The heart of Spain welcomes you to the 2017 congress, marking 70 years of EULAR

Welcome to Madrid for the start of the 18th Annual EULAR European Congress of Rheumatology! As in 2013, Madrid is once again hosting a significant number of participants – around 14,000 – from more than 100 countries in Europe and around the world. Madrid’s magnificent ambience of astonishing architecture, galleries, museums, theatres, culinary pleasures, and sporting events provides an excellent background for a special 4 days of exchanging scientific and clinical information.

We are grateful to have you with us as we celebrate the 70th anniversary of EULAR. It reflects an increasing and continued interest in what EULAR has to offer to the rheumatology community to advance scientific and clinical progress in the broad field of the rheumatic and musculoskeletal diseases.

The number of scientific contributions to the EULAR congress this year has reached an all-time high, with more than 4,850 abstract submissions. Overall, 48% have been accepted for presentation and another 26% for publication. A total of 347 were accepted as oral presentations this year, and the congress features 180 sessions and poster tours with 335 speakers.

EULAR kicks off its ‘Don’t Delay, Connect Today’ early intervention campaign

ATTENDEES AT EULAR 2017 will learn about the importance of its “Don’t Delay, Connect Today” early intervention campaign at a joint session for clinicians, health professionals, and patients that features presentations on how all three groups can contribute to the early diagnosis and treatment of rheumatic diseases, particularly the role of organisations and public engagement.

The purpose of the “Don’t Delay, Connect Today” campaign is to promote early intervention by encouraging those with typical symptoms to take action and consult their doctors as soon as possible. It will be adopted and put into effect by all PARE members in an attempt to dispel arthritis myths and educate the public about the seriousness of the disease.

John Church, CEO of Arthritis Ireland, will discuss the EULAR campaign and how organisations can become involved. “This campaign is especially important as it targets not only patients, but also health professionals in the hopes of encouraging those with typical RMD [rheumatic and musculoskeletal disease] symptoms to take action and, hopefully, prevent long-term irreversible damage,” Mr. Church said.

“Campaign materials have been developed for both PARE patient organisation and EULAR, Role of health professionals in rheumatology continues to evolve

THE INVOLVEMENT of health professionals in rheumatology has evolved over the last 3 decades. The roles that health professionals in rheumatology (HPRs) play in the management of patients with rheumatic and musculoskeletal diseases (RMDs) and how those roles have advanced over time will be the subject of today’s Health Professional Welcome Session. Attendees can expect to learn about past involvement of HPRs, their present roles, and what the future holds for HPRs.

The session will kick off with a presentation by Prof. Thea Vliet Vleugel of Leiden (the Netherlands) University Medical Centre, titled: “Looking Back...”

Prof. Gerd R. Burmester

Continued on page 3
IN RHEUMATOID ARTHRITIS (RA),

AS IL-6 ELEVATES,
THE EFFECTS
GO BEYOND
THE JOINTS

1-3

LEARN MORE ABOUT THE ROLE OF IL-6 IN RA AT BOOTH 41
FOR MORE INFORMATION, PLEASE VISIT www.artritis-IL6.es*

*For Spanish healthcare professionals only.

Congress marks 70 years of EULAR

additional 37 industry-supported scientific symposia will also be held. These numbers also reflect the availability of increased information on the impact, burden, and cost of these diseases for society and a significantly improved ability to diagnose and treat them. The incorporation of health professional and patient organisations within EULAR has been a considerable stimulus for these advances. This integration will facilitate the implementation of recommendations for management/standards of care of musculoskeletal disorders in daily practice.

The EULAR Congress 2017 will once again offer a wide range of topics, including clinical innovations, clinical translational research, and basic science. In addition, there will be meetings organised by People with Arthritis and Rheumatism in Europe (PARE), by Health Professionals in Rheumatology (HPR), and by the healthcare industry. We will also see the first results of our new initiatives regarding the EULAR School of Rheumatology, the EULAR Campaign “Don’t Delay, Connect Today,” and the EULAR Research Roadmap “RheuMap.”

The central activity of the congress will be poster presentations and poster tours with their highly interactive exchanges among participants. Out of the 2,336 poster displays spread over 3 days, 461 posters will be explained in 45 themed poster tours. The 2017 congress will further strengthen the reputation of the EULAR congress as a highly innovative and informative venue for clinical and translational researchers, as well as for practicing physicians, health professionals in rheumatology, and patients within the different facets of our discipline (e.g., inflammation, pain, bone, mechanical, and inflammatory disorders).

Virtually all oral presentations will be recorded, and appropriately registered participants will have access for 1 year to watch them. Registration also includes a 1-year subscription to Annals of the Rheumatic Diseases for medical doctors, health professionals, and researchers.

The opening plenary session this evening promises a lively atmosphere reflecting highlights of Spanish culture, a look back at EULAR’s history over the past 70 years, as well as recognition of past EULAR officers for their important contributions and the announcement of newly elected officers. The young first authors of the highest scoring abstracts in each category will also receive an award. A networking event will follow.

In this special anniversary year, the EULAR congress dinner on Friday, 16 June, at the historical Castle of Viñuelas offers the perfect opportunity to network with friends and colleagues from around the world in a relaxed atmosphere. The castle, located in the north of the city of Madrid, is surrounded by meadow-oak forest within a protected natural area.

This 70th anniversary congress has only been possible and come to be realised thanks to the untiring effort and support of all the EULAR members, including the Steering Group, the Scientific and Executive Committees, the EULAR Secretariat, and the MCI staff.

We are very happy to visit the city of Madrid for the second time. We take great pleasure and joy in welcoming medical doctors, patients, health professionals, and representatives of the pharmaceutical industry to EULAR 2017 and hope that their stay in Madrid will be informative, educational, and, last but not least, enjoyable.

Gerd R. Burmester
President of EULAR

EULAR congress dinner at the Castle of Viñuelas

Friday, 16 June 2017 20:30–24:00
Price: EUR 95 per person (not included in the registration fee)

Over the years, the EULAR Annual European Congress of Rheumatology has set the congress dinner as a traditional event offering a unique opportunity to meet and network with friends and colleagues from around the world in a relaxed atmosphere, enjoying the unmatched charm of the different venues and artistic performances selected.

In this special anniversary year, the EULAR congress dinner will take place in a special location, the historical Castle of Viñuelas, located in the north of the city of Madrid.

You will enjoy a wonderful experience full of local flavours in this incredible venue surrounded by meadow-oak forest within a protected natural area, allowing the observation of wild animals and birds at close range.

Come and celebrate EULAR’s 70th anniversary with us and enjoy the impressive grounds of this property taking you back to the 17th century.

Don’t miss this exceptional chance to experience the culture of Madrid and Spain and get to know other attendees!

Tickets are available in the registration area.

‘Don’t Delay, Connect Today’

Continued from page 1

health professional members. It is a well-coordinated effort to promote early intervention, which is so vital with RMDs.”

“Arthritis is a chronic disease with multiple comorbidities,” he explained. “With the development of powerful biologic drugs, improvements in care pathways for patients and very effective self-management options, early diagnosis and intervention can lead to significant improvements in lifestyle, physical movements, increased well-being, and work force participation.”

Despite the significant impact of arthritis on people and its economic costs, it continues to be underfunded within health systems. “It is a subspecialty that is shrouded in public myth,” Mr. Church said, and one of the goals of his presentation will be to help remind those in attendance about the importance of early action in RMD diagnosis and management.

“The talk will demonstrate EULAR’s commitment to this important action while showing those in attendance why their involvement in the campaign will benefit their patients,” he continued. “This is a pan-European effort aimed at creating a big impact. It will demonstrate strength in numbers if we all act together. ‘Don’t Delay, Connect Today’ will be relevant to all the delegates in the room. Together, we can encourage and create a big noise around the campaign.”

Another talk during the session will describe Rheumatosphere, a programme in Glasgow, United Kingdom, that focuses on raising awareness about arthritis and arthritis research.

“During the session, we will demonstrate aspects of this public engagement, highlighting how we aim to inspire the next generation of scientists and clinicians,” presenter Louise Bennett of the University of Glasgow explained. “In addition, we will discuss how we plan to raise public awareness of arthritis and immunology, as well as empower patients and their careers through dissemination of information that is both enjoyable and understandable to the lay public. These activities will also benefit the research team by enabling the public to provide them with feedback.”

Ms. Bennett hopes that the example of Rheumatosphere will inspire attendees to “engage with the public, which is an essential part of scientific life, particularly because the majority of research is publicly funded. We also will highlight the importance of targeting diverse groups, such as patients, children, and adults, in outreach activities.

“We believe that involving the public and patients is an essential part of being scientists and clinicians,” she continued. “We will only be able to fully deliver on many promised developments in arthritis research if we engage, inspire, and empower these important stakeholders. The presentation will show that Rheumatosphere emphasises that no one is fighting arthritis and rheumatic diseases alone – we’re all part of one big team.”

There will be three additional presentations. Prof. Andreas Schwarting (Aacura Kliniken Rheinland-Pfalz AG) will speak on ways to improve early diagnosis despite limited resources. Prof. Christian D. Mallen (Keele University) will discuss how general practitioners could enhance early diagnosis of rheumatic diseases. Paul Kirwan (Royal College of Surgeons in Ireland) will speak about the contribution of physiotherapists in early detection of inflammatory arthritis.

Neither Mr. Church nor Ms. Bennett have any disclosures of interest.
Letter from the EULAR Secretariat

Dear congress participants,

On behalf of the entire staff of the EULAR Secretariat, I cordially welcome you to the EULAR Congress 2017. This year also marks the 70th anniversary of EULAR as an organisation. EULAR was founded in 1947 and held its first European Rheumatology Congress in September 1947 in Copenhagen with 200 delegates from 16 countries. For the 2017 congress, EULAR expects around 14,000 delegates from more than 120 countries. For 70 years, EULAR has fostered excellence in education and research in the field of rheumatology; the fast development of EULAR as an organisation parallels the amazing progress in this field of medicine. Many of the disabling – and often deadly – diseases that were untreatable in earlier times are today manageable in a way that allows affected individuals to lead a normal life.

