI may be precursors of disease and associated with the detection of incident radiographic knee OA (ROA) up to 2 years later, and in some circumstances up to 7 years later,” Dr. Kwoh said. “The prognostic value of structural abnormalities on MRI for knee OA, however, is unknown.”

In a study to be presented in the Clinical Science Session, “Can imaging improve outcomes in OA?” Dr. Kwoh and colleagues examined one knee in each of 862 adults enrolled in the Osteoarthritis Initiative who had at least one knee at risk of developing ROA.

Overall, knees with any of several MRI-identified structural abnormalities had a significantly higher risk of ROA at 2, 4, and 10 years’ follow-up, compared with those without these abnormalities. The abnormalities included effusion synovitis, Hoffa synovitis, bone marrow lesions in the medial compartment and whole knee, surface area and full-thickness cartilage damage in the medial compartment and whole knee, and medial meniscal extrusion.

“Knee osteoarthritis may have several different phenotypes, and these may be cartilage, bone, inflammatory, or mechanically based. More than one phenotype may be present in a given individual,” Dr. Kwoh said. “Different phenotypes may require different types of treatment,” he emphasised.

Dr. Kwoh said he was surprised that not just some, but many, of the features detected with imaging were associated with a higher risk of developing knee osteoarthritis up to 10 years later. However, he noted that MRI remains primarily a research tool for osteoarthritis, rather than a diagnostic one.

The next steps for research involve determining how the predictors might interact with each other to better identify patients at risk. “We need to determine if there are a specific combination of MRI-detected features of structural damage that are predictive of developing knee osteoarthritis up to 10 years later,” Dr. Kwoh noted.

Dr. Kwoh disclosed receiving grants or research support from EMD Serono and AbbVie and serving as a consultant for EMD Serono, Astellas, Regeneron, Fidia, Regulus Therapeutics, GlaxoSmithKline, Taiwan Liposome Company, Kolon Tissue Gene, and Express Scripts.

Monitor aPL to prevent major organ involvement in SLE

Patients with systemic lupus erythematosus (SLE) who test positive for antiphospholipid antibodies (aPL) need careful monitoring to prevent and treat severe manifestations of the disease. That’s according to new research being presented this morning by Dr. Leyre Riancho-Zarrabeitia.

During the “SLE, Sjögren, and APS: Systemic autoimmunity in the real life” Abstract Session, Dr. Riancho-Zarrabeitia will present data from the RELESSER-T registry looking at the association between different aPL and SLE manifestations.

“aPL have been extensively associated with an increased risk of thrombosis and poor pregnancy outcomes, mainly in patients with primary antiphospholipid syndrome (APS),” said Dr. Riancho-Zarrabeitia of the department of rheumatology at the Sierrallana Hospital, Instituto de Investigación Marqués de Valdecilla (IDIVAL), and the University of Cantabria in Spain.

“Moreover, aPL positivity in SLE has been proposed to be associated with higher damage accrual and with certain manifestations, such as valvular heart disease, pulmonary hypertension, and neuropsychiatric manifestations;” she said in an interview.

The research to be presented today involves a total of 3,651 patients, 1,368 (37.5%) of whom have tested positive for aPL. The most frequent aPL detected were IgG anticardiolipin (aCL) antibodies, seen in 25% of patients, followed by lupus anticoagulant (LA) in 24% and IgM aCL in 20%.

Dr. Riancho-Zarrabeitia will report that most (20.6%) of the aPL-positive patients were positive for only one antibody, with smaller proportions testing positive for two (12.1%) or three (4.8%) antibodies.

“aPL positivity in SLE patients influenced the risk for thrombotic and obstetric manifestations,” Dr. Riancho-Zarrabeitia said.

All types of aPL were associated with classic APS manifestations, such as arterial and venous small-vessel thrombosis, recurrent early pregnancy losses and fetal death. Being LA positive or having more than one aPL was particularly associated with a higher risk for these manifestations. For example, when one antibody was present the odds ratio for arterial thrombosis was 4.45, but when two or more aPL were detected, the odds ratios rose to a respective 9.23 and 15.6.

As for lupus-specific manifestations, LA and aCL were associated with an increased risk of neuropsychiatric manifestations, and LA was linked to an increased risk for renal disease. The risk for specific SLE manifestations was higher with IgG isotypes of aPL, notably an increased risk for cardiac and respiratory events with IgG aCL.

While the more antibodies present generally led to a higher risk of complications, the risk for cutaneous manifestations decreased.

What these findings show, Dr. Riancho-Zarrabeitia said, is that there is a hierarchy for aPL and the risk for major manifestations, with LA the major one to watch out for to prevent SLE-related organ involvement. “The next step would be to confirm our findings with a prospective study.”

Dr. Riancho-Zarrabeitia has received travel grants from AbbVie, Pfizer, UCB, Merck Sharp & Dohme, GlaxoSmithKline, Amgen, and Roche.
Pfizer and Lilly are driven by our shared mission to improve the lives of the millions of people who are suffering from chronic pain, which can have life-altering physical, social, psychological, and economic impacts.

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Learn more at KeyPainDrivers.com
How to help your patients form an exercise habit (and maintain it)

While there’s no doubt that physical activity can provide myriad benefits for patients with rheumatic diseases, there is significant uncertainty around how to help and motivate patients to make it a habit so they can reap its long-term rewards.

Which is why EULAR delegates would be well advised to attend a Thursday afternoon session called “Exercise – More than a wonder drug.”

