

EULAR 2022



Review of the European Alliance of Associations for Rheumatology (EULAR) 2022 Congress

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A NEW and innovative hybrid format was adopted for the European Alliance of Associations for Rheumatology (EULAR) 2022 Congress, allowing delegates to meet on-site in Copenhagen, Denmark, and online. This year, EULAR celebrates its 75th anniversary, and the Opening Plenary Session focused not only on the association's biggest achievements over the years, but also what to expect from the future.

EULAR Past President Iain McInnes reflected on the association's "extraordinary contribution to this past that we are celebrating." McInnes emphasised that EULAR is primarily focused on people with rheumatic and musculoskeletal diseases. "In this regard, we are very proud of the recommendations and treatment strategies that have been pioneered to optimise care," he said. Through the work of standing committees and task forces, EULAR has "optimised the integration of new technology," added McInnes. This is best exemplified most recently in the advent of imaging modalities, which have further transformed care. "Finally, through our world-class congress and our increasingly persuasive advocacy programme, EULAR has spoken, and speaks, with passion and purpose

to advance the cause of people with rheumatic and musculoskeletal diseases in the educational, political, and wider domain," revealed McInnes. Although it cannot be said with certainty what will happen over the next 75 years, McInnes is confident that EULAR will continue to "strive on behalf of our patients, without reservation or limitation."

EULAR President Annamaria Iagnocco also discussed the future of the organisation in her welcome speech, and considered how EULAR can continue to advance rheumatological care across Europe. Rheumatic and musculoskeletal diseases are disabling and burdensome, and have a high prevalence, affecting more than 120 million Europeans. However, disparities remain in patient access to rheumatology departments. "To help solve this problem, we must position rheumatology as an important, interesting, and essential field of medicine, that is seen at the same level as other major specialties," stated Iagnocco.

Going forward, it is imperative to increase access to care, improve rheumatology visibility to policymakers and the public, and make the discipline attractive to medical students when they chose their specialisation. The





Danish rheumatology workforce was used to illustrate how this can be achieved. In Denmark, there are 29 rheumatologists per 500,000 inhabitants, and this can be attributed to the excellent medical education. Moreover, the Danish model is notable for focusing on the principle of togetherness. Diverse healthcare professionals collaborate with rheumatologists in a multidisciplinary team to support patients and offer guidance on non-pharmacological treatment options. Importantly, patients are proactively involved in decision making at every stage of the process, from symptom onset to goal setting. A prime example of this collaboration is the Dansk Gigthospital in Sønderborg, which is owned directly by the Danish Rheumatism Association. Within this one hospital, rheumatologists work closely with professors for rheumatologic rehabilitation, nurses, occupational therapists, physiotherapists, psychologists, and the patient organisation itself. Ultimately, patient-centred, multidisciplinary care is a valuable way of building trust, enhancing treatment adherence, and preventing comorbidities. Patients are also provided with rapid access to rheumatologists. For example, new patients should wait no longer than 4 weeks for access to a specialist appointment, and this is guaranteed by Danish law.

As with previous EULAR conferences, the 2022 congress was crucial for the

generation and exchange of scientific knowledge. Symposia spanned across the discipline, providing updates on gastrointestinal manifestations in systemic sclerosis and myositis, the role of ultrasound in calcium pyrophosphate deposition, the challenge of pregnancy in rheumatic disease, and clinical challenges in systemic lupus erythematosus. Of particular interest was the session on difficult-to-treat rheumatoid arthritis, which forms the basis of our compelling in-house feature.

An overview of standout EULAR press releases can be found within this issue of *EMJ Rheumatology*, including insights into treatment effectiveness in people with axial spondyloarthritis, the importance of treatment goals in psoriatic arthritis, and the association between air pollution and the development of inflammatory arthritis.

Our interview with EULAR Treasurer Xenofon Baraliakos is also not to be missed. Baraliakos talked about the effects of secukinumab in patients with psoriatic arthritis and axial manifestations, his responsibilities as a EULAR committee member, and patient-tailored treatment in the context of axial arthritis and psoriatic arthritis.