Please enjoy the many different opportunities designed to celebrate EULAR’s anniversary with us during the congress. Start your journey by taking a walk through EULAR’s history, which is displayed on the glass panels along the venue’s main alley. The panels show the remarkable development of EULAR as an organisation and of research in rheumatology in a timeline that reflects the look and feel of the last 7 decades. Go back 70 years in medicine with our photo exhibition, which shows old medical devices from the 1940s and 1950s. The photography of these items was made possible thanks to standing scientific programme which is this year the highest in the history of the congress. We received more than 4,850 abstracts, and we would like to take this opportunity to thank everyone who actively contributed in this way to the success of our congress. We would also like to thank our Scientific Programme Committee, who are highly valued, along with all of those working behind the scenes to establish the outstanding scientific programme which hosts some 350 invited speakers who address the most recent developments in clinical practise and patient care and basic and translational research.

Furthermore, I would like to draw your attention to the first EULAR campaign, which will be officially launched during the 2017 congress. With the slogan ‘Don’t Delay, Connect Today!’ EULAR calls on people with first symptoms of rheumatic and musculoskeletal diseases (RMDs) to connect with their local health-care provider as soon as possible to ensure early diagnosis and timely access to evidence-based treatment. Following the congress, please continue to support EULAR in keeping the campaign alive across Europe by taking action in your home countries and national organisations. A toolkit is available to support you in this pursuit and can be obtained from the EULAR Secretariat.

Another exciting, new initiative that will be launched during the congress is the EULAR School of Rheumatology. The school will provide and facilitate high-quality educational offerings for physicians, health professionals in rheumatology, and people with rheumatic and musculoskeletal diseases. The goal of the school is to become the global leader in rheumatology education, accessible by all, from everywhere. When you attend the congress registration desk, you will be offered a 1-year complementary membership in the school as a special anniversary gift from EULAR. This membership will enable you to access the school offerings, including the new EULAR App, with its unique features, as well as several new educational offerings in the near future, which will be developed by the various school ‘classrooms.’ These classrooms have been customised for different target groups, including students, trainees/residents/fellows in training, rheumatologists, researchers, teachers, health professionals, and, last but not least, people with arthritis/rheumatism. They stand at the centre of everything we do.

The year 2017 also started with some changes in the staff of the EULAR Secretariat. My predecessor, Heinz Marchesi, retired at the end of March. On behalf of the entire secretariat, I would like to thank Heinz for the outstanding service he provided to EULAR over the last 11 years as EULAR’s Executive Director.

I joined EULAR in January and it is my great pleasure to welcome you to “my first” EULAR congress in this position, although I have attended the congress many times in the past. A few words regarding my professional background: I am a physician and a journalist, and I have a long-standing connection to the field of rheumatology, first as a medical journalist, covering the ACR and EULAR congresses, and later as press officer of the German Competence Network for Rheumatology. Most recently, I was the General Secretary and Managing Director of the German Society for Rheumatology and its related education academy. My first weeks at EULAR have been extremely busy getting acquainted with all the different people and topics under the EULAR roof. I am very impressed by the unique, common spirit of the three pillars of EULAR and am now greatly looking forward to working with all of you!

May I also introduce further, recently hired new EULAR Secretariat staff members: Our new Communications Manager, Ursula Aring, joined EULAR in December 2016. Her role is to work with all areas of the organisation’s network to achieve understanding, acceptance, and active engagement regarding RMDs among all areas of society. To achieve this, she is managing and developing communications channels including digital and social media. Prior to EULAR, she worked in business communications in the private industry sector.

In May, we welcomed new PARE Coordinator Alžbeta Góhľam, who took over some of the tasks of Florian Klett, who is now focusing on the FOREUM foundation. Alžbeta supports PARE representatives in the EULAR Executive Committee and coordinates the European PARE networks and projects, including Patient Research Partners, Engagement Programme, Knowledge Transfer Programme, and Young PARE. Prior to EULAR, Alžbeta worked for a large foundation in the Czech Republic, followed by a position in the international department of Czech radio.

Thank you for your interest in EULAR and its activities, and welcome to the EULAR family! Please enjoy the different offerings of our congress. We highly appreciate your participation and welcome all suggestions regarding the further development and improvement of EULAR’s performance.

Julia Rautenstrauch
EULAR Executive Director

Julia Rautenstrauch

Scientific training bursaries

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). Only persons who work predominantly in the field of rheumatology are eligible. Bursaries will not be made if the applicant is already abroad in training. The age of the candidate should not exceed 40 years. Application details are available at www.eular.org. The next application deadline is 30 September 2017.
Roche-sponsored satellite symposia at EULAR 2017

A New Era for Giant Cell Arteritis
Thursday 15 June 2017, 17:30–19:00, Hall 7B, IFEMA – Feria de Madrid

Food and refreshments will be served from 17:00

17:30–17:35 Welcome and introduction
Prof John H. Stone, USA (Chair)

17:35–17:55 Current and future GCA treatment options
Prof John H. Stone, USA

17:55–18:05 Exploring the diagnosis landscape
Dr Yara Banz, Switzerland

18:05–18:20 Harnessing innovation to guide diagnosis and management
Dr Andreas Diamantopoulos, Norway

18:20–18:35 Navigating the route to better outcomes for patients
Prof Georg Schett, Germany

18:35–18:45 Discussion: What do these data mean for clinical practice?

18:45–18:50 Summary: Towards a brighter horizon for GCA
Prof John H. Stone, USA

18:50–19:00 Question and answer session

From Evolution to Revolution in Treatment of RA Patients
Friday 16 June 2017, 08:15–09:45, N101/N102, IFEMA – Feria de Madrid

Food and refreshments will be served from 07:45

08:15–08:20 Welcome and introduction
Dr José María Álvaro-Gracia, Spain (Chair)

08:20–08:40 What can we learn from real-world data approaches with biologics?
Dr José María Álvaro-Gracia, Spain & Prof Leslie Harrold, USA

08:40–09:05 What RA treatment-related challenges do patients still face?
Moderator: Dr José María Álvaro-Gracia, Spain
Prof Andrea Rubbert-Roth, Germany & Prof Ernest Choy, UK

09:05–09:25 Exploring new opportunities for RA treatment
Dr David Lee, Switzerland

09:25–09:30 Summary
Dr José María Álvaro-Gracia, Spain

09:30–09:45 Question and answer session
Basic science, clinical abstract awardees honoured

At this evening’s Opening Plenary Session, first authors from six basic science and seven clinical research abstracts will each receive awards for achieving the highest overall scoring from an expert review panel. Each of the winners below will receive 1,000 euros.

**Basic Science Award Winners**

Karlijn Debusschere is a PhD student at the Institute of Infection, Immunity, and Inflammation at the University of Glasgow (United Kingdom) and is receiving a prize for research on the anti-inflammatory repair properties of macrophages in the synovium of healthy patients and patients with rheumatoid arthritis who are on remission. Her award is for leading the largest genome-wide association study to date in juvenile idiopathic arthritis (JIA) patients. The researchers used four different Illumina platforms to genotype a UK cohort of 2,585 JIA patients and 5,181 controls. In an analysis of oligoarthritis and rheumatoid factor-negative polyarthritis cases, Dr. Smith and her colleagues confirmed 13 previously identified JIA risk loci and identified more than 20 potentially novel regions, including one single nucleotide polymorphism (SNP) in an intergenic region between TNFSF15 and TNFSF8 on chromosome 9. TNFSF15 is very similar to TNF-alpha, they noted, and has been found, in Crohn’s disease, to drive expression of proinflammatory cytokines (interferon-gamma) and TNF-alpha from specific T cells that are resistant to anti-TNF treatment. Other data also suggest SNPs in this region may have interactions within specific T- and B-cell lines.

Melissa van Tok is a PhD candidate at Academic Medical Centre Amsterdam. She is receiving a prize for her work in an experimental rat model of spondyloarthritis that demonstrates the dependency of IL-17A expression and production on the IL-23 axis for initiating experimental spondyloarthritis but not for sustaining already established disease (abstract OP0159). She and her colleagues showed that targeting of the IL-23 axis with an anti-IL-23 receptor antibody completely prevented the onset of arthritis and spondylitis in HLA-B27/Hu-beta-2m transgenic rats but, at the same time, was not able to reduce axial and peripheral joint inflammation in established disease.

**Clinical Abstract Award Winners**

Jesper Knoop, PT, PhD, is with Reade Center for Rehabilitation and Rheumatology, Amsterdam. He is receiving an award for research exploring analgesic use and factors related to analgesic use in patients with knee and/or hip osteoarthritis, which inspired the study. Dr. Knoop and his associates looked at data on analgesic use from the Amsterdam Osteoarthrits (AMS-OA) cohort. Analgesics were divided into acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs, including coxibs), and opioids. Analgesic use was reported by 62% of the patients, with acetaminophen, NSAIDs, and opioid use reported by 50%, 30%, and 12%, respectively.

Pauline Raaschou, MD, PhD, is with the department of medicine at the Karolinska Institute, Stockholm. The research for which she is receiving her award set out to determine whether TNF inhibitors (TNFis) were associated with cancer recurrence in patients with rheumatoid arthritis, compared with other types of treatment for RA (abstract OP0308). Dr. Raaschou and her associates found no difference in cancer recurrence rates between all...
PAH IS A PROGRESSIVE DISEASE
START AHEAD

OPSUMIT, as monotherapy or in combination, is indicated for the long-term treatment of pulmonary arterial hypertension (PAH) in adult patients of WHO Functional Class (FC) II to III. Efficacy has been shown in a PAH population including idiopathic and heritable PAH, PAH associated with connective tissue disorders, and PAH associated with corrected simple congenital heart disease.