Dr. Keegan Knittle of the University of Helsinki will offer advice on how to help patients maintain physical activity by taking congress delegates through behavioural science theories on self-determination, self-regulation, and habit formation.

According to Dr. Knittle, rheumatology health professionals can help patients begin on their physical activity journey by helping them to identify the types of physical activities that they most enjoy doing.

“This is easy for some individuals, but it could be a struggle for others. Offering individuals opportunities to try new ways of being active is a good start as people are more likely to maintain behaviours that they enjoy,” he said in an interview.

Helping patients to identify the positive outcomes that they can gain from being physically active – such as feelings of strength, health, and strong social behaviours – can also help them to maintain those activities.

“Exercise dosage can be identified and prescribed if patients undergo an exercise tolerance test to identify their maximum cardiorespiratory capacity. “We can then utilise intensities of maximum cardiorespiratory fitness [and/or maximum heart rate] to prescribe appropriate intensities that may alleviate symptoms,” Prof. Metsios said.

Research in cardiovascular diseases suggests that intensities between 60% and 90% of maximum heart rate elicit beneficial effects in multiple different disease outcomes, which are relevant to RMDs, including reduced fatigue and inflammation, improved cardiorespiratory health, quality of life, and functional ability.

“Exercise is safe, even when progressively higher exercise intensities are applied; this has multiple different benefits in different physiological and psychological outcomes in RMDs. “The benefits of using exercise as an adjunct treatment in RMDs are too many to ignore. As such, targeted efforts need to be made to effectively implement physical activity in clinical practice,” he added.

EULAR offers bursaries for scientific training

Every spring and autumn, EULAR awards up to 10 training bursaries to applicants from European countries for clinical or laboratory work (3-6 months) in a clinical or research unit of another European country. The objective is to improve the standard of research and care and to foster collaboration across rheumatologic, clinical, and research centres in Europe.

The amount of the bursary depends on the length of stay and equals 1,000 euros for travel expenses plus 1,000 euros per month of stay (maximum of 7,000 euros).

The next application deadline is 30 September 2019.

Bursaries will not be made if the applicant is already abroad in training.

Only persons who work predominantly in the field of rheumatology are eligible for scientific training bursaries; past recipients are not eligible for a second scientific training bursary. The age of the candidate should not exceed 40 years.

Recipients are asked to submit both a midterm report as well as a final report to the EULAR Secretariat, focusing on the results they have achieved during their training.

Based on their final report, participants may be given the chance to present their results in an abstract presentation at the next EULAR congress.

Applicants should submit an application together with the following documents:

• Curriculum vitae with date of birth and list of publications (if any).
• Outline of the clinical or laboratory project to be undertaken (maximum four pages including references).
• Written confirmation of acceptance from the host hospital or research institute (signed by the head of department), indicating the tentative time frame of the training period.

Application details are available at www.eular.org. Send your complete application in electronic form to the EULAR Secretariat at gabriela.kluge@eular.org.
WHAT DO WE REALLY KNOW ABOUT RA

Rheumatoid arthritis is a destructive autoimmune disease driven by pathogenic antibodies and proinflammatory cytokines.\(^1\)

Constant renewal of T cell–initiated immune response\(^2\) results in the production of autoantibodies and the perpetuation of proinflammatory cytokines.\(^1\)

Elevated levels of autoantibodies and cytokines lead to increased disease activity, structural damage, functional impairment, and extra-articular manifestations.\(^1,3\)

Visit Bristol-Myers Squibb Booth 24 to learn more

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## Exhibitor’s List

### Commercial Exhibition – Exhibitors’ List

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### EULAR Village – Exhibitors’ List

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Congress Venue Overview Plan

HALL 9
Hospitality suites
Overflow area

MEZZANINE 9
Hospitality suites A09.01–A09.14
Related meetings A09.08 & A09.13

HALL 7
Sessions

MEZZANINE 7
First aid
Hospitality suites A07.01 & A07.02
Speakers preview, Rooms S01–S03

NORTH CONVENTION CENTRE
Overflow area
Related meetings N113/N114
Sessions N101–N116

HALL 10
Catering, exhibition, posters
Cyber café @ EULAR Village

MEZZANINE 10
Related meetings A10.01–A10.15

HALL 8
Sessions

HALL 6
Sessions

MEZZANINE 6
Hospitality suite A06.01
Press conferences A06.02

PRESS CENTRE

HALL 2
Cloakroom
Registration area

SOUTH CONVENTION CENTRE
South auditorium
Related meetings S12–S17
Prayer rooms S21–S22

Hospitality suites
Overflow area

Related meetings A09.08 & A09.13

First aid
Hospitality suites A07.01 & A07.02
Speakers preview, Rooms S01–S03

Overflow area
Related meetings N113/N114
Sessions N101–N116
Gut microbiome may help predict methotrexate response in new-onset RA

Analysing the gut microbiome of patients with new-onset rheumatoid arthritis (RA) could help us understand why some respond very well to methotrexate treatment while others do not. The results of a genetic study, being presented this morning by Dr. Carles Ubeda, of FISABIO, Valencia, Spain, in collaboration with Dr. Jose Scher, of New York University, New York, (USA) highlight just how far research into the gut microbiome has come.

“It is well established that patients with rheumatoid arthritis differ in their response to methotrexate,” Dr. Ubeda explained in an interview. “Indeed, only up to 50% of patients will have a clinically adequate response.” Why this is the case is not clear, but one thought is that it is down to the high inter-patient variability of methotrexate bioavailability.

