




Subpopulations of cells from bronchoalveolar lavage can predict prognosis in sarcoidosis

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The higher the proportion of a T-cell subset (CD4⁺Vα2.3⁺ T-cells) in bronchoalveolar lavage fluid of sarcoidosis patients, the better the prognosis and therefore it may be used as an additional prognostic tool <http://bit.ly/2Mta0Cs>

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To the Editor:

Sarcoidosis is characterised by an accumulation of CD4⁺ T-cells in the lungs and an increased bronchoalveolar lavage fluid (BALF) CD4/CD8 ratio (>3.5) [1]. In sarcoidosis, an expansion of BALF CD4⁺ T-cells expressing the T-cell receptor Vα2.3 has been associated with good prognosis and with specific HLA-alleles, *i.e.* HLA-DRB1*0301 and HLA-DRB3*0101 (which is often carried together with HLA-DRB1*13). HLA-DRB1*03 and HLA-DRB3*0101 molecules show similarities in the region important for antigen presentation and both may therefore be capable of presenting identical antigens to the lung T-cells [2]. Furthermore, an expansion defined as >10.5% CD4⁺ Vα2.3⁺ BALF T-cells is commonly seen in patients with Löfgren's syndrome [3], which is characterised by an acute onset with bilateral ankle arthritis and/or erythema nodosum, bilateral hilar lymphadenopathy and, in some cases, with parenchymal infiltrates and usually fever [4]. We have previously shown that very high expansions of CD4⁺ Vα2.3⁺ T-cells are associated with Löfgren's syndrome and a disease duration <2 years [3]. However, not all patients with an expansion of CD4⁺ Vα2.3⁺ T-cells have Löfgren's syndrome and resolving disease. In this much enlarged study on a HLA-typed sarcoidosis cohort, we aimed at investigating the clinical characteristics of patients with an expansion of CD4⁺ Vα2.3⁺ T-cells in BALF and to analyse if the degree of expansion may predict the prognosis of sarcoidosis.