Important Safety Information
OPSUMIT is to be taken orally at a dose of 10 mg once daily with or without food. The most commonly reported adverse drug reactions were nasopharyngitis, headache, and anemia. OPSUMIT should not be initiated in patients with severe hepatic impairment, or clinically significant elevated hepatic aminotransferases (>3x ULN). OPSUMIT is not recommended in patients with moderate hepatic impairment. OPSUMIT should not be initiated in patients with severe anemia. Elevations of liver aminotransferases or a decrease in hemoglobin concentration may occur while taking OPSUMIT; monitoring is recommended. If signs of pulmonary edema occur, the possibility of pulmonary veno-occlusive disease should be considered. OPSUMIT is contraindicated in patients with a known hypersensitivity to the active substance or to any of the excipients, women who are pregnant, breastfeeding, or of childbearing potential who are not using reliable contraception. OPSUMIT is not recommended in patients undergoing dialysis; caution is recommended in patients with severe renal impairment. Avoid using OPSUMIT with strong CYP3A4 inducers. Caution should be exercised when OPSUMIT is administered concomitantly with strong CYP3A4 inhibitors. The safety and efficacy of OPSUMIT in children have not yet been established. There is limited clinical experience in patients over the age of 75 years, therefore OPSUMIT should be used with caution in this population.

Visit OPSUMIT.info for further information.
the treatments, as well as no differential risk depending on the timing of the start of TNFi in relation to the index cancer. However, it’s unclear whether the results are generalisable to patients with a very recent cancer or a poor prognosis.

Antoine Vanier, MD, PhD, is a postdoctoral researcher in biostatistics and lecturer at the Institut de Recherche en Santé 2, University of Nantes (France). Dr. Vanier’s award-winning research involves the development of a matrix for predicting rapid radiographic progression in patients with early rheumatoid arthritis by using various combinations of levels of common baseline characteristics, such as swollen joint count with or without the presence of typical RA erosion on radiographs, rheumatoid factor status, and C-reactive protein level (abstract OP0247). He and his coauthors pooled individual data from two observational cohorts and three clinical trials to determine predictors for which patients would have an increase in modified Sharp score of at least 3 points between baseline and year 1 after receiving a trial of at least 3 months on methotrexate or leflunomide. The resulting matrix yielded a more precise estimate of the probability of rapid radiographic progression.

Veerie Stouten is a PhD student with the Skeletal Biology and Engineering Research Center at Catholic University of Leuven (Belgium). Ms. Stouten is being honoured for her study on the sustained effectiveness of methotrexate with step-down glucocorticoid remission induction (COBRA) for early rheumatoid arthritis (abstract OP0226). Ms. Stouten and her associates compared the outcomes of three different intensive treatment strategies in high-risk patients of the CareRA trial at week 104, focusing on persistent disease control. High-risk patients were randomised to COBRA Classic, COBRA Slim, or COBRA Avant-Garde. Remission rates at week 104 in high-risk patients were 65.3% for Classic, 73.5% for Slim, and 73.1% for Avant-Garde, and, for those who were in remission at year 1, 54.7%, 67.8%, and 70.2% in the Classic, Slim, and Avant-Garde groups, respectively, stayed in remission at every 3-month evaluation until week 104.

Veerle Stouten is a PhD student with the Skeletal Biology and Engineering Research Center at Catholic University of Leuven (Belgium). Ms. Stouten is being honoured for her study on the sustained effectiveness of methotrexate with step-down glucocorticoid remission induction (COBRA) for early rheumatoid arthritis (abstract OP0226). Ms. Stouten and her associates compared the outcomes of three different intensive treatment strategies in high-risk patients of the CareRA trial at week 104, focusing on persistent disease control. High-risk patients were randomised to COBRA Classic, COBRA Slim, or COBRA Avant-Garde. Remission rates at week 104 in high-risk patients were 65.3% for Classic, 73.5% for Slim, and 73.1% for Avant-Garde, and, for those who were in remission at year 1, 54.7%, 67.8%, and 70.2% in the Classic, Slim, and Avant-Garde groups, respectively, stayed in remission at every 3-month evaluation until week 104.

Anoek de Koning, MD, is a PhD candidate in the department of rheumatology at Leiden (the Netherlands) University Medical Centre. She is receiving a prize for a study comparing low-dose CT (LD-CT) with conventional radiography in patients with ankylosing spondylitis (abstract OP0114). Dr. de Koning and her associates analysed detection of syndesmophyte formation with LD-CT and conventional radiography in patients from the SIAS (Sensitive Imaging of Axial Spondyloarthritis) cohort. In all comparisons, LD-CT detected more patients with progression. This was especially apparent in cases of growth and for cut-offs of a higher number of newly formed or growth of syndesmophytes per patient. With the strictest comparison of the consensus score for both radiography and LD-CT, 30% of the patients showed bony proliferation (newly formed and growth) at three or more sites on LD-CT, compared with 6% of patients on conventional radiography.

Tiphaine Goulenok, MD, of the internal medicine service at Bichat Hospital, Paris Diderot University, is being honoured for her work in leading a pilot study to determine whether a nurse-led vaccination program would improve pneumococcal vaccination coverage among patients with chronic inflammatory rheumatic diseases who are receiving immunosuppressive therapy and/or biotherapy (abstract OP0065). In the study, 88.9% of the patients who were candidates for vaccination were accurately identified by nurses. The vaccination rate was 17.1% preintervention and 77.6% postintervention.

Hepatic insufficiency:
- Record baseline hepatic AST/ALT prior to therapy, monthly monitoring recommended. If sustained AST/ALT elevation including increase in bilirubin ≥2X ULN or signs of clinical hepatic injury, discontinue treatment.
- Treatment may be recommenced in patients with no clinical hepatic injury, following hepatologist advice and normalisation of liver tests.
- Haemoglobin (Hb): Record baseline Hb and monitor as clinically indicated. As with other ERA treatment a non-progressive decrease in Hb (15g/dL) has been observed, with stabilisation and maintenance after 12- weeks of treatment. Treatment not recommended in patients with severe anemia.
- Pulmonary veno-occlusive disease (PVOD):
  - If signs of pulmonary oedema, consider PVOD.
- Women of child bearing potential:
  - Only initiate treatment in women of childbearing potential, using reliable contraception, who have a negative pregnancy test immediately prior to treatment and thereafter monthly during therapy. Women should not become pregnant for 1 month after discontinuation of treatment.
- CYP3A4 inducers/inhibitors:
  - Efficacy could be reduced with concomitant use of strong CYP3A4 inducers e.g. rifampicin, St. John’s Wort, carbamazepine, and phenytoin. Use caution with concomitant use of strong CYP3A4 inhibitors e.g. irinotecan, ketoconazole, voriconazole, clarithromycin, telithromycin, nefazodone, ritonavir, and saquinavir. Macitentan does not affect the exposure to CYP3A4 substrates hence, no expected loss of efficacy of the contraceptive pill.
- Pregnancy and lactation:
  - Animal studies have shown reproductive toxicity, there is no data on the use of macitentan in pregnancy. It is not known if macitentan is excreted in human breast milk or if there is a risk to the feeding child.
- Male fertility:
  - Testicular tubular atrophy, observed in animals, potential deterioration of human spermatogenesis cannot be excluded.
- Ability to drive and use machines:
  - Headache and hypotension are known side effects and may have a minor influence on the ability to drive and use machines.
- Side effects:
  - From clinical trial experience, very common (≥1/10); nasopharyngitis, headache, anemia, bronchitis, sepsis/fluid retention. Common (≥1/100 to <1/10); pharyngitis, influenza, uracoil tract infection, hypotension, nasal congestion.
- Overdose:
  - A single dose of 600mg was administered to healthy subjects. Adverse events of headache, nausea, and vomiting were observed. In the event of an overdose, take standard supportive measures. Due to high protein binding of macitentan, dialysis is unlikely to be effective.
- Packaging, quantity and price:
  - One box containing Optumit 10mg film coated tablets, 30 tablets per box.
  - Price £230.00 per box.

Marketing Authorisation Holder and Numbers: Actelion Pharmaceuticals Ltd.
MA: EU/1/13/393/1-3
Supply Classification: POM.
Information about this product, including adverse reactions, precautions, contra-indications, and the method of use can be found at: www.actelion.co.uk, or upon request from Actelion Pharmaceuticals Ltd, Oswestry Tower 13th Floor, 389 Oswestry High Road, Llandrindod Wells, LD4 2AL, UK, +44 (0)208 987 3333.
Date of revision July 2015.

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 Actelion Pharmaceuticals UK Ltd on +44 (0)208 987 3333 or drugssafety@actelion.com

©2016 Actelion Pharmaceuticals Ltd.
Date of preparation: February 2016

8 18th Annual European Congress of Rheumatology // 14-17 June 2017 // Madrid
Meet the Health Professionals in Rheumatology and PARE award winners

The first authors of the top three Health Professionals in Rheumatology abstracts and the author of the best People with Arthritis/Rheumatism in Europe (PARE) abstract at this year’s congress will each receive a prize of 1,000 euros at this evening’s Opening Plenary Session.

Huang Zhengping, MSc, of Guangdong Second Provincial General Hospital, Guangzhou, China, is receiving an award for a study on the feasibility of telemedicine in patients with ankylosing spondylitis (abstract THU0732-HPR). The study’s focus was Guangdong Internet Hospital, China’s first officially recognised network hospital. Mr. Zhengping and his colleagues conducted a 6-month randomised, controlled trial of two groups of patients: One group had standard care (ST), and one group had standard care with Network-Enhanced Management (ST-NEM). Guangdong Internet Hospital was widely accepted by the patients in the ST-NEM group. Patients were assessed via several tools at baseline and 6 months later. Patients assigned to the ST-NEM group reported significant improvement in functional limitation, psychological status, sleep quality, and general health status.

Wilfred Peter, PT, PhD, is with the Amsterdam Rehabilitation Research Center, the Reade Center for Rehabilitation and Rheumatology in Amsterdam, and the department of orthopaedics, rehabilitation, and physiotherapy at Leiden (The Netherlands) University Medical Centre. He is being honoured for leading a study on the reliability, responsiveness, and interpretability of the Animated Activity Questionnaire (AAQ), which measures activity limitations in hip and knee osteoarthritis (abstract OP0141-HPR). The AAQ, in addition to a patient-reported outcome measure and performance-based tests, showed good construct validity, cross-cultural validity, internal consistency, and test-retest reliability. A change in AAQ score over 13.5% indicated a real improvement in activity limitations in patients with hip and knee osteoarthritis. The researchers found that the AAQ seems to have great potential for international use in research, but its application in clinical practice needs caution.