“Earlier studies working with rodent models suggested that the microbiome is able to metabolise methotrexate, and we know from extensive recent work in the field that the intestinal microbiome can differ depending on the patient,” Dr. Ubeda said. “Thus, we hypothesised that different microbiomes with different capacities for metabolising methotrexate could lead to different bioavailability and therefore different clinical response to the drug.”

During the abstract session “Rheumatoid arthritis – looking before, looking forward!” Dr. Ubeda will present the findings of a study looking at the gut microbiome of patients with treatment-naive, new-onset RA. Faecal samples were taken from the study participants and subjected to 16S rRNA gene and shotgun metagenomic sequencing to determine what bacteria and genes were present.

“Most of the DNA extracted and the obtained sequences are bacteria derived,” Dr. Ubeda explained. “By applying several bioinformatics programmes, we identified genes encoded by commensal bacteria and characterised the metabolic functions of those genes.” With this method, it can be determined if a particular microbiome is encoding an enzyme or pathways involved with the metabolism of drugs used in the clinical setting.

The study showed that there is an abundance of specific bacterial genes encoded by the pretreatment gut microorganisms of methotrexate responders and nonresponders, and that these significantly differed between the two patient populations.

“Interestingly, some of the identified genes encode functions that are related to the folate metabolism. This suggests the possibility that the intraluminal (or intrabacterial) activation of methotrexate may prevent its absorption,” Dr. Ubeda said, and that it might make it possible to separate patients based on their future, observed methotrexate response.

The work of course needs validation but provides the first step toward predicting methotrexate response in new-onset RA patients that could be useful in clinical practice. Beyond validation, there is the issue of generalisability, Dr. Ubeda acknowledged.

“We currently don’t know if our model can be applied to other populations harbouring a very different microbiome. It is possible that other models containing a different set of genes will need to be applied to predict response to treatment in other patient populations.”

To predict response in patients who have already taken methotrexate, “that’s something that should definitely be looked at,” he said. “It is likely that we will obtain very different results since we know that RA therapies can modify the microbiome.”

Dr. Ubeda had no conflicts of interest to disclose. Dr. Scher has received consulting fees from UCB, Janssen, Novartis, and Bristol-Myers Squibb.

Taking stock of the challenges in assessing and treating fatigue in rheumatoid arthritis

Fatigue is a common, persistent problem in rheumatic and musculoskeletal diseases, including rheumatoid arthritis (RA), affecting 40%-80% of patients. A session Thursday afternoon will focus on how to recognise and assess fatigue in people living with inflammatory arthritis and help clinicians to understand their treatment options.

“Fatigue has received increased attention over the last decade and has been recommended by the Outcome Measures in Rheumatology Clinical Trials (OMERACT) group as an important outcome domain that should be assessed in all RA studies,” said Prof. Jose Antonio P. da Silva of the University of Coimbra (Portugal), one of several speakers lined up for the session. He will discuss how to define and assess fatigue in RA. “It also is considered one of the most important disease outcomes by patients.”

Work disability is among the most important consequences of RA-related fatigue, Prof. da Silva noted. Patients have identified fatigue as the principal barrier to employment and productivity. The literature has demonstrated that fatigue in RA contributes to a higher likelihood of absenteeism at work, a higher prevalence of the various dimensions of work disability, and more consultations with physicians and referrals to therapists.

Prof. da Silva and his colleagues performed a literature search to describe the role of fatigue, describe validated instruments that could be used to measure fatigue among RA patients, and propose a feasible manner in which to measure fatigue in these patients in clinical practice. They identified 12 different instruments, all of which could be considered adequate to measure fatigue in RA, depending on the clinical setting and objectives, he said. However, to date there has been no consensus to recommend a gold standard.

“Generic instruments, i.e., those used to address fatigue in different contexts, have the advantage of facilitating comparison across diseases,” Prof. da Silva said, “but their use in RA may entail important issues such as ‘contamination bias,’ whereby some items may distort the assessment of fatigue by influence of other distinct outcomes such as physical function impairment or joint inflammatory activity. They may also contain items that in RA would capture the restrictions imposed by inflammation or disability, rather than by fatigue itself, leading to unreliable or misleading results. Characteristics of the experience and consequences of fatigue are likely to be unique in RA patients, which imposes the need for specific assessment instruments.”

Overall, Prof. da Silva added, the measurement of fatigue in RA entails several challenges because of its subjective nature and close relationship with cognitive and emotional dimensions. “This has led to the proposal of quite complex instruments, difficult to use in practice,” he said. “Some studies suggest that scoring different components...”
High-resolution peripheral quantitative CT finds pre-RA bone erosions

Bone erosions, common at the time of rheumatoid arthritis diagnosis, can be detected even before patients present with the clinical criteria of RA, according to new research from investigators in Denmark.

Using high-resolution peripheral quantitative computed tomography (HR-pQCT), a technology developed to study osteoporosis, Dr. Kresten Krarup Keller of Aarhus University Hospital and Silkeborg Regional Hospital and his colleagues found a progression of bone erosions among patients with joint pain not yet diagnosed with full-blown RA. He will present the findings during an abstract session this morning.

“Even though we are very good at treating RA, a lot of people at diagnosis already have erosions,” Dr. Keller said. “Before the patient starts having symptoms there’s probably something going on in the bones. We may need to diagnose RA even earlier to prevent erosive disease, either by changing the clinical criteria or using new technologies like imaging techniques to look at the bones at a very-high magnification.”

