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## Propionibacterial genomes detected in the lymph nodes of Chinese patients with sarcoidosis

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The etiology of sarcoidosis is still not clear, we explored the role of propionibacterium in some Chinese sarcoidosis patients. The Ribosomal RNA of *P.acnes* and *P.granulosum* was measured by real-time quantitative reverse transcription-PCR using formalin-fixed and paraffin-embedded tissue of lymph node biopsy from 65 Chinese patients with sarcoidosis, 45 with tuberculosis, and 50 controls with other diseases (23 with nonspecific lymphadenitis and 27 with mediastinal lymph node metastasis from lung cancer). The *P.acnes* or *P.granulosum* rRNA was detected in 48 of the 65 sarcoidosis samples but only in 4 of the 45 TB samples and 3 of the 50 control samples. Analysis of the ROC curve revealed that an optimal cutoff value of the copy number of propionibacterial rRNA for diagnosis of sarcoidosis was 50.5 copies/mL with a sensitivity and specificity of 73.8% and 92.6%, respectively. Based on the cutoff value, 19 of the 24 additional sarcoidosis samples exhibited positive *P.acnes* or *P.granulosum*, whereas only 1 of the 22 additional TB samples was positive, resulting in a sensitivity and specificity of 79.2% and 95.5%, respectively. These findings suggest that propionibacteria might be associated with sarcoidosis granulomatous inflammation. Detection of propionibacterial rRNA by real-time qRT-PCR might possibly distinguish sarcoidosis from TB.

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