

# Diagnostic performance of interferon-Gamma assay for tuberculosis in immunocompromised patients

Sir,

We read with great interest a recent article by Eldin *et al.* who investigated the utility of interferon (INF)- $\gamma$  level and Quantiferon-TB Gold In tube (QFT-GIT) assay for the diagnosis of pleural tuberculosis (TB).<sup>[1]</sup> They concluded the *ex vivo* pleural fluid INF- $\gamma$  levels is an accurate diagnostic tool for pleural TB.<sup>[1]</sup>

However, the immune status of the patients in this study was not shown, and we wonder whether the immunocompromised condition would affect the performance of these tests or not. In fact, the role of QFT-GIT for pulmonary TB in immunocompromised patients remains questionable.<sup>[2,3]</sup> In the study in Korea, Jung *et al.* enrolled 119 immunocompromised patients, which included 29 patients with diabetes mellitus, 53 with malignancy, 23 with taking immunosuppressive drugs, and 14 with end-stage renal disease, and found sensitivity and specificity (95% CI) were: (59.0% [44.9-72.0]) and (61.3% [54.4-67.6]) of QFT-GIT for diagnosing smear-negative pulmonary TB.<sup>[2]</sup> As well as in a previous study by Lai *et al.* in Taiwan,<sup>[3]</sup> QFT-GIT assay had more indeterminate and false-negative results than another INF- $\gamma$  release assays (IGRA) – an enzyme-linked immunosorbent assay (T-SPOT.TB assay), especially in immunocompromised patients.

Therefore, we would like to suggest that the author should mention the underlying condition – immunocompetent or immunocompromised status – in the description of the demographic characteristics to help reader better understand the background.

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Questionable role of interferon- $\gamma$  assays for smear-negative pulmonary TB in immunocompromised patients. *J Infect* 2012;64:188-96.

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