

**Autoimmune Diseases and Conditions - Multiple Sclerosis; Studies from Hospital University Vall d'Hebron Reveal New Findings on Multiple Sclerosis (Profile and Usefulness of Serum Cytokines To Predict Prognosis In Myelin Oligodendrocyte Glycoprotein Antibody-associated Disease)**

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2025 MAR 4 (NewsRx) -- By a News Reporter-Staff News Editor at Life Science Weekly -- Fresh data on Autoimmune Diseases and Conditions - Multiple Sclerosis are presented in a new report. According to news originating from Barcelona, Spain, by NewsRx correspondents, research stated, "To characterize the serum cytokine profile in myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD) at onset and during follow-up and assess their utility for predicting relapses and disability. This retrospective multicentric cohort study included patients aged 16 years and older meeting MOGAD 2023 criteria, with serum samples collected at baseline ( $\leq 3$  months from disease onset) and follow-up ( $\geq 6$  months from the baseline), and age-matched and time to sampling-matched patients with multiple sclerosis (MS)."

Financial supporters for this research include Spanish Government, Spanish Government, Fondation pour l'aide a la recherche sur la sclerose en plaques (ARSEP), Fondation pour l'aide a la recherche sur la sclerose en plaques (ARSEP), P-FIS, P-FIS.

Our news journalists obtained a quote from the research from Hospital University Vall d'Hebron, "Eleven cytokines were assessed using the ELLA system. Data comparisons and statistical analyses between cytokine levels and clinical outcomes were performed. Eighty-eight patients with MOGAD and 32 patients with MS were included. Patients with MOGAD showed higher IL6 ( $p = 0.036$ ), IL8 ( $p = 0.012$ ), and IL18 ( $p = 0.026$ ) baseline levels compared with those with MS, in non-optic neuritis (ON) presentations. BAFF values increased over time, especially in patients with MOGAD treated with anti-CD20 ( $p = 0.002$ ). Baseline BAFF, CXCL10, IL10, and IL8 levels correlated with disease severity at MOGAD onset (all  $p < 0.05$ ). Finally, higher baseline BAFF levels predicted lower risk of relapses (hazard ratio 0.41 [0.19; 0.89],  $p = 0.024$ ). This study suggests a proinflammatory Th17-dominant profile in non-ON MOGAD patients, with a novel finding of a potential protective role of BAFF on relapses."

According to the news editors, the research concluded: "These results shed new light on the pathogenesis of MOGAD, potentially guiding therapeutic decisions."

For more information on this research see: Profile and Usefulness of Serum Cytokines To Predict Prognosis In Myelin Oligodendrocyte Glycoprotein Antibody-associated Disease. Neurology-neuroimmunology & Neuroinflammation, 2025;12(2). Neurology-neuroimmunology & Neuroinflammation can be contacted at: Lippincott Williams & Wilkins, Two Commerce Sq, 2001 Market St, Philadelphia, PA 19103, USA.

The news correspondents report that additional information may be obtained from Alvaro Cobo-Calvo, Hospital University Vall d'Hebron, Vall d'Hebron Inst Recerca, Dept. of Neurology, Ctr Esclerosi Multiple Catalunya Cemcat, Edifici Cemcat, Pg Vall d'Hebron 119-129, Barcelona 08035, Spain. Additional authors for this research include Javier Villacieros-alvarez, Carmen Espejo, Georgina Arrambide, Xavier Montalban, Mar Tintore, Alessandro Dinoto, Patricia Mulero, Laura Rubio-Flores, Pablo Nieto, Carmen Alcala, Jose E. Meca-Lallana, Jorge Millan-Pascual, Pedro Martinez-Garcia, Raphael Bernard-Valnet, Ines Gonzalez-Suarez, Aida Orviz, Raquel Tellez, Laura Navarro Canto, Silvia Presas-Rodriguez, Sergio Martinez-Yelamos, Juan Pablo Cuello, Ana Alonso, Raquel Pinar Morales, Gary alvarez Bravo, Lakhdar Benyahya, Romain Marignier, Sophie Trouillet-Assant, Virginie Dyon-Tafan, Caroline Froment Tilikete, Aurelie Ruet, Bertrand Bourre, Romain Deschamps, Caroline Papeix, Elisabeth Maillart, Philippe Kerschen, Xavier Ayrignac, Alex Rovira, Cristina Auger and Bertrand Audoin.

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