



CORRESPONDENCE

Quinolones to treat acute bacterial exacerbation of chronic bronchitis in TB endemic areas: a word of caution

To the Editors:

The meta-analysis by SIEMPOS *et al.* [1] has shown equivalent efficacy of macrolides, quinolones and amoxicillin/clavulanate in the treatment of patients with acute bacterial exacerbation of chronic bronchitis (ABECB). Although quinolones are associated with better microbiological success and fewer recurrences of ABECB, certain points merit further discussion, especially in tuberculosis (TB) endemic areas.

Most of the randomised controlled trials included in this meta-analysis were published from the Western world, where TB is not widespread. In areas endemic of TB, *Mycobacterium tuberculosis* has been isolated from the sputum specimen of 1.5–5% of cases with acute exacerbations of chronic obstructive pulmonary disease, thus reflecting the high prevalence of active TB as a precipitating cause for acute exacerbation [2, 3].

Besides providing good coverage for the usual bacterial organisms causing ABECB, quinolones have potent antimycobacterial properties. Their use to treat ABECB can lead to temporary improvement in symptoms of pulmonary TB, thus delaying the diagnosis and prolonging the patient's infectivity. In a study by DOOLEY *et al.* [4], initial empiric therapy with a quinolone was associated with a delay in the initiation of appropriate anti-TB treatment (21 *versus* 5 days). This delay in the diagnosis of active TB translates not only into greater patient morbidity and mortality, but also in increasing the spread of TB in the community.

Quinolones are essential drugs in the treatment of drug-resistant TB. Widespread and indiscriminate use of quinolones, due to their broad-spectrum antibacterial coverage and relatively low cost, is likely to rapidly enhance their resistance to most of the susceptible organisms in the community, including mycobacteria. Reports of quinolone-resistant TB [5] and extensively drug-resistant (XDR)-TB [6] are pouring in.

XDR-TB has now been identified in all regions of the world, but it is most prevalent in Asia and Eastern Europe [5]. A recent study carried out in a tertiary care hospital in India [7] found that XDR-TB accounts for 8% of multidrug-resistant cases, compared with ~4% in the USA.

Therefore, in light of the potential of masking active tuberculosis and the threat of an emerging epidemic of

extensively drug-resistant tuberculosis, the use of quinolones should be restricted in tuberculosis endemic areas.

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STATEMENT OF INTEREST

None declared.

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