Ellen M.H. Selten, MSc, is with the department of rheumatology at Sint Maartenskliniek, Nijmegen, The Netherlands. She is receiving an award for a study on the excess risk of cardiovascular events among people with rheumatoid arthritis before and after the 2000s (abstract OP0046). In the meta-analysis of 28 selected observational studies, the results confirmed an increased risk of all defined cardiovascular events among people with rheumatoid arthritis, compared with the general population, in the years prior to 2000. However, there was no increased risk for heart failure and cardiovascular mortality after the year 2000, whereas excess risk was reduced for myocardial infarction and remained stable for stroke. The results indicated that the increased risk of cardiovascular events has declined since the 2000s.

Ellisabeth Filhol is a rheumatologist in training (third year) at Nîmes University Hospital-Montpellier University in France. She is being recognised for conducting a systematic review and meta-analysis of the literature through March 2016 to assess the excess risk of cardiovascular events among people with rheumatoid arthritis before and after the 2000s (abstract OP0046). In the meta-analysis of 28 selected observational studies, the results confirmed an increased risk of all defined cardiovascular events among people with rheumatoid arthritis, compared with the general population, in the years prior to 2000. However, there was no increased risk for heart failure and cardiovascular mortality after the year 2000, whereas excess risk was reduced for myocardial infarction and remained stable for stroke. The results indicated that the increased risk of cardiovascular events has declined since the 2000s.

EULAR Imaging Library

- An online gallery with a wide spectrum of traditional to most recent imaging modalities, ranging from the most common to the rarest RMDs in adults and children

- The ever-growing collection offers a valuable educational resource for rheumatologists, physicians and health professionals who focus on the musculoskeletal system

- Easy to navigate and free to download on www.eular.org
Study validates EULAR definition of arthralgia suspicious for progression to rheumatoid arthritis

The recently established EULAR definition of arthralgia suspicious for progression to rheumatoid arthritis underwent validation in a longitudinal study that confirmed its ability to distinguish patients who are at highest risk for progression from those who do not progress.

The study, conducted by investigators from the Netherlands and Sweden, will be presented this afternoon.

The results should help to design better clinical trials investigating the progression from arthralgia to rheumatoid arthritis (RA), which have been difficult to perform in past studies because of a lack of clarity concerning patients who are more likely or less likely to progress to RA. Inclusion of patients considered likely to progress would provide more meaningful clinical data.

This problem in trial design and the shifting emphasis on investigating very early stages of RA as a strategy of lessening disease symptoms or preventing RA outright led to a EULAR task force definition of arthralgia that is more likely to progress to RA (Ann Rheum Dis. 2017;76:491-6).

“arthritis,” said Prof. van der Helm–van Mil, Chair of Rheuma-Liga, a patient organisation in Germany. He is receiving a prize for his work on a project and online platform developed to aid the transition from children’s care to adult care in patients with arthritis (abstract OP0345-PARE). Ten transition peers were trained to provide telephone, online, and personal support for adolescents transitioning from children’s to adult care. An online information platform has been created, and camps especially for young people growing up with arthritis are offered. The model project will run for 3 years – from 2014 until the end of 2017. The German Arthritis Research Center is evaluating the project. The online information platform is well accepted; it had more than 10,000 visitors during the first year, and the young users like the content of the homepage. For parents, information materials have been developed, and a seminar is offered. The project was developed at Deutsche Rheuma-Liga in cooperation with the German Arthritis Research Center and financial support by the German Federal Ministry of Health.
Translating the Latest Knowledge in PsA... ...Into Daily Practice

Thursday, 15 June 2017
17:30 - 19:00  •  Room N101/N102

Description
This symposium will provide the latest insight on the management of the multiple manifestations of PsA, focusing on the therapeutic challenges associated with the heterogeneity of this disease and recent advances in capturing the patient’s perspective. At the conclusion of the symposium, patient case studies representative of the clinical challenges discussed throughout the program will be presented to demonstrate how inhibition of phosphodiesterase-4 can provide value in psoriatic arthritis.

Agenda
17:15 - 17:30  Registration
17:30 - 17:35  Chairperson’s introduction to the complexity of PsA
17:35 - 18:00  Clinical challenges of PsA in daily practice
18:00 - 18:25  Partnering with patients to guide therapy decisions
18:25 - 18:45  Real-world clinical experience
18:45 - 19:00  Question-and-answer panel

Program Chair
Dr. Jaime Calvo-Alén
Head of Rheumatology
Hospital Universitario Araba
Basque Country, Spain

Program Faculty
Prof. Carlo Selmi
Head, Rheumatology and Clinical Immunology
Humanitas Research Hospital
University of Milan
Milan, Italy

Dr. Kurt de Vlam
Principal Investigator
University Hospital Leuven
Leuven, Belgium

Prof. Dennis McGonagle
Professor of Investigative Rheumatology
University of Leeds
Leeds, England
### Exhibitors' List

Status as of 1 May 2017

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>STAND N°</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABBVIE</td>
<td>29A+31+32</td>
</tr>
<tr>
<td>AMGEN</td>
<td>45</td>
</tr>
<tr>
<td>BIOGEN</td>
<td>64</td>
</tr>
<tr>
<td>BIOMEDICA S.A.</td>
<td>68</td>
</tr>
<tr>
<td>BMS</td>
<td>17</td>
</tr>
<tr>
<td>BOSCHER-INGEHEIM</td>
<td>9+34</td>
</tr>
<tr>
<td>BRISTOL-MYERS SQUIBB</td>
<td>26+27</td>
</tr>
<tr>
<td>CELGENE</td>
<td>28+29B</td>
</tr>
<tr>
<td>CELLTRION HEALTHCARE</td>
<td>66+67</td>
</tr>
<tr>
<td>CRESIDNO BIOSCIENCE</td>
<td>46C</td>
</tr>
<tr>
<td>CYTOBIOTHERAPEUTICS INC</td>
<td>47</td>
</tr>
<tr>
<td>DIAGNOSTICS</td>
<td>15</td>
</tr>
<tr>
<td>DSA MEDICA SRL</td>
<td>49</td>
</tr>
<tr>
<td>DJE LIMITED</td>
<td>48</td>
</tr>
<tr>
<td>EIU LIMITED AND COMPANY</td>
<td>01+30</td>
</tr>
<tr>
<td>ESAOTE S.P.A</td>
<td>20</td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>03</td>
</tr>
<tr>
<td>FEDE RAMBAMETIC</td>
<td>07+08</td>
</tr>
<tr>
<td>FUTURE EVENTS</td>
<td>58B</td>
</tr>
<tr>
<td>GE HEALTHCARE</td>
<td>58C</td>
</tr>
<tr>
<td>GILEAD SCIENCES</td>
<td>61</td>
</tr>
<tr>
<td>GROBENTRA DE GMBH</td>
<td>65</td>
</tr>
<tr>
<td>GLADCATHASPHASE</td>
<td>23+24</td>
</tr>
</tbody>
</table>

---

### EULAR Village Exhibitors' List

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>STAND N°</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGORA</td>
<td>V05</td>
</tr>
<tr>
<td>AMERICAN COLLEGE OF RHEUMATOLOGY</td>
<td>V03+V21</td>
</tr>
<tr>
<td>APLAR</td>
<td>V24</td>
</tr>
<tr>
<td>ARAB LEAGUE AGAINST RHEUMATISM (APLAR)</td>
<td>V1</td>
</tr>
<tr>
<td>ASSOCIATION OF WOMEN IN RHEUMATOLOGY</td>
<td>V12</td>
</tr>
<tr>
<td>BRITISH SOCIETY FOR RHEUMATOLOGY</td>
<td>V23</td>
</tr>
<tr>
<td>CLINICAL AND EXPERIMENTAL RHEUMATOLOGY</td>
<td>V4</td>
</tr>
<tr>
<td>EMEKNET</td>
<td>E26</td>
</tr>
<tr>
<td>EULAR</td>
<td>EULAR CAMPUS</td>
</tr>
<tr>
<td>EULAR HEALTH PROFESSIONALS IN RHEUMATOLOGY</td>
<td>E27</td>
</tr>
<tr>
<td>EULAR PARE</td>
<td>E29</td>
</tr>
<tr>
<td>EULAR PARE HOSPITALITY SUITE</td>
<td>V8</td>
</tr>
<tr>
<td>EULAR STUDY GROUPS</td>
<td>V13-V14</td>
</tr>
<tr>
<td>EUROPEAN LUPUS SOCIETY</td>
<td>V2</td>
</tr>
<tr>
<td>FOREUM FOUNDATION FOR RESEARCH IN RHEUMATOLOGY</td>
<td>V15-V16</td>
</tr>
<tr>
<td>HELP DECK FOR MOBILE DEVICES</td>
<td>V7</td>
</tr>
<tr>
<td>INTERNATIONAL FEDERATION OF PSORIASIS ASSOCIATIONS (IFPA)</td>
<td>V3</td>
</tr>
<tr>
<td>JAPAN COLLEGE OF RHEUMATOLOGY</td>
<td>V22</td>
</tr>
<tr>
<td>LETTER TO EDITOR RHEUMATOLOGY</td>
<td>V18</td>
</tr>
<tr>
<td>LIGA RHEUMATOLÓGICA ESPAÑOLA (LIRE)</td>
<td>V10</td>
</tr>
<tr>
<td>LUPUS EUROPE</td>
<td>V9</td>
</tr>
</tbody>
</table>

---

### Poster Display

**POSTER 0001-0132**

**POSTER 0133-0246**

**POSTER 0247-0360**

---

**POSTER 0641-0772**

**POSTER 0529-0640**

**POSTER 0361-0528**
Global variation of biologic uptake in spondyloarthritis shows that there is more at play than cost

Mounting scientific evidence shows that biologic anti-rheumatic drugs suppress inflammation, improve function and mobility, and may also halt disease progression in people with spondyloarthritis.

Rates of treatment with these agents vary around the world – in part because of their high cost. But cost is only part of the picture, according to Dr. Elena Nikiphorou, a rheumatologist and epidemiologist at King’s College London.

At an abstract session this afternoon, Dr. Nikiphorou will report that differences in biological anti-rheumatic drug uptake seen from country to country cannot be explained exclusively through economic indicators.