We look forward to being part of the international rheumatology community again at next year's congress. Until then, read on for our key scientific insights from EULAR 2022 Congress. ●

Inflammatory Arthritis Development Driven by Air Pollution

NEW EVIDENCE on the links between rheumatic disease and pollutants was shared at the EULAR 2022 Congress in Copenhagen, Denmark. Air pollution has been found to be a key environmental exposure exacerbating the development of inflammatory arthritis and affects the immune system on a molecular level.

Data presented show that long-term exposure to air pollution is associated with incremental risks in the development of rheumatic disease. Two abstracts, which were presented by Giovanni Adami, Rheumatology Unit, University of Verona, Italy, focused on environmental exposures, and their role in the occurrence of rheumatic disease.

Data taken from over 80,000 individuals in a retrospective observational study carried out in Italy focused on particulate matter (PM), every non-gas found in the air. This contains chemicals and materials, some of which are toxic. Researchers found there to be a positive association between levels of PM measured at local air quality stations, and the risk of developing autoimmune diseases. Each 10 $\mu\text{g}/\text{m}^3$ increase in the concentration of PM correlated with a 7% risk of having autoimmune disease.

Exposure to PM_{10} was linked with increased risks of rheumatoid arthritis, and $\text{PM}_{2.5}$ was consistent with an increased risk of both rheumatoid arthritis and inflammatory bowel disease. Chronic exposure to PM levels above the safe threshold was found to be associated with a 10% greater risk of developing immune-mediated disease.

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Exposure to $\text{PM}_{2.5}$ in a group of almost 60,000 females at high risk of fracture was found to be negatively associated with osteopenia at the top of the thigh bone, and in the lumbar spine. Persistent exposure above 25 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ and 30 $\mu\text{g}/\text{m}^3$ for PM_{10} was associated with a 16% and 15% higher risk of having osteoporotic bone mass scores, respectively. Adami and his team concluded that a higher risk of osteoporosis was linked with long-term exposure to air pollution in the environment. ●



Treatment Effectiveness for Axial Spondyloarthritis

RESEARCHERS have presented new evidence at the EULAR 2022 Congress, held in Copenhagen, Denmark, revealing sex differences in disease presentation, physiology, and response to treatment in patients with axial spondyloarthritis (axSpA). This is a chronic inflammatory rheumatic disease that affects the spine and sacroiliac joints, and can cause persistent pain and disability.

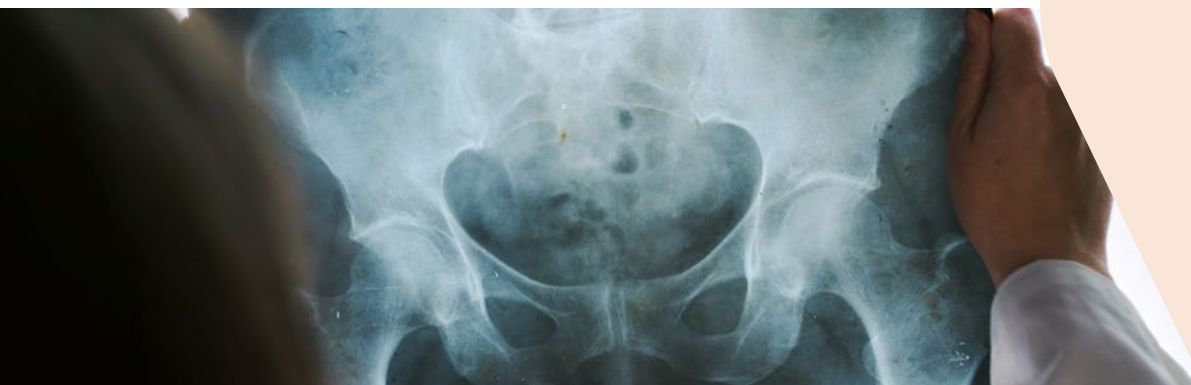
Treatments for axSpA are wide-ranging, but a tailored approach is needed, as their effectiveness varies greatly between patients. The use of TNF inhibitors, for instance, has been found to have more efficacy in males than females with axSpA in previous data. Recognising differences in treatment efficacy between sexes is highly relevant in order to tailor patient care and also to improve patient education.