For the study, Dr. Keller and his colleagues used HR-pQCT to measure progression of bone erosion over a 1-year period in 22 anti-citrullinated peptide antibody (ACPA)-positive patients who had arthralgia but no rheumatoid disease and 23 similarly aged controls without arthralgia, ACPA, or rheumatic disease. Median age was 53 years for patients and 48 years for controls.

All participants underwent a medical history, ACPA test, clinical examination, and ultrasound of the hand joints. A 2.7-cm long volume of interest in the second and third metacarpophalangeal (MCP) joint of the right hand was scanned using HR-pQCT at a spatial resolution of 82 micrometers at baseline and after 1 year. Cortical and trabecular bone structure were evaluated in a 12.3-mm long volume of interest proximal to the MCP head using the provided scanner software. Erosions were defined as cortical breaks in two consecutive slices, in two planes nonlinear in shape and with loss of underlying trabecular structure. The number, depth, width, and volume of erosions were measured using the OsiriX DICOM viewer.

Ten patients were diagnosed with RA a median of 86 days after baseline (interquartile range, 24-200 days). The investigators noted a significant increase in the number of patients with erosions during follow-up in the patient group but not in the control group. More erosions per individual at follow-up were observed in patients when compared with controls.

Additionally, the increase in average and total volume of erosions from baseline to follow-up were larger in patients, compared with controls. At follow-up, the average and total width, depth, and volume of erosions were larger in patients in comparison with controls. Percent change in bone density and cortical and trabecular parameters did not differ between patients and controls.

While there was no change or trends noted in the bone structure, Dr. Keller said, “the major finding was that there was a progression in the size of erosions among these patients during the study period.”

“We know that early treatment is crucial to prevent the progression of bone disease, but here we found that, even before the clinical diagnosis, a progression is seen,” Dr. Keller added. “It would be wonderful if we could be able to find the right patients early on and to start treatment at that time point so we could prevent patients from getting bone erosions or progression of bone erosions.” Patients who have a positive ACPA and joint pain would be good candidates, he said.

The study also underlines that new technologies are needed for early diagnosis. HR-pQCT, which allows clinicians to view the bones with higher magnification than MRI and x-ray, could be a potential solution, he said.

Dr. Keller has received speaking fees from Pfizer. One of his coauthors reported receiving grants from Roche and Novartis outside this work and speaking fees from Merck Sharp & Dohme, Pfizer, UCB, and Sobi.

High resolution peripheral quantitative computer tomography images of bone changes. Average and total volume of erosions from baseline to follow-up were larger in patients compared with controls. (A) New active erosion at follow up in a patient. (B) New active erosion at follow up in a control.

Continued from // 14

of fatigue does not appear to add relevant information to that of a single-item instrument, but this may depend on the intended use of the information – a medication change or self-management intervention.” Other studies suggest that RA-specific, multidimensional instruments are needed to fully and precisely identify fatigue specific to RA.

In the absence of formal recommendations, he said that “clinicians and researchers should consider whether their needs are best served by a single-item or multi-item instrument that explores broader fatigue issues to create a global score, or by a multidimensional instrument that produces subscale scores for a range of different domains of fatigue, such as cognitive and physical fatigue.”

Further studies and cooperative work are required to address specific needs related to measuring fatigue, Prof. da Silva said, such as eliminating contamination bias, a consensual adoption of a gold standard measurement, the definition of clinically relevant and validated cut-offs to assist in patient care management, and the development and validation of a standardised, single-item assessment tool.

“We propose to use a single-item instrument as a screening tool, like BRAF NRS [Bristol Rheumatoid Arthritis Fatigue Numerical Rating Scale] or RAID-F [Rheumatoid Arthritis Impact of Disease–Fatigue domain], which would be supplemented by additional multidimensional assessments if significant levels of fatigue are identified,” he said. “This will be particularly useful when the aims are to explore causality of fatigue or the efficacy of an intervention.”

Prof. da Silva had no financial conflicts to disclose.
Spreading the WORD that children and young people get rheumatic diseases, too

The first ever “WOrld young Rheumatic Disease Day – WORD Day,” aimed at spreading the WORD that children and young people get rheumatic diseases, too, took place on Monday, 18 March, 2019. The campaign was jointly launched by the Paediatric Rheumatology European Society (PReS) and the European Network for Children with Arthritis (ENCA), with the main aim of raising parental and professional awareness of these illnesses in children to ultimately reduce diagnostic delays.

A range of face-to-face awareness-raising events were undertaken across the world (Argentina, Australia, Belgium, Canada, France, Germany, Ireland, Israel, Italy, Lebanon, Netherlands, Poland, Portugal, Russia, Slovenia, South Africa, Spain, Sweden, United Kingdom, and the United States). These awareness events included television and radio interviews, podcasts, lectures to healthcare professionals, awareness stands in public places (schools, hospitals, universities, tourist sites), patient and parent meet-ups, workshops with children and young people, cake sales, social media live sessions and posts, and sponsored walks and hikes.

The extremely active social media campaign (@WORDDay2019, #WORDDay2019) reached 640,000 people through Facebook (www.facebook.com/WORDday2019/) and 285,000 people through Twitter (twitter.com/WORDDay2019). Patient story video clips came through very strongly. These highlighted the effect of conditions such as juvenile idiopathic arthritis, juvenile systemic lupus erythematosus, juvenile dermatomyositis, mixed connective tissue disease, vasculitis, scleroderma, and many other diseases on the lives of children and young people.

