

Basic Principles of Treatment

ACTIVE DISEASE

- Kill tubercle bacilli rapidly
- Prevent emergence of drug resistance
- Eliminate persistent bacilli from host tissues to prevent relapse

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REVIEW ARTICLE

Dan L. Longo, M.D., *Editor*

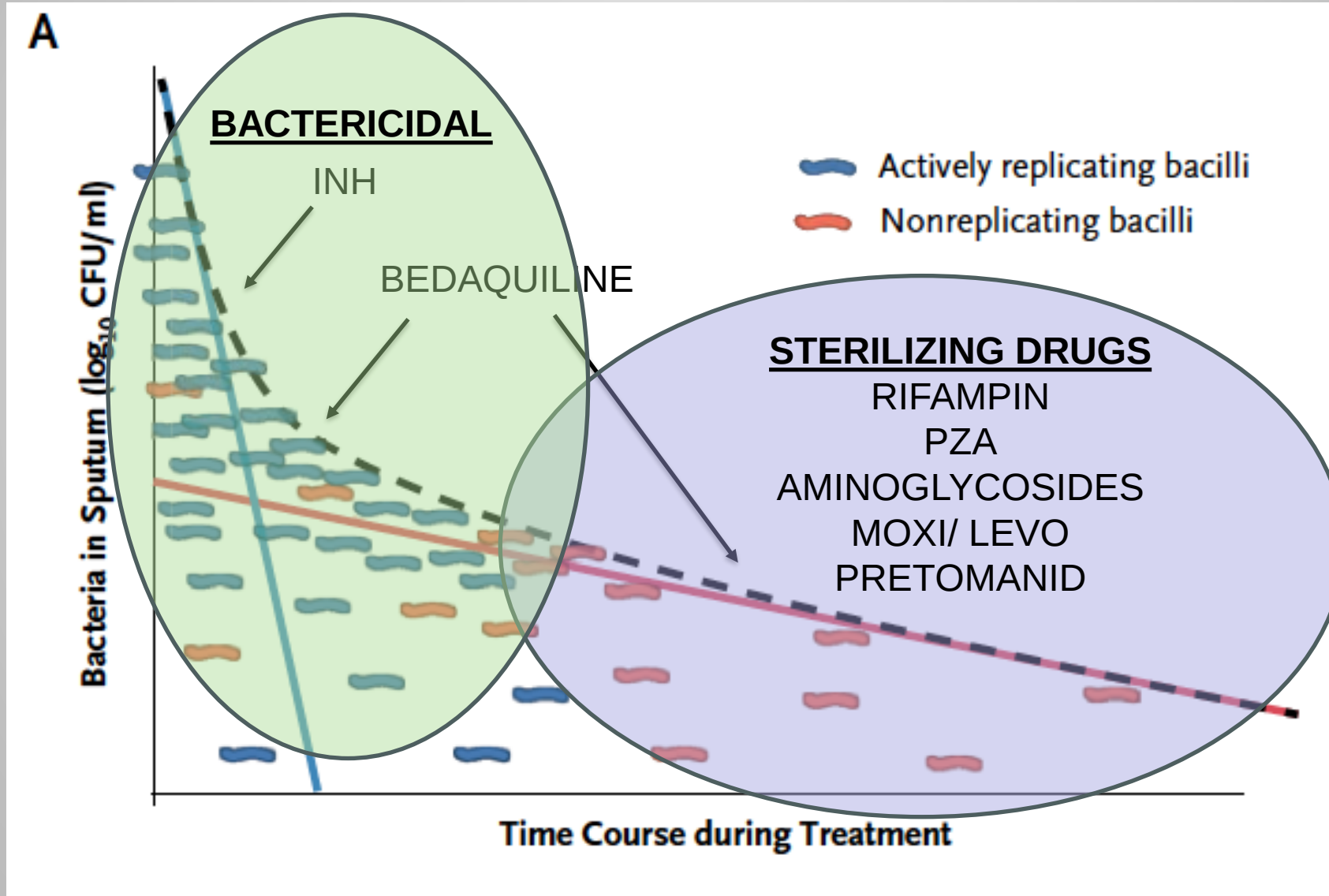
Treatment of Tuberculosis

C. Robert Horsburgh, Jr., M.D., Clifton E. Barry III, Ph.D.,
and Christoph Lange, M.D.

Horsburgh CR et al. N Engl J Med 2015;373:2149-60.