Pasoon Hellamand, Rheumatology, Amsterdam UMC, the Netherlands, and colleagues aimed to validate the results of prior studies by using data collected from a large multinational cohort in a clinical practice setting. In the study, 6,451 patients with axSpA were assessed regarding their treatment response. Analysis demonstrated that females showed a 15% lower clinically important improvement when compared with males with the same condition. Retention rates of TNF inhibitors were

also found to be significantly lower in the female cohort. The research team also focused upon the impact of non-steroidal anti-inflammatory drugs (NSAID) used in the treatment of patients diagnosed with radiographic disease.

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Another group, led by Murat Torgutalp, Charité – Universitätsmedizin Berlin, Germany, focused on whether treatment with NSAIDs is linked to delaying the progress of radiographic spinal progression. The data thus far has shown conflicting reports. The group of researchers studied 243 patients with early axSpA from the German Spondyloarthritis Inception Cohort (GESPIC) in order to establish the link between NSAID intake and radiographic spinal progression over a 2-year period. The results demonstrated that higher intake of NSAID is associated with lower radiographic spinal progression, especially in patients diagnosed with radiographic axSpA. ●



Treatment Goals in Psoriatic Arthritis

RECENT DATA have shown that the early achievement of minimal disease activity (MDA) in psoriatic arthritis (PsA), a type of inflammatory arthritis which is linked to the chronic skin condition psoriasis, is connected to long-term improvements in the patient's quality of life (QoL). Whilst this emphasises the significance of setting and achieving goals quickly following diagnosis, data released from the UPLIFT study suggest that healthcare providers and patients are often unaligned on the topic of treatment goals.

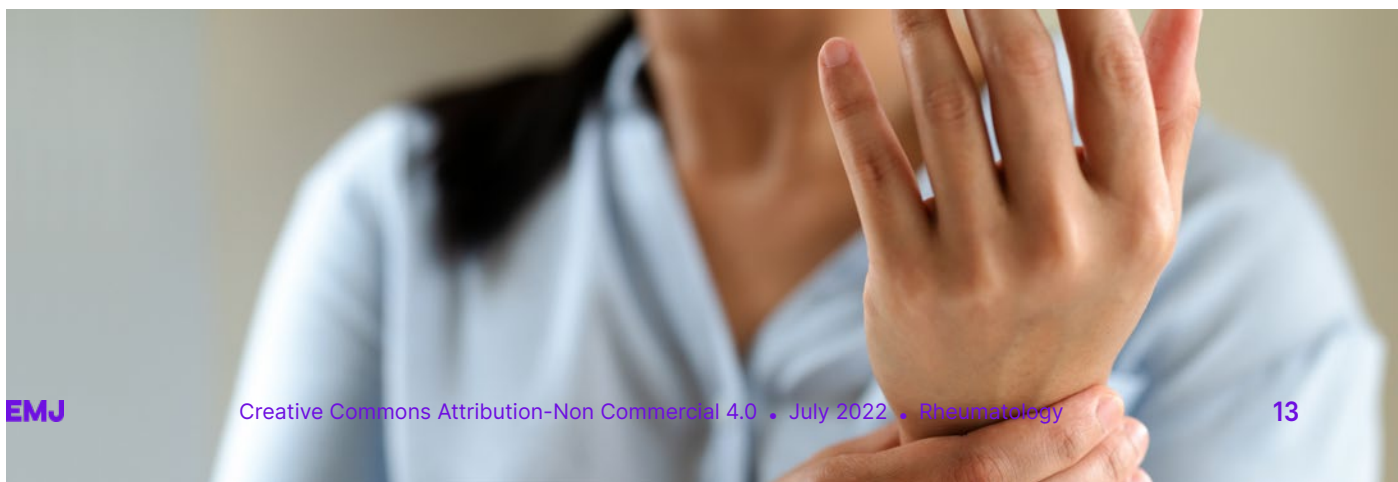
The results, which were presented at this year's EULAR Congress in Copenhagen, Denmark, highlighted the necessity of improving communication around the topic of treatment goals, which would consequently ameliorate the QoL for patients with PsA. Patients with PsA experience swelling and pain in both their joints and at the places where tendons and ligaments attach to bones. MDA is a target used in PsA treatment, which makes use of the patient perspective alongside clinical manifestations of disease.

