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NEW RELAPSE PREDICTION TOOL REDUCES COST OF RHEUMATOID ARTHRITIS TREATMENT Successful DMARD tapering significantly reduces drug costs

Madrid, Spain, 16 June 2017: The results of a study presented today at the Annual European Congress of Rheumatology (EULAR) 2017 have shown that the combined use of two measurements to accurately predict the risk of relapse in patients with rheumatoid arthritis (RA) allows successful dose reduction (tapering) of their disease modifying anti-rheumatic drugs (DMARDs). This in turn increases the cost-effectiveness of each DMARD treatment.¹

A combination of the multiple-biomarker disease activity (MBDA) score* and anti-citrullinated protein (ACPA)† status allowed the categorisation of different levels of relapse risk, which in turn may be used to implement successful DMARD tapering, with a resultant reduction in the cost of treatment.¹

With the development and wider use of highly effective DMARDs, about one half of RA patients achieve disease remission,² which is the ultimate treatment goal.³ This then raises the question of whether anti-rheumatic treatment can be tapered or stopped altogether, and how to predict which patients are least likely to relapse as a result.⁴

Previous results from the RETRO study‡ demonstrated that more than half of patients stay in remission after tapering or stopping conventional and biological DMARD treatment. Relapses occurred particularly in the first 6 months after treatment reduction, and were associated with the presence of ACPA.⁵ However, prediction models for disease relapse based on ACPA alone needed further improvement.⁶

* An objective validated disease activity measure for patients with RA based on 12 different serum biomarkers

† An antibody present in the blood of most RA patients; 'double positive' ACPA patients also have the Rheumatoid Factor antibody in their blood

‡ Reduction of Therapy in patients with Rheumatoid arthritis in Ongoing remission -- a multicentre, randomised controlled, parallel-group phase 3 trial evaluating the effects of tapering and stopping all conventional and/or biological DMARDs in patients with RA in stable remission



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“We have now been able to create a risk-stratified tapering model based on different relapse rates according to the use of MBDA and ACPA status as predictors,” said lead author Dr. Melanie Hagen from the University of Erlangen-Nuremberg, Germany. “Having shown in the RETRO study that those RA patients who relapse after tapering their DMARDs respond well to their reintroduction, a structured tapering and stopping of DMARDs is not only a cost economic strategy, but also clinically feasible,” she added.

RA patients with a low MBDA score (<30) and negative ACPA status showed the lowest risk of relapse (19%). With a moderate/high MBDA scores (≥ 30) or single positivity for ACPA, the relapse risk increased, and the risk was highest in those patients with double-positive ACPA (61%). On this basis, DMARD tapering appeared feasible in the MBDA-low / ACPA-negative patients, and in MBDA moderate/high / ACPA negative patients.

Considering only those RA patients who did not flare, the costs for synthetic and biologic DMARDs in the MBDA-low and single-positive groups (n=41) would have been €123,751.29 for full-dose treatment over one year. Tapering and stopping DMARDs in the low-risk relapse groups allowed a 75 percent reduction in DMARD costs equivalent to €92,821.50.

The average reduction of DMARD costs per patient was €2,350.08 in the MBDA-low / ACPA-negative and the MBDA-low / ACPA-single positive patients, and €1,761.43 in the MBDA-moderate/high / ACPA single-positive patients.

MBDA scores and ACPA status were determined in baseline blood samples from 146 RA patients in sustained remission who had been enrolled in the prospective randomised controlled RETRO study. Patients either continued their current regimen of DMARD treatment, tapered the dose by 50%, or stopped their DMARDs altogether after 6 months of tapering. Patients were observed for 1 year. Direct treatment costs (including testing costs at baseline) were evaluated every three months.

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NOTES TO EDITORS:

For further information on this study, or to request an interview with the study lead, please do not hesitate to contact the EULAR congress Press Office in the Goya Room at the IFEMA, Madrid during EULAR 2017 or on:

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About Rheumatic and Musculoskeletal Diseases

Rheumatic and musculoskeletal diseases (RMDs) are a diverse group of diseases that commonly affect the joints, but can also affect the muscles, other tissues and internal organs. There are more than 200 different RMDs, affecting both children and adults. They are usually caused by problems of the immune system, inflammation, infections or gradual deterioration of joints, muscle and bones. Many of these diseases are long term and worsen over time. They are typically painful and limit function. In severe cases, RMDs can result in significant disability, having a major impact on both quality of life and life expectancy.

About 'Don't Delay, Connect Today!'

'Don't Delay, Connect Today!' is a EULAR initiative that unites the voices of its three pillars, patient (PARE) organisations, scientific member societies and health professional associations - as well as its international network - with the goal of highlighting the importance of early diagnosis and access to treatment. In Europe alone, over 120 million people are currently living with a rheumatic disease (RMD), with many cases undetected. The 'Don't Delay, Connect Today' campaign aims to highlight that early diagnosis of RMDs and access to treatment can prevent further damage, and also reduce the burden on individual life and society as a whole.

About EULAR

The European League Against Rheumatism (EULAR) is an umbrella organisation which represents scientific societies, health professional associations and organisations for people with rheumatic and musculoskeletal diseases throughout Europe. EULAR aims to reduce the burden of rheumatic and musculoskeletal diseases on individuals and society and to improve the treatment, prevention and rehabilitation of rheumatic and musculoskeletal diseases. To this end, EULAR fosters excellence in education and research in the field of rheumatology. It promotes the translation of research advances into daily care and fights for the recognition of the needs of people with musculoskeletal diseases by the governing bodies in Europe through advocacy action.



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