Dr. Nikiphorou is presenting results from her team’s analysis of data from the ASAS COMOSPA study, a cross-sectional multicenter observational study that looked at treatment for more than 3,300 consecutive spondyloarthritis patients fulfilling the ASAS (Assessment of Spondyloarthritis international Society) classification criteria in 22 countries in Africa, the Americas, East Asia, and Europe. All patients in the study were 18 or older and diagnosed with peripheral or axial disease.

Dr. Nikiphorou and her colleagues found differences in the uptake of biologic anti-rheumatic drugs by country even after adjusting for a wide variety of socioeconomic and clinical variables. For example, Colombia’s rate of biologic drug use after adjustment for per-country socioeconomic, demographic, and clinical variables exceeded 50% of SpA patients, while Singapore’s was well below 25%.

Overall, unadjusted mean use of biologics to treat SpA was highest in Belgium, which had 75% uptake. Usage was also high in France and the United States. China, meanwhile, had the lowest mean uptake of all countries.

The researchers did expect to see some variation by country, Dr. Nikiphorou said. “Even among EU countries, we know from previous studies that there are inequalities in access to biologics and also that reimbursement or clinical recommendations can regulate prescription of biologics in clinical practice.”

While Dr. Nikiphorou and her colleagues found that higher use of biologics in SpA tended to occur in the countries with higher overall medical expenditures, this did not reach statistical significance, and country gross domestic product was not significantly correlated to uptake either.

“Even in this fully adjusted model which uses sophisticated statistical techniques to include these country-level factors, there remains residual variation across countries, which makes us think that there are factors beyond these socioeconomic factors that account for these differences,” Dr. Nikiphorou said.

As to what these might be, Dr. Nikiphorou added that it is difficult to know. “Even among EU countries, we know from previous studies that there are inequalities in access to biologics and also that reimbursement or clinical recommendations can regulate prescription of biologics in clinical practice.”

One can only speculate on the potential explanations for the residual variation across countries, which makes us think that there are factors beyond these socioeconomic factors that account for these differences,” Dr. Nikiphorou said.

Progress in management of SpA

Wednesday 17:00 – 18:30

Hall 7A
The Biologic Conversation:
Talking originators and biosimilars

Thursday 15th June; 08:15–09:45am
Hall N103–104

Chair: Robert J Moots (UK)
Panel: Eduardo Mysler (Argentina)
Mark Genovese (USA)
Ronald Van Vollenhoven (The Netherlands)

We would like to have an open conversation with you about originator biologics and biosimilars in rheumatology.

Here are some of the things we’d like to talk about:

• How can the critical roles of the physician and patient as treatment decision makers be maintained?
• What do physicians need to know with respect to biologic and biosimilar clinical data?
• How can real world data support decision making?
• What factors need to be considered when making switching decisions?

If you’re ready to discuss these and many other questions, and maybe even help find the answers, come to Hall N103–104 at 08:15 tomorrow, Thursday 15th of June. It’s early, but it will be worth it.

AGENDA

08.15 Welcome and introduction
Robert J Moots

08:30 Talking originator biologics and biosimilars
Chair and panel

09.30 Unanswered questions
Chair and panel

09.40 Summary and close
Robert J Moots

Pfizer EULAR 2017 Satellite symposium
For more information, come visit us at the Pfizer booth (booth 37)
Researchers aim to help working patients with rheumatic and musculoskeletal diseases

Biologic medications, multiprofessional interventions, and early, aggressive treatment of rheumatic diseases have allowed more people with rheumatoid arthritis and other rheumatic diseases to maintain their careers and continue with their daily valued activities.

But that does not mean working patients don’t continue to experience pain, lost work days, and disability, even if they are in clinical remission.

Indeed, according to two researchers now focusing on work- and rehabilitation-related issues among people with rheumatic disease, the working environment presents a series of unique concerns for patients – many of which require a closer look.

At a session this afternoon that is dedicated to rehabilitation and modern drug treatment, Mathilda Björk, PhD, an occupational therapist at Linköping (Sweden) University, will discuss the complexities of the concept of remission and making decisions about rehabilitation in a population that may have few clinical indicators of an active disease but continues to struggle at working and finding an activity balance in life.

“When rheumatologists discuss remission, generally it’s according to disease activity measured by the DAS28, for example, which measures disease activity and inflammation. But we know that inflammation and disability are not highly correlated,” Dr. Björk said in an interview. That means that patients may have a low disease activity but still experience disability.

Dr. Björk’s recent studies derive from two Swedish cohorts of people with early rheumatoid arthritis (RA) in the TIRA-project (Swedish acronym for Early Intervention in Rheumatoid Arthritis), with one group treated before the advent of biologic medications and the other treated after 2006 when these became widely available. In the latter cohort, more than three-quarters of patients were working. “It is a high-functioning group,” she said. “But they reported a lot of limitations and problems at work.”

Disability can arise “from stress, or tiredness, or pain,” all of which can be exacerbated by the demands of managing a work environment in combination with an active leisure time and a lot of social roles, Dr. Björk said.

Dr. Björk’s talk highlights “the need for clinicians to arm the patient with self-management strategies and to carefully assess what the patient wants to do,” at work and at home, when considering indications for rehabilitation. “Today’s patients are demanding in a good way and want to stay active and participate in valued activities,” Dr. Björk said.

“But this also causes needs for activity balancing, self-management, and energy conservation as a part of the rehabilitation, which is in line with today’s guidelines and recommendations.”

At the same session, Yeliz Prior, PhD, of the University of Salford (United Kingdom) will present on the lack of communication between RA patients and clinicians related to work-specific concerns and ways to intervene.

In an interview, Dr. Prior said that clinicians need to ask their employed RA patients more pointed questions to determine the presence of work instability, a common precursor of disability and a key intervention point in preventing disability. Work instability occurs when people must change their duties or position because of an inability to meet normal job demands or must miss days of work.

“People with RA often don’t know their rights at work and particularly struggle to decide whether they should disclose their condition,” Dr. Prior said. “Our research has shown that people don’t just worry about their managers but also worry about their colleagues’ perception of them. People don’t want to seem any different from anybody else doing the job that they are doing.”

Currently, the provision of work rehabilitation services in the National Health Service (NHS) is scattered, with no clear pathway for patients with RA to follow, Dr. Prior said. More often than not, RA patients are given some generalised advice and written information. There are clinical specialist occupational therapists providing work rehabilitation interventions to include job site visits and liaison with employers, but these specialist services are not accessible by all. It very much depends on the extent of service provision in a given NHS Trust and expertise available to them locally.

Dr. Prior and colleagues conducted a feasibility randomised controlled trial with 55 rheumatoid, psoriatic, or inflammatory arthritis patients who were randomised to receive either job retention work rehabilitation or written information only. Rheumatology occupational therapists provided individualised work rehabilitation on a one-to-one basis using the Work Experience Survey–Rheumatic Conditions (WES-RC) structured interview tool. The research group found that a brief job retention work rehabilitation is a credible and acceptable intervention for people with inflammatory arthritis with concerns about continuing to work because of arthritis, and it is cost effective. Most participants admitted not reading the written work advice provided; therefore, this had no impact in aiding those with work instability.

The WES-RC was originally developed in the United States, and Dr. Prior’s research group has adapted this tool for the UK. “We’ve made the tool and the user manual freely available online at the Salford University’s research repository for therapists to download and use in clinical practice. Its use is becoming more common amongst occupational therapists working in rheumatology in the UK, but there is a need for wider uptake to standardise work rehabilitation provision across the UK,” she said.

Yet, in many clinics, the conversations about work still aren’t taking place. Some of the problem lies with patients’ awareness, Dr. Prior said, who “don’t necessarily think it’s the clinicians’ responsibility to address their difficulties at work, so they don’t tend to disclose work problems to their GP, rheumatologist, or even the therapists, who are most likely to be of help, unless they have been specifically asked about how they are coping at work or have been in long-term sickness leave. We know that, once people with RA are on long-term sick leave, they are unlikely to return to work. Therefore, job retention work rehabilitation is more effective but requires an early identification of problems at work.”

More clinicians should be asking about patient’s work status, she said. “Work is an important aspect of life – just like we ask patients about their daily lives, we should be asking how they are getting along at work.” Currently, Dr. Prior is involved in evaluating a pilot programme to implement Health and Work Champions in the NHS, funded by the College of Occupational Therapists and the Public Health England. This campaign is aimed at raising the awareness about the importance of asking the “work question” amongst the NHS staff to encourage the early identification of work instability in people consulting to the NHS in the UK.

Neither Dr. Björk nor Dr. Prior reported having any relevant conflicts of interest.
Thursday, 15 June
11:45–13:30
• From top to toe; health professional practice
• 6th EULAR Online Introductory Ultrasound Course
• Clinical features and treatment of orphan diseases
• Economic impact of biosimilars and discussing risks with patients
• Genetic basis, epigenetics, and genomics in disease
• Inflammatory mediators in rheumatic disease
• MTX, GCs, and JAK inhibitors in RA

Friday, 16 June
11:45–13:30
• Imaging advances in arthritis – what is new?
• Indexes and predictors in systemic sclerosis and myositis
• New drivers in RA and SpA pathophysiology
• Novelty in the clinical approach to SLE, Sjögren’s, and APS
• Osteoporosis risk assessment and disease burden

Saturday, 17 June
10:15–11:45
• Imaging advances in vasculitis, crystal, and connective tissue disease
• Infection-related rheumatic disease: clinical and epidemiologic aspects

EULAR Online Courses 2017

- Courses start in September 2017
- 12th EULAR Online Course on Rheumatic Diseases
- 4th EULAR Online Course in Paediatric Rheumatology
- 3rd EULAR Online Course for Heath Professionals
- 7th EULAR Online Course on Systemic Sclerosis
- 9th EULAR Online Course on Connective Tissue Diseases
- 6th EULAR Online Introductory Ultrasound Course
- Individual course cost: EUR 115

NEW: Discounted price for low and middle income countries with GDP below USD 10’000 (EUR 86). Sign up for online courses at eular.org

Follow @eular_org on and

EULAR (Europe)
Cohort studies begin to piece together link between cancer immunotherapy and autoimmune disease

Immune checkpoint therapies are a new class of anticancer agents that target regulatory pathways in T cells to boost antitumor immune responses, leading to improved survival for many cancer patients.

