

Solid phenotypic drug susceptibility testing

The proportion method

The proportion method (Canetti et al., modified) determines the percentage of growth (number of colonies) of a defined inoculum on drug-free control media versus growth on culture media containing the critical concentration of an anti-TB drug.

Drug Concentration ($\mu\text{g/ml}$)

Streptomycin 4.0

Isoniazide 0.2

Rifampicin 40.0

Ethambutol 2.0

Amikacin 40.0

Kanamycin 30.0

Ofloxacin 2.0

Capreomycin 40.0



Solid phenotypic antibiogram of an MDR isolate

With more on: GLI Mycobacteriology Laboratory Manual, First Ed 2014

<http://www.who.int/tb/laboratory/mycobacteriology-laboratory-manual.pdf>

- Mycobacteria: laboratory methods for testing drug sensitivity and resistance. G. Canetti, S. Froman, J. Grosset, P. Hauduroy, Miloslava Langerová, H. T. Mahler, Gertrud Meissner, D. A. Mitchison, and L. Šula. Bull World Health Organ. 1963; 29(5): 565–578.
- Measurement of sensitivity of the tuberculous bacillus to antibacillary drugs by the method of proportions. Methodology, resistance criteria, results and interpretation. G. Canetti, N. Rist, J. Grosset. Rev Tuberc Pneumol (Paris). 1963 Feb-Mar; 27:217-72.