Principles of Rx:

target different bacterial subpopulations



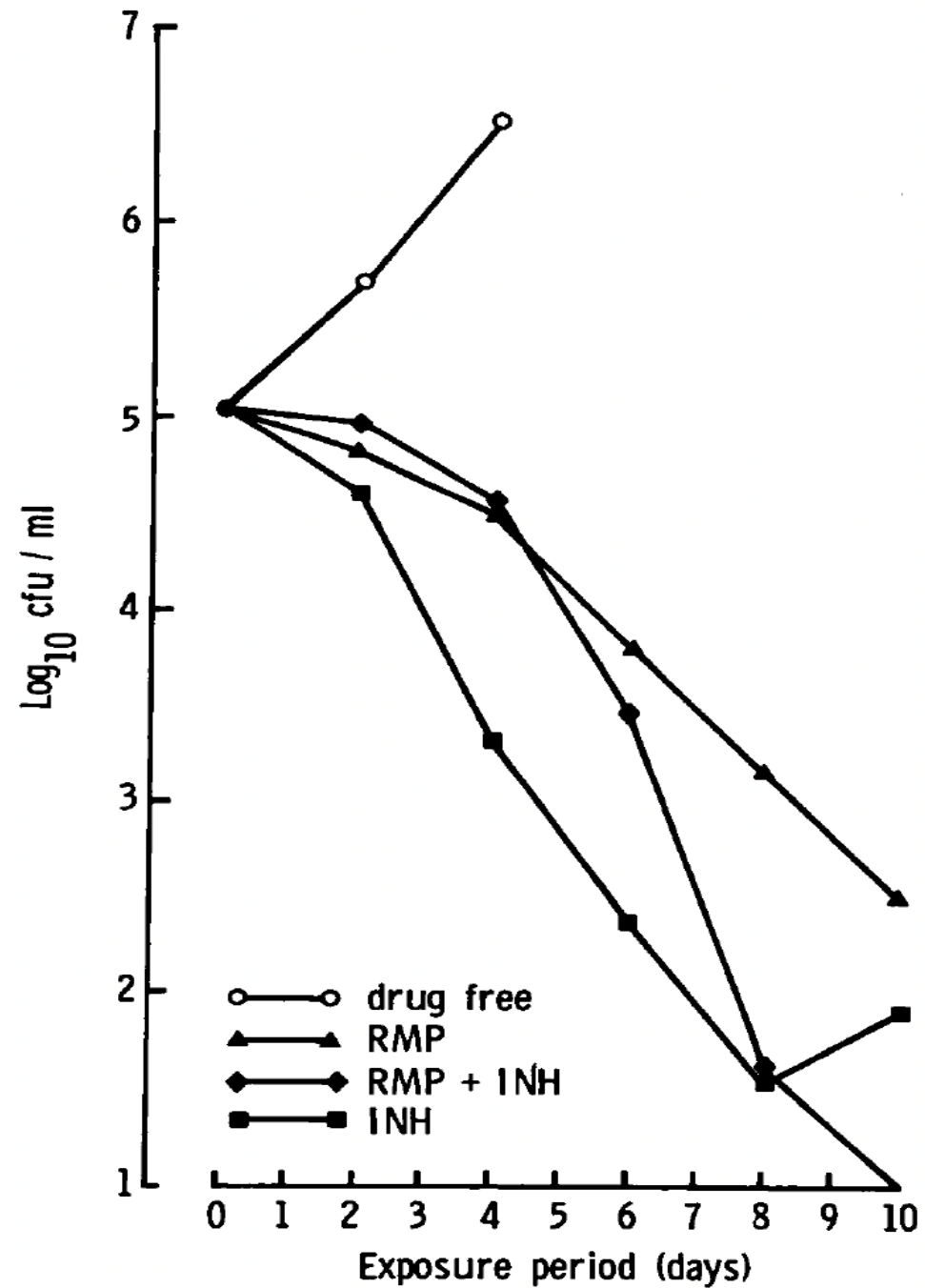
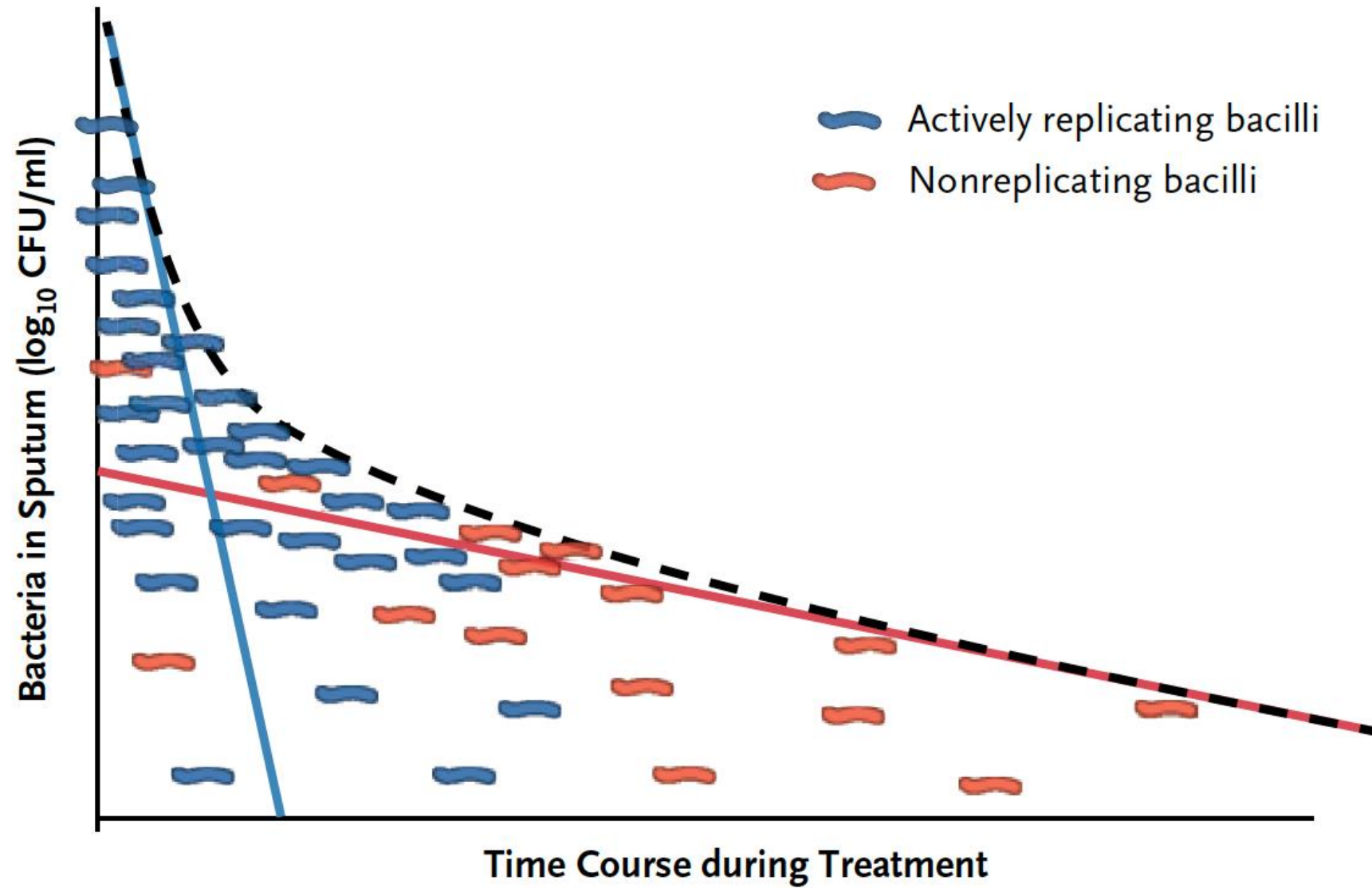


FIGURE 1. Bactericidal activity of isoniazid 1 $\mu\text{g/ml}$, rifampin 1 $\mu\text{g/ml}$ and isoniazid + rifampin.

