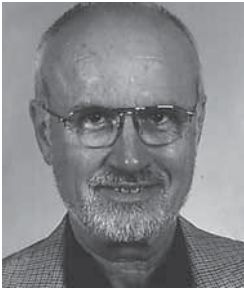


## S7



## About propionibacterial and mycobacterial etiology of sarcoidosis

Ulrich Costabel

Senior Consultant Interstitial and Rare Lung Disease Unit Ruhrlandklinik,  
University of Duisburg-Essen, Essen, Germany

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Infectious agents have long been suspected to play an etiologic role in sarcoidosis. Currently, the strongest candidates include *Propionibacterium* and *Mycobacterium* species. The findings among Japanese sarcoidosis patients are most strongly associated with propionibacteria, and among American sarcoidosis patients with mycobacteria. Molecular analysis of sarcoidosis tissue revealed the presence of protein and DNA of predominantly *Propionibacterium acnes* in Japanese and of mostly mycobacteria in American populations. Immune responses against peptides of both species have also been reported. Interestingly, *P. acnes* is able to induce a sarcoid-like pulmonary granulomatosis in mice. The underlying mechanisms and specific host factors (e. g. immune response genes) involved in the microbial pathobiology of sarcoidosis remain to be determined. Further research is warranted to delineate if the molecular and immunologic findings are secondary to actively replicating bacteria or to residual peptides and DNA of a previously cleared organism.