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NEW BLOOD TEST DETECTS STROKE AND HEART ATTACK RISK IN LUPUS PATIENTS WITH NO CARDIOVASCULAR SYMPTOMS

Introducing biomarker into clinical practice could enable more effective
prevention of cardiovascular disease

Madrid, Spain, 15 June 2017: The results of a study presented today at the Annual European Congress of Rheumatology (EULAR) 2017 press conference have shown that a specific biomarker detected in the blood of lupus patients with no symptoms of cardiovascular disease (CVD), thought to be at low risk of CVD based on traditional risk factors, is associated with the presence of atherosclerosis*.¹

Overall, the risk of having fatty deposits (plaques) in the carotid arteries that deliver blood to the brain due to atherosclerosis was increased by a factor of 8 times in those lupus patients who had a biomarker known as High Sensitivity Cardiac Troponin T (HS-cTnT) in their blood.¹

Premature CVD is much more common in young premenopausal women with lupus than healthy women of a similar age.² With the increased life expectancy of lupus patients due to improved therapy, CVD has emerged as a significant threat to their health.² CVD is a major cause of death and ill-health in lupus patients.³ Using traditional risk factors as the 'Framingham score' has previously underestimated the risk of CVD in this population.⁴

"The results of our study raise the possibility that this easily measured biomarker could be introduced into clinical practice as a more reliable way of evaluating CVD risk in lupus patients," said lead author Dr. Karim Sacre, from the Bichat Hospital, Paris, France. "This in turn will enable more effective primary prevention measures such as treating abnormally raised blood lipids to be implemented," he added.

* Narrowing and blockage of the arteries caused by fatty deposits on their inside walls



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Using vascular ultrasound, 23 out of 63 (36.5%) consecutive lupus patients were found to have signs of carotid plaques compared to only 2 out of 18 (11.1%) of a control group. None of these patients nor the controls had symptoms of CVD and they all had a low Framingham risk factor score. Only age ($p=0.006$) and lupus disease status ($p=0.017$) were independently associated with the presence of carotid plaques.

The percentage of lupus patients with carotid plaques who had a detectable HS-cTnT was 87%; only 42.5% of lupus patients without plaques had a detectable blood level of HS-cTnT ($p<0.001$). Conversely, 54.5% of lupus patients with a detectable HS-cTnT, but only 11.5% with an undetectable HS-cTnT had a carotid plaque ($p<0.001$).

“Before introducing this new biomarker into clinical practice, we are conducting further research to confirm our findings on a larger cohort of patients, with a longer follow up period, analysing not only carotid plaques, but also the occurrence of major cardiovascular events,” Dr. Sacre concluded.

Lupus (Systemic Lupus Erythematosus) is a genetically complex chronic relapsing immune mediated rheumatic disease characterised by inflammation that may affect different tissues, including the skin, joint linings, lungs, kidneys and other organs.⁵ Lupus predominately affects women, occurring 10 times more often than in men, and frequently starting at child-bearing age.⁶ The disease is highly variable in the way it may present, and in its outcome among individuals and across different ancestral groups.⁷

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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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