The WORD Day ‘button challenge’ was launched and went viral, with participants posting videos of themselves trying to button up a shirt while wearing thick gloves to appreciate the difficulty that children with arthritis can face doing simple tasks because of inflamed or damaged joints.

Young PARE proudly supported WORD Day through the sharing of activities leading up to and during the awareness day. Young PARE focuses on young people with rheumatic and musculoskeletal diseases aged 18-35 years who, like children under 18 years, face similar difficulties in society, particularly with regard to people understanding that younger people get these conditions, too!

A summary of the campaign can be found in the Lancet Child & Adolescent Health article (Lancet Child Adolesc Health. 2019 Jan;3[1]:8-9) and in the official WORD Day video (https://vimeo.com/318626431).

The WORD Day campaign will continue and grow each year!

Scenes from Wednesday’s Opening Plenary Session
The results of a multicentre retrospective study that will be presented this afternoon provide some reassuring news suggesting that children with rheumatic diseases can be safely given live attenuated vaccines regardless of their age, diagnosis, or therapy.

At Clinical Science Session called "Adults are just grown-up children! Discuss," Dr. Veronica Moshe from Meir Medical Centre in Saba, Israel, will present the results of a study involving 234 children from 13 paediatric centres in 10 countries. Most patients (n = 206) had juvenile idiopathic arthritis.

Dr. Moshe said in an interview that it has been common practice for rheumatologists to withhold common childhood vaccines such as measles, mumps, and rubella with or without varicella vaccine (MMR/V) out of a theoretical concern that administering a live vaccine could put the child at risk of infection.

"Vaccinations can prevent some of these infections ... [But] on the other hand, there is a fear that a state of immune suppression might decrease response to the vaccine, and might lead to disease flare," Dr. Moshe said.

Knowing whether these concerns are valid is particularly important at the moment because of the outbreak of measles in the populations of many countries across the globe, Dr. Moshe noted.

Current Paediatric Rheumatology European Society (PReS) guidelines state that “the vaccination of live-attenuated vaccines in patients on high-dose DMARD [disease-modifying antirheumatic drug], high-dose glucocorticosteroids or biological agents can be considered on a case-by-case basis, weighing the risk of infections against the hypothetical risk of inducing infection through vaccination.”

But the current level of evidence for this advice is low, hence the need for the study.

“We must have clear guidelines on how to deal with the administration of live vaccines in this patient population so that we can provide the safest and most effective practice,” she said.

In the study cohort, of which 70% was female, 110 had MMR/V vaccine booster while on methotrexate (MTX). Only three patients reported a local skin reactions and pain, and none had a disease flare.

Of the 76 children who had an MMR/V booster while on MTX and a tumor necrosis factor (TNF) inhibitor, 7 reported mild and transient local skin reactions, fever, and upper respiratory tract infection.

Of 39 children who received the vaccine while on biologic therapy alone, only 1 reported fever. A total of 23 had the booster while on anti-TNF therapy, 12 while on anti–interleukin-1 (6 on anakinra and 6 on canakinumab), and 4 while on anti–IL-6 (tocilizumab).

No vaccine infections related to measles, rubella, mumps, and varicella were reported.

The findings both strengthen and extend the current PReS recommendations, according to Dr. Moshe. “In other words, the study implies that all patients can be vaccinated, regardless of their age, diagnosis, or therapy,” she said.

The data provide the basis for a large, prospective data-collection study that will be launched by the PReS vaccination study group at this congress, she added.

Dr. Moshe has no relevant disclosures; one coauthor reported serving on speakers’ bureaus for several companies.
EULAR 2019
Posters and Poster Tours:
Thursday-Saturday

The scientific posters and health professionals in rheumatology posters are displayed in the poster areas of the exhibition, Hall 10, from Thursday to Saturday. They are changed on a daily basis. PARE posters are displayed permanently on an ePoster station near the EULAR Village. Delegates interested in the EULAR projects have the opportunity to browse posters of the different projects and working groups in the poster area.

Official poster viewing will take place at the following hours:
- Thursday, 13 June, 11:45 – 13:30
- Friday, 14 June, 11:45 – 13:30
- Saturday, 15 June, 10:30 – 12:00

Guided poster tours on selected topics will take place during the official poster viewing times at dedicated ePoster stations.

Guided Poster Tours
Guided poster tours on various topics take place during the official poster viewing. For details on the posters presented during the various tours, please refer to the online programme available at www.congress.eular.org or the EULAR 2019 Congress Mobile App.

Please note that you need to register to participate in a guided poster tour. The number of participants per tour is limited to 20. Registrations can be made at the poster tours and workshop desk, located in the registration area in Hall 2, on a first-come, first-served basis on the day of the poster tour.

The poster tours take place at the corresponding ePoster stations located in Hall 10 (Tour T01 on ePoster station 01, T02 on ePoster station 02, and so on).