Achieving MDA in the initial year following diagnosis is associated with a better quality of life; however, data regarding reaching MDA after this period have been lacking thus far. Information presented by Selinde Snoeck Henkemans, Rheumatology, Erasmus MC, Rotterdam, the Netherlands, demonstrated that patients with PsA with a sustained level of MDA have a QoL comparable to the general disease-free population after 1, 2, and 3 years

of follow-up, respectively. Those who did not reach MDA in the first year after diagnosis, however, generally had a lower QoL in comparison and this persisted over time. Snoeck Henkemans concluded that the failure to achieve MDA in PsA in the first year following diagnosis tends to be associated with worse QoL outcomes, which do not improve despite intensified treatment.

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Another study released at EULAR 2022 supports these findings. Pascal Richette and his team focused on findings from UPLIFT, a multinational survey for adult patients with PsA and/or psoriasis, and included information from rheumatologists and dermatologists. Richette's study found that rheumatologists considered disease remission or low disease activity as pivotal goals in the treatment of PsA, but patients were most interested in alleviating joint pain. Thus, the majority of patients did not believe that they were aligned with their healthcare provider regarding current treatment goals. ●





Alternatives to Opioid Pain Management in Rheumatic and Musculoskeletal Diseases

RHEUMATIC and musculoskeletal diseases (RMD) are one of the most common indications for prescribed opioids. Pain is an important consideration for patients with RMDs, which can restrict function and impact quality of life. However, there is little evidence for the benefit opioids provide these patients, and opioid prescription has led to a North American epidemic of addiction, with increasing trends observed in several European countries as well. Several abstracts presented at the EULAR 2022 Congress aimed to address the lack of knowledge about pain management in RMD and develop novel pain relief strategies to reduce this chronic health burden.

The current standard pain treatment for patients with RMDs is the injection of steroids; however, this can increase risk of infection, cartilage degeneration, and induce other well-known systemic side effects. An abstract presented by Hiltrun Haibel, Department of Gastroenterology, Infectious Diseases and Rheumatology, Charité – Universitätsmedizin Berlin, Germany, investigated a new approach to pain management focusing on the activation of peripheral opioid receptors using small doses of morphine in adults with chronic knee arthritis. The results demonstrated that a single-dose 3 mg morphine injection did not lead to significant pain improvements compared with a placebo, and showed inferior pain improvements relative to steroid treatment on Day 7.

A second abstract presented by Joyce (Yun-Ting) Huang, Department of Epidemiology and Public Health, University College London, UK, analysed UK opioid prescribing trends to first-

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time users with an RMD diagnosis. The data showed an increase in new opioid users among patients with rheumatoid arthritis, psoriatic arthritis, and fibromyalgia since 2006. However, overall, the results demonstrated a small decrease in new opioid users among most RMDs. The authors hypothesised that this decrease, which occurred after 2008, may have been related to increasing awareness about the opioid epidemic. The high proportion of long-term opioid users in patients with rheumatoid arthritis and fibromyalgia highlights the importance of exploring the safety of long-term opioid use and effective pain interventions.

A third abstract presented at EULAR looked at alternative strategies for reducing the burden of lower back pain. Jacek Kopec, School of Population and Public Health, University of British Columbia, Vancouver, Canada, and his team investigated weight loss, ergonomic interventions, and an exercise programme. This population-based microsimulation study found that a one-unit reduction in BMI per year among overweight and obese individuals produced a reduction in disability equivalent to an effective ergonomic intervention in 35% of at-risk workers. ●

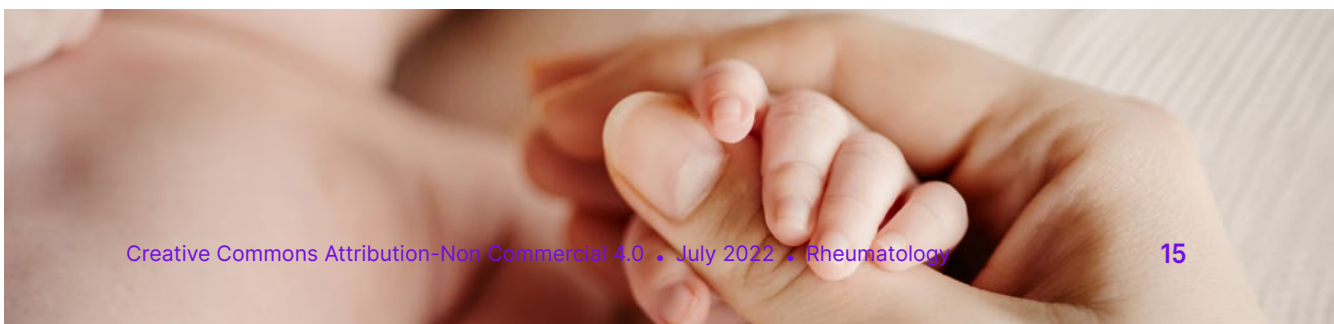
Pregnancy Outcomes in Females with Rheumatic and Systemic Autoimmune Diseases

