



LETTER TO THE EDITOR

Response to the letter of Lai and Hsueh

Dear Editor,

We thank Lai and Hsueh for their valuable comments on our article¹ in which we described a case with *Nocardia* thyroid abscess in a 70-year-old patient and favorable clinical response to trimethoprim-sulfamethoxazole therapy. We agree with their opinion that molecular methods are essential for identifying *Nocardia* isolates to the species level. The species identification of the *Nocardia* isolate was based on the results of conventional laboratory methods, including positive modified acid-fast staining, colonial morphotypes, and the hydrolysis pattern of casein, xanthine, hypoxanthine, and tyrosine. With the advent of molecular genotyping methods, such as 16S rRNA gene sequencing and hsp65 gene sequencing, more *Nocardia* species, which could not be distinguished by traditional biochemical reactions, have been discovered.^{2–5} Unfortunately, the isolate from this patient was not available for further studies, and therefore in a strict sense could be just regarded as a *Nocardia* isolate.

Recently, we collected 12 clinical *Nocardia* isolates from 3 medical centers in southern Taiwan, which identified to the species level by 16S rRNA gene sequencing. There were two each of *N. cyriacigeorgica*, *N. brasiliensis*, and *N. asiatica*, and one each of *N. carnea*, *N. beijingensis*, *N. farcinica*, *N. otitidiscaviarum*, and *N. transvalensis*. Such a result highlights the heterogeneity and diversity of *Nocardia* isolates in clinical medicine. This finding further echoes the need of molecular methods to accurately identify *Nocardia* species and the *in vitro* antimicrobial susceptibility profile for each clinical isolate for optimal antimicrobial therapy.⁵

References

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