

The Reply

We appreciate the important observations made by Su et al¹ regarding the tuberculosis-like pneumonias caused by bacterial organisms of the Actinomycetales order. The Actinomycetales group includes phylogenetically diverse but morphologically similar aerobic and anaerobic actinomycetes such as *Actinomyces*, *Rothia*, *Williamsia*, *Gordonia*, *Tsukamurella*, and *Rhodococcus*.² As a group, these organisms exhibit filamentous branching structures, which may fragment into rods, or coccoid forms. This morphological variability is one of the reasons why acid-fast bacilli organisms such as *Mycobacterium*, *Tsukamurella*, and *Rhodococcus* (aerobic actinomycetes) may be confusing even for experienced microbiologists. The differentiation of these 3 genera, as well as their species identification, is difficult, and often responsible for delayed or inappropriate diagnosis. Therefore, we concur with Su et al¹ that phenotypic similarity in culture media of these pathogens may lead to species misidentification and thus, molecular identification should be routinely performed. In our report,³ *Rhodo-*

coccus was identified by standard microbiological methods (high-performance liquid chromatography) and by molecular characterization at the reference public health laboratory. In summary, the aerobic actinomycetes such as *Gordonia*, *Rhodococcus*, and *Tsukamurella* are increasingly recognized clinical pathogens that cause tuberculosis-like pneumonias. We agree with Su et al¹ about the importance of identifying actinomycetes to the molecular level for epidemiological reasons and to provide optimal clinical therapies.

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References

1. Su S-Y, Chao C-M, Lai C-C. Other than “*Rhodococcus*”. *Am J Med.* 2013;126:e15.
2. Savini V, Fazii P, Favaro M, et al. Tuberculosis-like pneumonias by the aerobic actinomycetes *Rhodococcus*, *Tsukamurella*, and *Gordonia*. *Microb Infect.* 2012;14(5):401-410.
3. Franco-Paredes C, Ray S. Causes of persistent acid-fast positive smears in pulmonary tuberculosis. *Am J Med.* 2012;125(12):e3-e4.