NEW data presented at the EULAR 2022 Congress showed an increase in adverse outcomes in females who are pregnant with various rheumatic and systemic autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, and systemic lupus erythematosus (SLE). The study reported that fetal and serious maternal morbidity happen at an increased rate in females with SLE relative to females without SLE. Additionally, the increased risk was noted in females with spondyloarthritis (SpA), which was associated with the use of steroids in females with rheumatoid arthritis.

In SpA, the results have not been aligned as some studies report increased pregnancy risks while others have failed to identify any notable distinction between females with and without SpA. Bella Mehta presented findings from a retrospective study on delivery-related hospital admissions of more than 50,000 females with SLE. The study group found that patients with SLE had a greater risk of fetal morbidity, which included a higher risk of intrauterine growth restriction and preterm delivery. Furthermore, patients with SLE also had a higher risk of general medical issues (e.g., blood transfusion, puerperal cerebrovascular disorders, acute renal failure, eclampsia or disseminated intravascular coagulation, and cardiovascular and peripheral vascular disorders) than those without SLE. These new findings will assist in pregnancy management in females with SLE.

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Another study presented results from a nationwide register-based study of singleton births between April 2007 and December 2019 in females diagnosed with ankylosing spondylitis or undifferentiated SpA. This study confirmed that females with SpA had a greater risk of adverse outcomes in their pregnancies, including a higher risk of developing gestational diabetes, elective and emergency caesarean delivery, and preterm birth. Additionally, children born to females with SpA were not necessarily smaller but had an increased chance of developing infection in the first year. To conclude the session, another study showed the impact of rheumatoid arthritis and its treatment in 92 females. A positive pregnancy outcome was reported in 56.5% of the participants. Small for gestational age (20.5%) and premature birth (16.9%) were the most common unfavourable outcomes. ●





Rheumatic and Musculoskeletal Diseases not Risk Group for Severe COVID-19 Infection

ACCORDING to data presented at the EULAR 2022 Congress, patients with inflammatory rheumatic diseases (IRD) should not be considered a risk group for severe COVID-19. The studies supported the overall advice of administering three doses of COVID-19 vaccine, particularly in older patients and patients receiving immunomodulatory treatment.

The researchers collated data from two large ongoing prospective cohort studies and explored the post-vaccination serum samples for evidence of breakthrough infection. It was observed that the occurrence of breakthrough infections was similar between patients taking immunosuppressants and controls. Additionally, hospitalisation occurred in similar proportions in both groups. Generally, hospitalised cases had more comorbidities and were older relative to non-hospitalised cases.

Patients treated with anti-cluster of differentiation 20 therapy, in comparison to any other immunosuppressant, had significantly higher hospitalisation rates. Despite the fact that anti-cluster of differentiation 20 therapy may increase the chances of severe COVID-19 breakthrough infections, the researchers believed traditional risk factors continue to make a significant contribution. In conclusion, patients with IRDs should not necessarily be viewed as a risk

group for severe COVID-19, and incorporating other risk factors should be standard practice when considering treatment options, vaccination, and adherence to infection prevention measures.

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Another study presented at this year's congress used the German COVID-19-IRD registry as of 31st January 2022. A total of 271 breakthrough infection cases were reported. In these cases, 91% of the patients had received two doses of the vaccine and 9% had received three doses, with an average time of 148 days between the last dose and infection. Patients who had been triple vaccinated had a higher rate of comorbidities; however, patients infected displayed a lower rate of hospitalisation, COVID-19-associated complications, requirement of oxygen treatment, or death. Both studies support the overall endorsement of reducing risk of severe COVID-19 by administering three doses, especially in more vulnerable patients. ●