

## Four-month Chemotherapy in the Treatment of Smear-negative Pulmonary Tuberculosis: Results at 30 to 60 Months

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### Abstract

**Introduction:** Most patients with active pulmonary tuberculosis (PTB) are treated with a 6-month short course regimen. The purpose of the present study was to assess the efficacy of using 4 months of chemotherapy to treat patients with smear-negative PTB. **Methods:** A total of 314 patients were randomised to a daily or combined (daily and intermittent) regimen as follows: (1) 2HRZ/2HR—2 months of isoniazid (H), rifampicin (R) and pyrazinamide (Z), followed by 2 months of H and R or (2) 2HRZ/2H<sub>3</sub>R<sub>3</sub>—2 months of HRZ as in regimen 1, followed by H and R given 3 times weekly for 2 months or 4 months if initial sputum specimens were culture positive. **Results:** One hundred and fifty-eight patients were assigned to the daily regimen and 156 to the combined regimen. Of the 158 patients, 99 had negative cultures and 59 had positive cultures. There was no relapse among 96 culture-negative patients assessed at 30 months and 68 patients at 60 months. However, 6 patients had no radiological response while 1 was considered on review to have non-tuberculous disease. There was no relapse among 57 culture-positive patients assessed at 30 months and 41 at 60 months. In the combined regimen group, 102 had negative cultures and 54 had positive cultures. There was 1 relapse in the culture-negative group of 100 patients assessed at 30 months and 74 at 60 months. There was no radiological response in 5 patients. One patient in the culture-positive group failed therapy but there were no relapses during follow-up to 60 months. **Conclusion:** A 4-month daily or combined regimen appears to be highly effective in the treatment of non-immunocompromised patients with smear- and culture-negative PTB.

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**Key words:** Four-month chemotherapy, Pulmonary tuberculosis, Smear negative

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