

Journal club

Management of latent tuberculosis infection

Treatment for latent tuberculosis has the potential to significantly reduce the incidence of active tuberculosis infection, but patient adherence to treatment regimens is often limited by the lengthy duration of treatment required. This study evaluated the efficacy of a 3-month regimen of rifapentine plus isoniazid administered as directly observed once-weekly therapy compared with 9 months daily self-administered isoniazid.

The investigators carried out an open-label non-inferiority trial in which 3986 subjects were randomised to combination therapy and 3745 randomised to isoniazid monotherapy. Subjects were enrolled if they had a positive tuberculin skin test or were a close contact of a patient with tuberculosis. Contacts of patients with drug-resistant tuberculosis were excluded. Subjects were followed-up for 33 months from enrolment and the primary end point evaluated was the development of active tuberculosis in the study subjects.

The study demonstrated that 3 months directly observed weekly combination therapy is non-inferior to 9 months daily self-administered isoniazid. Seven patients developed tuberculosis in the combination group (0.19%) compared with 15 in the monotherapy group (0.43%). There was a trend to improved efficacy in the combination therapy group. Rates of hepatotoxicity were greater in the isoniazid only group, and hypersensitivity reactions were greater with combination therapy, but serious adverse events did not differ significantly between the groups. Rifapentine plus isoniazid could be an alternative to standard preventive therapy.

► **Sterling TR**, Villarino ME, Borisov AS, *et al*. Three months of rifapentine and isoniazid for latent tuberculosis infection. *N Engl J Med* 2011;**365**:2155–66.

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