Thursday, 13 June
11:50 – 13:30
- T01: Cytokines and inflammatory mediators – Novel mechanistic pathways in rheumatic musculoskeletal diseases – From science to clinics
- T02: RA, these are exciting times
- T03: Do we harm when we improve? Treatment effects and comorbidities in rheumatoid arthritis
- T04: SLE, Sjögren’s, and APS – Clinical aspects (other than treatment)
- T05: Clinical aspects of axial SPA: All you want to know, and likely more – Part I
- T06: Osteoarthritis: Research in motion
- T07: Musculoskeletal pain: Molecules to management
- T08: Translational science as the foundation for future therapies in paediatric rheumatology; Poster tour PReS
- T09: How can we improve our care of children and young people with paediatric rheumatic disorders?
- T10: Other orphan diseases – Know rare diseases much better
- T11: Diagnostics and imaging procedures – What’s new in imaging – Miscellaneous topics
- T12: Health services research
- T13: Furthering clinical management; Poster tour HPR
- T14: PARE Poster tour I; ePoster station 14

Friday, 14 June
11:50 – 13:30
- F01: Genetics and epigenetics
- F02: Rheumatoid arthritis – Non-biological treatments – Upcoming small molecule therapies for RA
- F03: SLE, Sjögren’s, and APS – Treatment
- F04: Vasculitis
- F05: Clinical science highlights – SSC and myositis
- F06: Unravelling the pathogenesis of spondyloarthritis: A story of genes, cells, and cytokines
- F07: Modern treatments in SPA: About their effect on relevant disease outcomes
- F08: Osteoporosis
- F09: Caring for children and young people with autoimmune/autoinflammatory conditions; Poster tour PReS
- F10: New options for treatment and care of children and young people with arthritis; Poster tour PReS
- F11: Diagnostics and imaging procedures – What’s new in imaging in RA
- F12: Epidemiology and risk factors
- F13: Lifestyle, exercise; Poster tour HPR
- F14: PARE Poster tour II, ePoster station 14

Saturday, 15 June
10:30 – 12:00
- S01: Adaptive immunity in rheumatic diseases
- S02: Rheumatoid arthritis – Biological DMARDS
- S03: SLE, Sjögren’s, and APS: The autoimmunity club
- S04: Surprising and innovative – SSC and myositis
- S05: Clinical aspects of axial SPA: All you want to know, and likely more – Part II
- S06: Psoriatic arthritis: Old and new drugs tackling the different manifestations of psoriatic disease
- S07: Crystals
- S08: Infection-related rheumatic diseases
- S09: Clinical challenges in paediatric rheumatology; Poster tour PReS
- S10: Diagnostics and imaging procedures – What’s new in imaging in SPA
- S11: Improving our studies: Research methods in epidemiology, health services, and outcome validation
- S12: Epidemiology and risk factors – drug safety and registries
- S13: Validation of outcome measures and biomarkers in RMDs
- S14: How to improve your education
Five reasons why you should offer smoking cessation advice to your patients

There is a pressing need for rheumatology health professionals to educate their patients about the importance of smoking cessation, particularly as patients begin to ask more about the impact of smoking on disease outcomes, delegates will learn this afternoon.

In the session titled “How not to smoke like a chimney,” rheumatologist Dr. Helen Harris of NHS Lothian’s Western General Hospital in Edinburgh, UK, will present research to EULAR delegates that will illustrate that helping smokers with rheumatic and musculoskeletal diseases to quit is achievable and should be considered an essential part of the rheumatology outpatient consultation.

Evidence shows that smoking has a direct effect on inflammatory rheumatic diseases and increases the risk of comorbidities, Dr. Harris explained in an interview.

However, research shows that the practice of offering smoking cessation advice is highly variable across practices and countries. For example, a survey of rheumatologists in 25 countries revealed that, although most doctors give advice to quit smoking to most patients, only 20% had a specific protocol for smoking cessation. Nurses also gave cessation advice to most patients in only one-third of departments that had nurses providing patient education.

“There is a pressing and unmet need to improve awareness amongst rheumatologists of the importance of smoking cessation advice for rheumatology patients,” Dr. Harris said.

“Smoking predicts higher incidence, greater severity, and reduced treatment responses in rheumatoid arthritis, lupus, and spondyloarthritis,” she explained.

Furthermore, the most common risk of immunosuppressive therapies used to treat these conditions is infection; and smoking is known to increase the risk and severity of both bacterial and viral infections.

“Counselling smokers to quit at the time of commencing immunosuppressive treatment is therefore imperative,” Dr. Harris stressed.

Smoking cessation advice is particularly important for people with rheumatoid arthritis because these patients have a different profile of cardiac risk factors, compared with the general population, she said.

RA patients are also at a substantially higher risk of lung cancer and other airway diseases, which makes smoking cessation “essential to effectively lower CVD, risk of lung cancer, and other lung conditions in RA patients who smoke.”

In her presentation, Dr. Harris will set out her top five reasons to offer brief smoking cessation advice to rheumatology patients:

- Improve success of medication dose reduction.
- Reduce cardiovascular and respiratory diseases and cancer risks.
- Reduce mortality.
- “Raising awareness of the harms of smoking for rheumatology patients is the first step in the cessation pathway and can be done effectively using posters or postcards freely available through www.nras.org.uk,” she added.

At the same session, Ida Kristiane Roelsgaard from the Copenhagen Center for Arthritis Research (COPE-CARE) will take delegates through the current state of evidence around the benefits of intensive smoking cessation.

According to Ms. Roelsgaard, smoking cessation interventions have traditionally been designed for people without chronic diseases, which means the literature on smoking cessation interventions in people with inflammatory joint diseases (IJDs) is limited.

“Why there is lack of research on smoking cessation and IJDs is difficult to answer. … We do know that smoking can worsen the disease outcomes and patient-reported outcomes, so testing the effect of smoking cessation and smoking cessation interventions in this patient group is important,” she said in an interview.