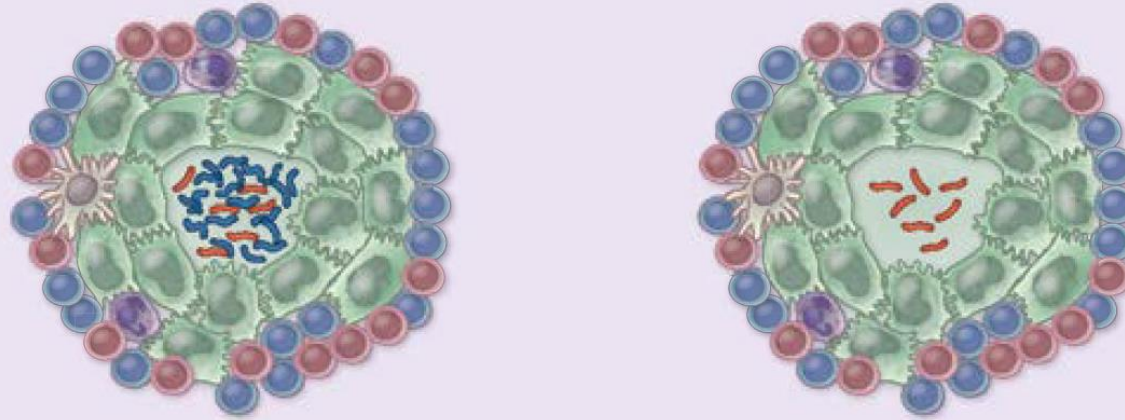
D.A. Mitchison (1979).
Chest 76 (6): 771-81

A



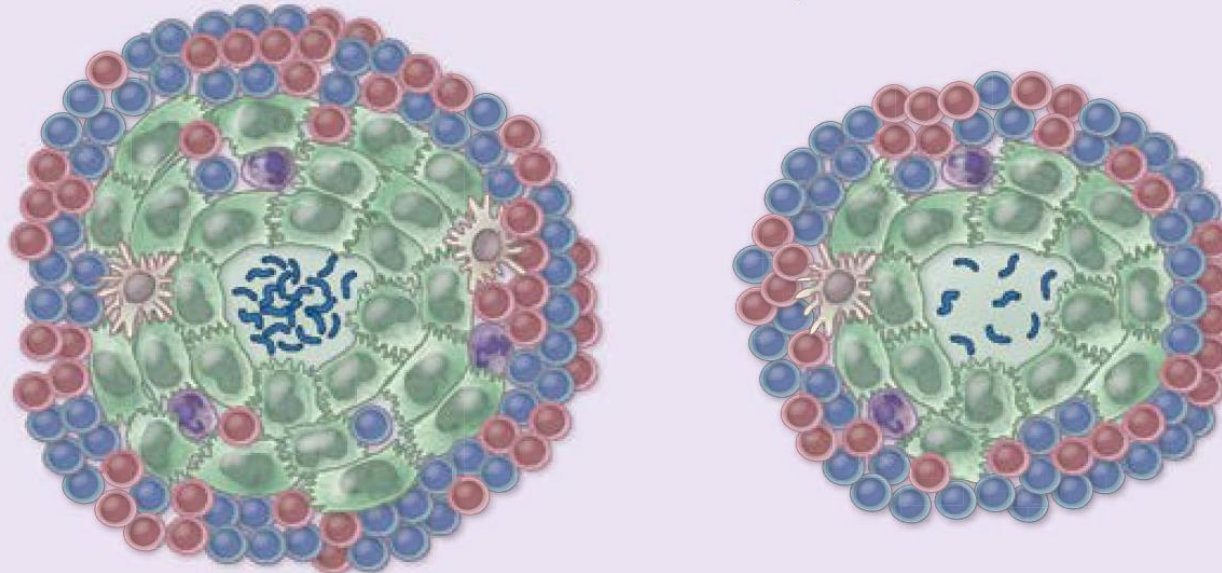
B

Persistent bacilli theory



TREATMENT

Persistent disease theory



Thick-walled granuloma

Mechanisms of Action (MOAs) of TB drugs

