New alternative test for *Mycobacterium tuberculosis* complex

Novo teste alternativo para o complexo *Mycobacterium tuberculosis*

**To the Editor:**

I read the report on the alternative test for the presumptive identification of *Mycobacterium tuberculosis* complex with a great interest. Simeão et al. recommended “the combined screening test to rapidly identify *M. tuberculosis* in resource-poor settings and in less well-equipped laboratories while awaiting definite identification by molecular or biochemical methods.” I agree that the new alternative test might be effective in the diagnosis. However, there are some concerns. First, this technique depends on the level of expertise of the clinical microscopist, hence the diagnostic yield will vary in different settings. Determining standards for clinical microscopy is a common problem in laboratory medicine, and there is as yet no international consensus. Second, the cost analysis in this report is only a cost identification and does not focus on the outcome. A cost-effectiveness or cost-utility analysis should have been presented. Third, it remains questionable whether there will be any experienced clinical microscopists available to perform the test in settings in which the laboratories are less well-equipped.

Viroj Wiwanitkit
Professor of Tropical Medicine, Visiting Professor, Hainan Medical College, China

**References**


---

**Author’s reply**

**Resposta dos autores**

**To the Editor:**

I would like to thank Dr. Wiwanitkit for his interesting comments on our study. We agree that the technique depends on the expertise of clinical microscopists. However, there is no simpler method. In order to classify an isolate as *M. tuberculosis* complex, we can use biochemical tests (niacin, nitrate or p-nitrobenzoic acid) or molecular methods; these tests are expensive, especially the niacin test, which requires a good quality strip for appropriate results, otherwise the results cannot be trusted. Good quality niacin test strips are quite expensive, and considerable growth of the isolate is necessary. There are also molecular methods, which demand much more laboratory expertise.

The cost analysis we included is related only to the supplies. It was never our aim to conduct a comprehensive cost-effectiveness analysis in this study. Such an analysis is very complex, and a multidisciplinary team that includes an economist is required in order to make high-level analyses.

Settings in which microscopy and culture are performed demand a reliable laboratory expert, who should be able to identify the macroscopic aspect of *M. tuberculosis* cultures and should therefore also be perfectly able to perform the screening test. If a laboratory is going to employ a method based on molecular biology, it will need personnel with much greater expertise than that required to perform the procedure outlined in our study.

Maria Alice da Silva Telles
Head of the Regional Referral Laboratory.

*Instituto Adolfo Lutz*, São Paulo, Brazil