At the moment, there is also no current evidence around whether one smoking cessation intervention works better than another, but the good news is that evidence in the area is increasing and patients are starting to ask more questions about the impact that smoking can have on their disease, as well as the benefits of quitting. For example, one key finding from her qualitative research was that smokers with rheumatoid arthritis had a strong wish for more of a focus on smoking cessation from their health professional.

People with rheumatoid arthritis who participated in an ongoing randomised, controlled trial testing an intensive smoking cessation intervention felt they had gained more knowledge and acquired tools for changing their smoking behaviour, even though they did not immediately quit.

“They thought that the clinical study was a positive approach from the rheumatology department and saw it as an opportunity to finally quit smoking,” Ms. Roelsgaard explained.

“As patients with UDs begin to ask for more information and knowledge about their disease, smoking cessation interventions and advice are important to address in the rheumatology departments,” Ms. Roelsgaard added.

Neither presenter had conflicts of interest to disclose.

EULAR Congress dinner at La Quinta de Jarama

Friday, 14 June 2019, 20:00–24:00
Price: EUR 95 per person (not included in the registration fee)

EULAR 2019 welcomes you to La Quinta de Jarama for the congress dinner held on Friday, 14 June.

La Quinta de Jarama is an exclusive venue located only 30 minutes from Madrid city center.

The cocktail party will be held in its beautiful space full of nature composed by gardens, olive trees, and fountain.

After enjoying cocktails in these amazing gardens, dinner will be served in its elegant indoor spaces and its porches.

The EULAR Congress Dinner is a great opportunity to dine and meet with friends and colleagues from around the world in a relaxed atmosphere and enjoy the unmatched charm and fascination of Madrid. Those who have shared this evening with us in previous years would not want to miss it. Come and join us!
EULAR offers six different types of live courses and meetings, held at different locations in Europe:

- Synovial Biopsy
- Registers and Observational
- Health Professional Postgraduate Course
- Imaging Courses
- Health Economics in Rheumatology
- Epidemiology Course
- Immunology Course
- Ultrasound Courses
- Ultrasound Trainers in Rheumatology.
Satellite Symposia Programme // Thursday, 13 June

**Therapeutic choice in RA: How should we be guided by patients?**
Chair: Andrew Östör (AU)

- **8:15** Andrew Östör (AU)
  Welcome and introduction
- **8:25** Jose Maria Alvaro-Gracia (ES)
  The impact of RA on quality of life: The patient perspective
- **8:40** Lars Klareskog (SE)
  Assessing patient outcomes in routine clinical practice: Can we do better?
- **8:55** David Walsh (UK)
  Pain mechanisms and management in RA
- **9:10** Andrew Östör (AU)
  Patient-centric therapeutic choice
- **9:30** All
  Panel discussion and Q&A

**Axial spondyloarthritis: Optimizing clinical management and future directions**
Chair: Robert Landewé (NL)

- **8:15** Robert Landewé (NL)
  Welcome and introduction
- **8:20** Robert Landewé (NL)
  Radiographic and nonradiographic axSpA: Historical perspectives and current priorities

**Putting new evidence into clinical practice in GCA and RA – Together we dare**
Chair: John Stone (US)

- **8:15** John Stone (US)
  New insights into the treatment of GCA
- **8:40** Frank Buttgereit (DE)
  Strengthening the treatment paradigm in RA
- **9:00** Peter Nash (AU)
  Ixekizumab in the holistic management of psoriatic arthritis: SPIRIT head-to-head trial
- **9:20** All
  Panel discussion: What does the data mean for patients?

**Elevating treatment goals in psoriatic arthritis**
Chairs: Victoria Navarro-Compán (ES) Lars Erik Kristensen (DK)

- **8:15** Victoria Navarro-Compán (ES) Lars Erik Kristensen (DK)
  Welcome and introduction
- **8:30** All
  Panel discussion: What does the data mean for patients?
8:15 – 9:45 | N105/N106

**Consider the patient perspective: Challenges facing women with axSpA and PsA**
Chair: Irene van der Horst-Bruinisma (NL)

8:15 Irene van der Horst-Bruinisma (NL)
Welcome and introduction

8:30 Helena Marzo-Ortega (UK), Kay Anderson (UK)
Expert discussion: axSpA

9:00 Laura Coates (UK), Kay Anderson (UK)
Expert discussion: PsA

9:30 All
Summary and Q&A discussion

8:15 – 9:45 | N117/N118

**Optimizing patient management in RA – Can we live up to patient expectations?**
Chair: Peter Taylor (UK)

8:15 Peter Taylor (UK)
Opening and introduction

8:30 Peter Taylor (UK)
Marco Matucci Cerinic (IT)
Ulf Mueller-Ladner (DE)
Ruth Slack (UK)
Thierry Thomas (FR)

1) Selecting the right treatment for the right patient at the right time: What drives our decision?
2) Patient expectations in RA
3) Addressing patient expectations: Through the eyes of a multidisciplinary team

9:40 Peter Taylor (UK)
Closing remarks

8:15 – 9:45 | N111/N112

**IL-6 receptor inhibition in RA: New perspectives in optimal patient care**
Chair: Ernest Choy (UK)

8:15 Ernest Choy (UK)
Welcome and introduction

8:20 Ernest Choy (UK)
IL-6 biology and implications for clinical targeting in RA

8:45 Roberto Caporali (IT)
Differentiating IL-6R inhibitors from other drug classes