But, as rheumatologists all over the world are beginning to find, these agents, which include ipilimumab, nivolumab, and pembrolizumab, have the potential to elicit symptoms of rheumatoid arthritis (RA) and other rheumatic diseases in patients with no previous history of them – an adverse effect that frequently leads to suspension of treatment with a lifesaving cancer drug.

At a session this afternoon, rheumatologists will discuss their experiences with patients referred to them after treatment with immune checkpoint inhibitors and present results from small observational cohorts. They will also discuss what’s known and still unknown about the natural history and potential mechanisms of this effect, which is related to an overactivation of the immune system.

Dr. Cassandra Calabrese of the Cleveland Clinic in Ohio, USA, is presenting results from a retrospective chart review of 19 patients referred with symptoms of autoimmune disease after treatment with this class of drugs. Three patients had a preexisting autoimmune disease and were referred preemptively prior to starting immunotherapy. The remaining 16 patients had no history of autoimmune disease, and most developed symptoms within 4 months of starting treatment.

“This phenomenon was unknown to me and my group before around February of 2016, when we started noting referrals of patients from oncology,” Dr. Calabrese said. “We were seeing symptoms of everything from Sjögren’s syndrome to inflammatory arthritis and myositis in patients being treated with these drugs for their cancer.” The same year, Dr. Calabrese and her team began coordinating an ongoing study to assess these patients.

Dr. Calabrese said that the cohort has shown so far that patients who develop autoimmune disease after immune checkpoint inhibitors “require much higher doses – of steroids in particular – to treat their symptoms,” and this can all too often result in being taken out of a clinical trial or having to stop cancer treatment.

Most of the patients in the cohort were treated with steroids only, while a handful received biologic agents, and methotrexate or antimalarials were used in one patient each. Dr. Calabrese said that the serology results, available for only half the patients in the cohort, did not closely align with typical profiles for patients with RA or related diseases.

She noted that the rheumatic symptoms did not always resolve.
Session takes stock of past, present, and future of HPRs as a pillar of EULAR

At 70 Years of EULAR and 30 Years of HP Involvement: A Rehabilitation Perspective. The presentation will provide historical perspective about how HPRs have evolved in EULAR and the future of HPRs, Prof. Vliet Vlieland said.

“its learning goal is to get a historic perspective on the development of the healthcare system of tomorrow. The medical and demographic structure of the population and the technical environment is rapidly changing,” Dr. de Thurah said. “This change will call upon new roles, new skills, and a transfer of skills to health professionals within rheumatology from other professions. Thus, in the future, it will be essential that HPRs develop new skills and competences in order to fulfill these new roles. Among other things, HPRs must have clinical knowledge, new educational skills, and skills within information and communication technology.”

Overall, the future for HPRs in EULAR looks bright, Prof. Vliet Vlieland added. “There has been an enormous progress in the professional development of HPRs within EULAR over time,” Prof. Vliet Vlieland said. “However, the continuous changes in rheumatology, healthcare, and society as a whole demand that we do not merely continue activities but constantly modify activities and employ new, innovative initiatives for HPRs working in rheumatology, jointly with patients and rheumatologists.”

At 70 Years of EULAR and 30 Years of HP Involvement: A Rehabilitation Perspective. The presentation will provide historical perspective about how HPRs have evolved in EULAR and the future of HPRs, Prof. Vliet Vlieland said.

“The continuous changes in rheumatology, healthcare, and society as a whole demand that we do not merely continue activities but constantly modify activities and employ new, innovative initiatives for HPRs working in rheumatology, jointly with patients and rheumatologists.”

Being informed about the progression made over the years will serve as a motivator to support, advocate, or become involved in current and future activities of HPRs in EULAR.

Next, Jackie Hill, PhD, a retired nurse and researcher from Harrogate, United Kingdom, will discuss HPR involvement from a nursing lens in “Looking Back At 70 Years of EULAR and 30 Years of HP Involvement: A Nursing Perspective.” Dr. Hill will describe the evolution of rheumatology nursing over the past 30 years and the part that EULAR has played in the disseminating education, and recognition of best nursing practice and experiences within Europe. Dr. Hill will also address important nursing initiatives that have been launched under the auspices of EULAR.

In 1981 when Dr. Hill began working in rheumatology, there were no rheumatology nurses practicing in out patient clinics and no dedicated rheumatology nursing courses or text books, she said. “The possibility of nurses prescribing, administering intra-articular injections, and acting as clinical nurse specialists or consultant rheumatology nurses was not even conceived,” Dr. Hill said. “In 2017, it is difficult to believe this scenario, but it is important to remember that this was just 36 years ago. The comparison of then and now is what makes this session so important and will be the subject of my talk.” Attendees will then hear from President-Elect of EULAR, Prof. Johannes W.J. “Hans” Bijlsma of University Medical Centre Utrecht, who will discuss important progress made in the field of rheumatology in the 70 years of EULAR, particularly progress made in the nonpharmacological treatment of RMDs and the importance of efforts by HPRs in this area. Dr. Bijlsma will be about the important work of physiotherapists to keep RMD patients on the move, about the development of occupational therapy for RMD patients to let them stay independent in working and living environments, and about the important support and practical help of nurses,” Prof. Bijlsma said. Attendees will “get insight into the very important role nonpharmacological interventions can play in the treatment of patients with RMDs and how allied health professionals have developed this field.”

Lastly, audience members will hear about “The Future for Health Professionals in Rheumatology” from Annette de Thaurah, PhD, of Aarhus (Denmark) University Hospital, chair of the EULAR Standing Committee for HPRs. The presentation will address future demands for HPRs and how they can prepare for the changes of checkpoint inhibitor–induced autoimmune disease is in its infancy. Clinical trials largely missed the phenomenon, the researchers said, because the trials were not designed to capture musculoskeletal adverse effects with the same granularity as other serious adverse events.

“This will be a long discussion in the months and the years ahead with oncologists,” Dr. Belkhir said.

Neither Dr. Calabrese nor Dr. Belkhir reported having any relevant conflicts of interest.

FROM BENCH TO BEDSIDE
Controlling the balance between cancer and autoimmunity

Wednesday 15:00 –16:30
Hall 7B
Researchers offer advice on using wearable devices in studies

Wearable device technologies give researchers important clues into the real-life experiences of patients with rheumatic and musculoskeletal diseases by monitoring sleep, physical activity, and other data that are hard to capture in patient self-reports and in-clinic tests. In a Health Professionals Session this afternoon, speakers will describe the current landscape of uses for these devices and considerations for how to best use them in research.

Marie McCarthy, director of product innovation for ICON PLC, a global clinical research organisation that provides outsourced development services to industry, will talk about how these technologies – from commercially available movement trackers like the FitBit to medical-grade devices that are more sensitive – are being integrated into trial designs, and how researchers can think about using them.

“If you’re looking at the development of drugs for rheumatic disease, these snapshot approaches of using in-clinic assessments of movement and strength as well as self-reports of symptoms of patients, an important consideration in people with rheumatic diseases, she said.

Ms. McCarthy noted that data from wearables can help researchers ensure compliance with study recommendations for patients enrolled in trials – by noting, for example, that a patient has been more active than a study recommends. And data from devices can help contextualise patient self-reporting on pain.

“Traditional endpoints around pain are subjective, and it can be difficult to differentiate from the placebo response and the true pain reduction from the drug,” Ms. McCarthy said.

Using an objective measure, say from activity levels, to add context to those responses can assist in decision making around the drug.”

The data generated by studies incorporating wearable technology can be considerable, particularly if the technology is being used to detect subtle movement patterns, for example.

But most of the information being used in clinical trials involving wearables involves “derived endpoints that have gone through validated algorithms,” Ms. McCarthy said. “In some respects they’re no different from getting a number for blood pressure. For example, if you’re measuring steps over the course of a day, it’s easy for the statisticians to deal with that because it’s a time-stamped number.”

Where it gets more complicated is when researchers start to mine the granular information captured by the device, such as subtle movement patterns. “That’s the kind of data that’s more exploratory, and that tends not to be used as an endpoint in a rheumatology clinical trial,” she said.

“That’s where you start getting into terabytes of data.”

At the same session, Alexandra Clarke-Cornwell, a public health researcher at the University of Salford, Manchester (United Kingdom) will share insights from several published studies of wearable devices in nontrial research settings in persons with rheumatic and musculoskeletal diseases.

Ms. Clarke-Cornwell will focus on studies using two licensed wearable devices designed for use in medical and research settings: activPAL, an accelerometer and inclinometer that is placed on a patient’s thigh for up to a week, and ActiGraph, which can be worn on the waist or the wrist.

Like Ms. McCarthy, Ms. Clarke-Cornwell says that much of the devices’ value comes from having objective information on activity patterns to compare with patient self-reports. “They’re not perfect, these devices, but we’re getting much better data from them than if we were to subjectively ask a person about their activity,” she said.

For example, in one study evaluating osteoarthritis patients before and after an exercise intervention, “we could notice after the intervention a slight improvement in gait speed, so we were getting things from the devices that we couldn’t from a self-reported questionnaire,” she said. Even clinical observation of patients’ movement often tells a less-complete story than the wearables can, she added.

Ms. Clarke-Cornwell will discuss the types of data to be gleaned from these devices and the best statistical approaches to use, and also some practical aspects of integrating them into research.

“Things like, ‘How did you put the accelerometer on the patient?’ ‘How did you get it back from them?’ ‘What data did you actually use?’ ‘Do you have a statistician who can code the data in a usable way?’ These are things people don’t always think about,” she said.

Ms. McCarthy’s advice to researchers curious about incorporating wearables into a rheumatology trial is not to start with the device.

“People are excited by the concept of the wearable, so they’ll start with the wearable and think ‘What can we measure?’ instead of thinking ‘What are we trying to prove here? Who is the patient and what is the likely burden of using the device?’ and finally ‘What are the expected outcomes?’” she said. “Generally, I want the device that has lots of research and validation studies behind it. But it all very much depends on what you’re trying to achieve and what you’re trying to prove, and that should dictate what device you use.”

Neither Ms. McCarthy nor Ms. Clarke-Cornwell had relevant disclosures to declare.
Monoclonal antibody tops bisphosphonate for glucocorticoid-induced osteoporosis

The monoclonal antibody denosumab provides significantly greater improvements in bone mineral density (BMD) than does the bisphosphonate risedronate among patients with glucocorticoid (GC)-induced osteoporosis, according to results of a phase III trial to be presented this afternoon.

When denosumab was compared with risedronate, the BMD increased almost twice as much in patients who were continuing GC therapy and was more than three times greater in those initiating GC therapy, according to study author Prof. Willem F. Lems of VU Medical Centre, Amsterdam, who will present the trial results.

The primary outcome of this randomized, double-blind, multinational trial—one of the largest ever in GC-treated patients—was change in lumbar spine BMD after 12 months of therapy. Patients 18 years of age or older on GC therapy (dose equivalent of 7.5 mg prednisone daily) were eligible for the study, although those under the age of 50 years were required to have a history of osteoporotic fracture. For those 50 years of age or older, evidence of osteoporosis on BMD evaluation was required.

The 795 patients who were enrolled in this noninferiority study were randomized to 60 mg of denosumab administered subcutaneously every 6 months or 5 mg of oral risedronate taken daily for 24 months. Both groups received matching placebos. All patients received calcium and vitamin D supplementation. Of the 795 patients, 565 were continuing on GC therapy and 290 initiated glucocorticoids at study entry.

Denosumab proved noninferior to risedronate in lumbar spine BMD after 12 months. Both groups received matching placebos. All patients received calcium and vitamin D supplementation. Of the 795 patients, 565 were continuing on GC therapy and 290 initiated glucocorticoids at study entry.

Denosumab proved noninferior to risedronate in lumbar spine BMD after 12 months. In addition, denosumab demonstrated superiority to risedronate in both those continuing and those initiating GCs. Among continuous GC patients, BMD increased in the lumbar spine by 4.4% in the denosumab group versus 2.3% (P less than .001) in the risedronate group. In the GC-initiating group, the percentage increases were 3.8% versus 0.8% (P less than .001), respectively. The BMD improvements in the hip favoring denosumab were similar for the continuous (2.1% vs. 0.6%; P less than .001) and initiating (1.7% vs. 0.2%; P less than .001) groups.

Both therapies were reasonably well tolerated, according to Prof. Lems, who reported that the incidences of adverse events and serious adverse events were similar. This included the rates of infection. Although several therapies are approved for treating or preventing GC-induced osteoporosis, including the bisphosphonate risedronate, there is evidence that a substantial proportion of candidates with the potential to benefit are not routinely treated, according to Prof. Lems.

Denosumab, which is currently indicated for the treatment of osteoporosis, targets RANKL (receptor activator of nuclear factor Kappa-B ligand), which promotes maturation of osteoclasts that break down bone. RANKL, which is increased in patients with GC-induced osteoporosis relative to healthy controls, may be a particularly suitable target for this condition. The favorable effect on BMD in this study and the low frequency of administration, only twice a year, support its “potential to become another treatment option” in patients who require extended GC therapy and face increased fracture risk, Prof. Lems said.

The study was funded by Amgen. Prof. Lems and many coauthors reported financial relationships with Amgen and other companies marketing osteoporosis drugs. Three coauthors are employees of Amgen.

A EULAR initiative supported by the three pillars and by the network’s PARE organisation, scientific member societies and health professional associations with the united goal of highlighting the importance of early diagnosis, reasons for treatment delay and timely access to evidence-based treatment.

Follow @eular_org on and
Interferon-based gene expression score predicts progression to connective tissue disease

Researchers at the University of Leeds have developed a scoring system based on the expression of two genes of interferon-stimulated genes (ISGs) that predicts progression from detection of antinuclear antibody (ANA) to autoimmune connective tissue disease (CTD). The findings, presented at an abstract session today, could be used to determine the best therapeutic window of opportunity for early intervention.

"ANA binds to the contents of the cell nucleus and can be detected from blood tests. The hallmark of systemic lupus erythematosus (SLE) and other CTD pathogenesis is the loss of self-tolerance, leading to production of numerous ANAs. ANA can be detected in blood up to 10 years before the onset of clinical symptoms. Thus, a period of ANA positivity and other immune dysregulation precedes clinically overt disease," said Dr. Md Yuzaiful Md Yusof, a National Institute of Health Research Doctoral Research Fellow at the University of Leeds (United Kingdom).

Some people who are ANA positive are in the preclinical stages of a disease. But not all are. Others may never develop SLE or any other CTDs. ANA can be detected at low levels in over one-quarter of the general population, while SLE affects less than 0.15% of people. So, the detection of ANA alone is not good enough to predict disease.

"If this transition from prelupus to SLE/CTD could be predicted, early, and potentially more effective, intervention could be employed," Dr. Yusof explained.

Type I interferon (IFN-I) has been implicated in the pathogenesis of SLE, but much less is known about its role in the initiation of disease. This is partly because IFN-I activity is difficult to measure due to its instability in serum. This roadblock can be circumvented by measuring the level of expression of interferon-stimulated genes (ISGs). However, current scoring systems may be affected by selection, roles, and weighting of the genes.

The Leeds researchers selected 30 relevant ISGs from the literature and used them as biomarkers that predict progression to systemic autoimmunity. They studied 125 individuals at risk of CTD, including 82 with 1-year follow-up data. Over the next year, 16 (20%) progressed to CTDs, mainly SLE. The researchers analysed blood samples from these individuals who were at risk of CTD and compared the genes that were responsive to IFN-alpha (Score A) or genes that were responsive to both IFN-alpha and -gamma (Score B) with those from groups that included SLE patients and healthy controls.

"In SLE, both IFN Score A and B were elevated, compared to healthy controls, whereas only IFN Score A was elevated, compared to healthy control in the at-risk CTD group. Thus, we had defined IFN Score B as a subset of ISGs, the expression of which was only increased in patients with confirmed clinical SLE," Dr. Yusof said.

IFN Score B was low in individuals who were at risk of developing CTD but who did not progress to develop disease and was increased in those who actually did progress. However, there was no difference in IFN Score A between these two groups. Thus, an elevated IFN Score B at baseline in those who are at risk of CTD may be a biomarker of progression from ANA-positive status to clinical autoimmune disease.

Analyses of other clinical, immunological, and imaging biomarkers are underway to develop a prediction model from ANA-positive status to CTD. Before any biomarker makes it to the clinical setting, validation in an independent and ethically diverse cohort is a must-do.

The aim, according to Dr. Yusof, is "early and potentially targeted intervention" that could prevent the "development of severe systemic symptoms and minimise damage accrual, which should be the major therapeutic goal."

Three of the study authors reported receiving grant/research support from AstraZeneca.

ABSTRACT SESSION
Novel insights in inflammatory mediators
Wednesday 17:00–18:30
Room N109/N110

---

**Programme**

**Health Professionals Session**

Wearable technologies in 21st century healthcare N101 / N102

The Young Rheumatologist
Systematic literature review: the link from science to clinical practice N111 / N112

Joint Session Clinical / HPR / PARE Session
EULAR Campaign: Don’t Delay, Connect Today N115 / N116

**EULAR Projects in Paediatric Rheumatology**

Standing Committee Session on Paediatric Rheumatology N117 / N118

Practical Skills Sessions
Crystal I Ultrasound Basic 1 N107 / N108 N109 / N110

17:00 – 18:30

**Abstract Sessions**

Still breaking news on TNF inhibitors in Rheumatoid arthritis Hall 8

Progress in management of SpA Hall 7A

Early diagnosis of systemic sclerosis and myositis: Biomarkers and diagnostic tool Hall 7B

SLE, Sjögren’s APS - clinical aspects N103 / N104

Osteoporosis treatment gap, new options, and new strategies South Auditorium N105 / N106

Basic and clinical science in paediatric rheumatology N110 / N111

Impact of rheumatic diseases N111 / N112

**Risk factors for developing diseases or comorbidities** N117 / N118

Scleroderma, myositis, and related syndromes, etiology, pathogenesis N107

Novel insights in inflammatory mediators N109 / N110

**Health Professionals Session**

Rehabilitation and modern drug treatment – needs and challenges N101 / N102

PARE Session
Comorbidities: Having one RMD is enough – we don’t need anything else N115 / N116
New classification system for systemic lupus erythematosus moves forward

A large EULAR/American College of Rheumatology project that aims to optimise classification criteria for systemic lupus erythematosus (SLE) is in its final phase, according to Prof. Martin Aringer, a member of the SLE Classification Criteria Steering Committee who will give a progress update in a Clinical Science Session this afternoon.

When completed and available for clinical use, these criteria are hoped to resolve many of the deficiencies of previous classification systems, Prof. Aringer said in an interview.

The proposed new classification system is dependent on first identifying positive antinuclear antibodies (ANA) but then improves on specificity by adding criteria weighted for relative importance. The new approach directly addresses limitations of the 1997 revised ACR criteria and the 2012 criteria from the SLE International Collaborating Clinics (SLICC).

"Positive ANA are key, given that ANA are often the door to SLE in the diagnostic approach and have high sensitivity," explained Prof. Aringer, chief of the division of rheumatology at Technische Universität Dresden (Germany). The new classification uses specific weighted SLE criteria for the first time to boost specificity. When combined with ANA as an entry criterion, the weighted criteria should not only improve specificity but also “give us a system that is hopefully intuitive enough to convey an idea of the disease.”

Although the ACR system is relatively easy to use, particularly because it did not require the 11 criteria to be weighted, Prof. Aringer explained that it is “not entirely intuitive.” The criteria in the ACR system did help promote the concept that multiple organ systems can be involved, but patients could be classified as having SLE with just the four mucocutaneous criteria, a circumstance not limited to individuals with SLE and one of the weaknesses of the ACR system most criticised by dermatologists.

The SLICC criteria require patients to be positive for ANA, which increased sensitivity relative to the ACR system, but specificity of the SLICC system fell to 84% from the 96% reported with ACR criteria. The new system described by Prof. Aringer is designed to preserve the sensitivity of the SLICC system but improve specificity by adding weight to characteristics most closely associated with SLE.

"For example, class III or IV lupus nephritis will weigh much higher than leukopenia or unexplained fever," Prof. Aringer said.