9:10 Jacques-Eric Gottenberg (FR)
Optimising IL-6R inhibition in clinical practice

9:35 Ernest Choy (UK)
Conclusion

17:30 – 19:00 | Hall 7A

**Demystifying the systemic truths of SpA**
Chair: Dirk Elewaut (BE)

17:30 Dirk Elewaut (BE)
Welcome and introduction

Demystifying the journey from pathogenesis to therapy

17:55 Dafna Gladman (CA)
Unmet needs in SpA: Not just the usual suspects

18:20 Laura Coates (UK)
Integrated, personalised, connected ... SpA 2025

18:40 All
Panel discussion and Q&A

17:30 – 19:00 | Hall 7B

**Managing chronic pain in osteoarthritis: Pushing back the frontier with targeted therapies**
Chair: Richard Langford (UK)

Faculty:

- Francis Berenbaum (FR)
- Bart Morlion (BE)
- Cécile Overman (NL)

Part 1: Treatment strategies for osteoarthritis-associated pain: A case journey

Part 2: OA-associated chronic pain: What is the therapeutic “frontier”? Closing

17:30 – 19:00 | N101/N102

**Fine-tuning the treatment of PsA: Focus on the IL-23 pathway**
Chairs: Georg Schett (DE)
Peter Taylor (UK)

17:30 Georg Schett (DE), Peter Taylor (UK)
Welcome and introduction

17:35 Stefan Siebert (UK)
The promise and delivery of targeting the IL-12/23 pathway

17:50 Georg Schett (DE)
Focus on the IL-23 pathway

18:05 Peter Taylor (UK)
Targeting IL-23: What could this mean in practice?

18:20 Luis Puig (ES)
Experience of targeting IL-23 in dermatology

18:35 All
Panel discussion and Q&A

17:30 – 19:00 | N105/N106

**Beyond the joint: The role of pathogenic autoantibodies in system manifestations of RA**
Chair: Bernard Combe (FR)

17:30 Bernard Combe (FR)
Welcome and introduction

17:35 Jens Thié (DE)
The course of systemic RA disease: The role of pathogenic autoantibodies

17:55 José María Álvarez-Gracia (ES)
Unseen epidemic: Causes and consequences of RA-associated ILD

18:20 Laura Geralindo-Pardilla (US)
Double trouble: Autoimmunity and inflammation link to cardiovascular risk in RA

18:45 All
Symposium summary, panel discussion, and close

17:30 – 19:00 | N117/N118

**Treatment timing considerations in biologic management of SLE: The long and short of it**
Chair: Alejandro Olivé-Marqués (ES)

17:30 Alejandro Olivé-Marqués (ES)
Welcome and introduction

17:35 Alejandro Olivé-Marqués (ES)
Long- and short-term treatment goals in SLE

17:45 José A. Gómez-Puerta (ES)
Balancing the benefits and risks of treatment in SLE

18:05 Luca Iaccarino (IT)
When to start biologic therapy in SLE

18:25 Andreas Schwarting (DE)
Experience with initiating biologic therapy earlier in the disease course

18:40 All
Faculty discussions

18:55 Alejandro Olivé-Marqués (ES)
Summing up and concluding remarks

17:30 – 19:00 | N111/N112

**Redesigning the future of RA treatment with Infliximab SC**
Chair: Rieke Alten (DE)

17:30 Rieke Alten (DE)
Welcome and introduction

17:40 Daehyun Yoo (KR)
Real-world safety, efficacy, and drug survival of CT-P13

18:10 Rene Westhoven (DE)
Clinical findings on CT-P13 SC

18:40 All
Panel discussion
Investigator Sponsored Study (ISS)

GSK supports studies designed and executed by independent investigators, including healthcare institutions and medical networks, that contribute to medical science and improve patient care. Support can be in the form of product, funding or both. Support for a study is based on the importance of the research objectives, scientific rationale for the methodology, and the ability of the investigator to deliver a high-quality, ethical study. The results of GSK ISSs are publicly disclosed regardless of the outcome.

2019 ISS Request For Proposals

GSK is accepting ISS proposals

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<th>Event</th>
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<tr>
<td>Submission of proposal by Investigators</td>
<td>July 15, 2019</td>
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<td>Committee Review &amp; Selection by GSK</td>
<td>August 2019</td>
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<tr>
<td>Communication to Investigators by GSK</td>
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<td>Submission of full Protocol and ICF by Investigators</td>
<td>October 2019</td>
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<tr>
<td>Committee Review/Final Decision by GSK</td>
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GSK is committed to deliver the above review timelines, however, the review process might take longer for certain proposals.

Areas of Research Interest

— BLyS inhibition with focus on diseases consistent with the belimumab anti-BLYS mechanism of action
— Use of anti-BLYS in combination with anti-CD20 in lupus and other mechanism of action compatible diseases
— Belimumab in lupus and other autoimmune diseases
— Lupus patient perception and opinion about their treatment and life (with or without belimumab)
— Association of biomarkers with patient stratification or clinical outcomes in lupus
— Use of belimumab in lupus in clinical practice
— Lupus disease state

Visit us at medical booth (31) if you would like to discuss further and log-on to https://iss.gsk.com/ to get started

Interested In Access To Clinical Data For Secondary Research?

GSK provides access to anonymized patient-level data for research that can advance science or improve patient care. To learn more, go to: http://www.clinicalstudydatarequest.com