The "candidate system," which is still in the testing phase, has been in development with the support of both the ACR and EULAR. In an initial analysis conducted with ANA data from 13,080 patients, a titer of at least 1:80 on HEP-2 ANA immunofluorescence produced a sensitivity for SLE of 97.8%, providing the basis for selecting positive ANA as an entry criterion.

There are now plans to test the candidate system against both the ACR and the SLICC criteria in a larger cohort of patients with SLE patients or conditions mimicking SLE in order to confirm its clinical utility. The goal is to develop a system that provides a better and potentially earlier classification of SLE. However, Prof. Aringer suggested that a weighted classification system also has the potential to provide a better gauge of the relative impact of this disease across organ systems.

Prof. Aringer had no relevant disclosures to declare.

CLINICAL SCIENCE SESSION
Moving towards new criteria in SLE, Sjögren’s, and APS
Wednesday 15:00 – 16:30
Hall 8

The EULAR App

- The EULAR App provides information and guidelines on rheumatic and musculoskeletal diseases for use by rheumatologists, medical doctors and health professionals in rheumatology for their everyday work.

- **EULAR App features include:**
  - Recommendations
  - Outcome measures library with calculators
  - Imaging library
  - Classification material for RMDs
  - EULAR pocket primer on rheumatic diseases
  - all accessible from any location (online and offline)

- Created as part of the EULAR School of Rheumatology.

- www.eular.org
Biomarkers discriminate between lung inflammation and fibrosis in SSc-related interstitial lung disease

The management of systemic sclerosis (SSc)-related interstitial lung disease (ILD) could potentially benefit from the development of two specific nuclear imaging biomarkers that will be discussed this afternoon. “Our data show that stage-dependent visualisation of ILD with radiotracers that specifically target key markers of lung inflammation and/or fibrosis is possible. Using specific imaging biomarkers might allow individualised patient management and thus, could potentially be the first step towards precision medicine in SSc-ILD,” said Janine Schniering, who will present the results of the study.

Ms. Schniering is a PhD student in the department of rheumatology at University Hospital Zurich, a designated EULAR Center of Excellence. Ideally, diagnosis of SSc-ILD should be early in the course of the disease when SSc-ILD can be more effectively treated, and the damage that has occurred so far could perhaps be reversed. But, roadblocks to personalised care remain.

“Clinical tools for individualised patient stratification are still missing. This unmet need leaves patient management mostly at a trial and error stage, which is in sharp contrast to the developing concept of precision medicine,” Ms. Schniering explained.

At last year’s EULAR Congress, the researchers reported the success of a radiotracer that specifically targets integrin αvβ3. SPECT (single photon emission computed tomography) was used to detect the radiotracer molecule in lung tissue of an established murine model of bleomycin-induced lung fibrosis and in tissue samples from ILD patients. In the current study, the researchers assessed the applicability of nuclear imaging (PET/CT and SPECT/CT) of key molecules of ILD as potential biomarkers for the stage-dependent assessment of ILD in the murine preclinical model. ¹⁷⁷Lu-[(RGDFK)]-ligand was used as SPECT tracer to target integrin αvβ3, with ¹⁸F-Azafol used as PET tracer to target folate receptor beta (FR-beta).

“We found that expression of folate receptor beta, a marker exclusively expressed on activated macrophages, and integrin αvβ3, a marker expressed on a variety of immune cells and (myo-) fibroblasts, were significantly upregulated at the protein and/or mRNA level of lungs from patients with SSc-ILD. Most notably, similar increases in the expression levels of FR-beta and integrin αvβ3, were detected in the murine model of bleomycin-induced lung fibrosis,” she said.

In mice, FR-beta expression was upregulated at the inflammatory stages, with higher integrin αvβ3 expression evident in both the inflammatory and fibrotic stages of lung disease. The molecular targeted imaging discriminated between lung inflammation and/or fibrosis with time. The findings corresponded with changes in expression of FR-beta and integrin αvβ3 at the tissue level.

In contrast, the clinically routinely employed, but unspecified, imaging techniques of ¹⁸F-fluorodeoxyglucose-PET and high-resolution CT did not discriminate between lung inflammation and fibrosis.

Ms. Schniering reported receiving grant/research support from the Swiss National Science Foundation, and many of her coauthors reported relationships with pharmaceutical companies and/or holding the patent license for mir-29 for the treatment of systemic sclerosis.
Satellite Symposia Programme // Wednesday, 14 June

13:00–14:30 // Hall 8  AbbVie
Optimizing long-term therapy: How can we deliver the outcomes patients need?
Chairperson: Paul Emery (United Kingdom)
13:00 Paul Emery (United Kingdom)
Introduction
13:05 Paul Emery (United Kingdom)
The importance of detecting patients at risk of imminent RA: overcoming the obstacles
13:20 Daniel Aletha (Austria)
Taking the patient from target to goal: How do we implement the most effective approach?

13:35 Filip van den Bosch (Belgium)
Delivering the long-term treatment aspirations of the patient and the clinician: What are the latest data?
13:55 John Isaacs (United Kingdom)
In a changing world, how do we select the right therapy for the long-term benefit of the patient?
14:10 All
Interactive panel discussion

13:00–14:30 // Hall 7A  Pfizer
Time for a paradigm shift in RA? Patient and physician journeys when treatment is not to target
Chairperson: Maxime Dougados (France)

13:00 Maxime Dougados (France)
Welcome and introduction
13:05 Peter C. Taylor (United Kingdom)
Understanding the DMARD-intolerant/inadequate responder journey for patients and physicians
13:25 All
Question and answer session
13:30 Roy Fleischmann (United States)
JAK inhibition: deep dive into efficacy and safety data
13:50 All
Question and answer session
14:10 Janet Pope (Canada)
RA data in the real world
14:15 All
Question and answer session
14:20 Maxime Dougados (France)
Closing remarks and wrap-up

13:00–14:30 // N103/N104  Novartis Pharmaceuticals
IL-17A inhibition: meeting patient needs and achieving new treatment goals in PsA
Chairperson: Peter Nash (Australia)
13:00 Peter Nash (Australia)
Welcome and introduction
13:05 Georg Schett (Germany)
The role of IL-17A in the immunobiology of early and established PsA
13:25 Laura Coates (United Kingdom)
Treatment targets in PsA: the rheumatologists’ perspective
13:45 Tore K. Kvien (Norway)
Treatment targets in PsA: the patients’ priorities
14:00 Peter Nash (Australia)
Does IL-17A inhibition meet these treatment targets?
14:20 Peter Nash (Australia) and all
Panel discussion and conclusions

13:00–14:30 // N105/N106  IBSA – Bioiberica
Pearls supported by Janssen
Considering patients’ needs – action and reaction of IL-6 blockade
Chairpersons: Josef S. Smolen (Austria), Costantino Pitzalis (United Kingdom)
13:00 Costantino Pitzalis (United Kingdom)
Welcome and introduction
13:05 Josef S. Smolen (Austria)
IL-6 blockade: a clinical update
13:30 Costantino Pitzalis (United Kingdom)
The role of IL-6 in RA pathophysiology and structural damage
13:55 Ernest Choy (United Kingdom)
The biology behind patient-reported outcomes in RA
14:15 Josef S. Smolen (Austria)
Q&A, conclusions and closing remarks

13:00–14:30 // N117/N118  CElecoxib vs Placebo Trial
Latest evidence on osteoarthritis treatment: a simple CONCEPT to complete the MOSAIC
Chairperson: Johanne Martel-Pelletier (Canada)
13:00 Johanne Martel-Pelletier (Canada)
Welcome and introduction
13:07 Ingrid Möller (Spain)
Consensus recommendations for the management of osteoarthritis of the hand, hip and knee: what PANLAR (Pan-American League of Associations of Rheumatology) says
13:22 Johanna Martel-Pelletier (Canada)
Can biomarkers predict the effect of treatment on cartilage volume loss? New clinical evidence
13:37 Jean-Pierre Pelletier (Canada)
MOSAIC: 24 month study on structural changes in knee osteoarthritis assessed by MRI with chondroitin sulphate
13:52 Tomasz Blicharski (Poland)
Pharmaceutical grade chondroitin sulphate is as efficacious as celecoxib and better than placebo: results of the ChONDrosis vs CElecoxib vs Placebo Trial (CONCEPT)
14:07 Question and answer session
14:22 Johanne Martel-Pelletier (Canada)
Concluding remarks
**Indications:** RA: MabThera, in combination with methotrexate, is indicated for the treatment of adult patients with severe active rheumatoid arthritis who have had an inadequate response or intolerance to other DMARDs including one or more TNF inhibitor therapi es. MabThera 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 methotrexate. GPA and MPA: MabThera, in combination with glucocorticoids, is indicated for the induction of remission in adult patients with severe, active Granulomatosis with Polyangiitis (Wegener’s) (GPA) and Microscopic Polyangiitis (MPA).

**Dosage and administration:** Patients must be given the patient alert card with each infusion. Administer through a dedicated line with full resuscitation facilities immediately available in case of severe infusion related reactions (IRR). Monitor for cytokine release syndrome. Interrupt infusion if severe reactions occur. Premedicate with analgesic/anti-pyretic and anti-histamine before each infusion. RA: Recommended dose is 1000 mg iv infusion on day zero and a second 1000 mg iv infusion two weeks later. Premedication with 100 mg methylprednisolone should be completed 30 minutes prior to each infusion. First Infusion: Initial rate 50mg/hour; after 30 minutes this can be escalated by 50 mg/hour increments every 30 minutes to a maximum of 400 mg/hour. Second and subsequent Infusion: Initial rate 100mg/hour; with 100 mg/hour increments every 30 minutes to a maximum of 400 mg/hour. Alternative faster infusion option (4mg/mL in 250mL infusion volume) for initial rate 100mg/hr. Subsequently, the rate can be increased by 100 mg/hour increments every 30 minutes to a maximum of 400 mg/hour. Pneumocystis jiroveci pneumonia (PCP) prophylaxis is recommended during and following sequential use of DMARDs including biologics after MabThera.

**Reporting of suspected adverse reactions:** Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via their corresponding national reporting system.
MabThera has been improving RA patients’ lives for over a decade and continues to do so\textsuperscript{1–5}

References