Aim: To study the extrapulmonary mycobacteria isolations in the National Reference Laboratory for Mycobacteria in Athens, in an eight years period (1998-2005).

Materials: 21177 extrapulmonary clinical specimens in total of 140190.

Methods: Microscopy by Ziehl Neelsen stain. Culture by the classical method on solid Löwenstein-Jensen (LJ) medium, as well as, by the automated system Bactec MGIT 960 (Becton Dickinson). Identification by molecular hybridization, using the commercial kits: InnoLipa V2 (Innogenetics), Accuprobe (Gen Probe, Biomerieux) and Genotype Mycobacterium CM and AS (Hain Life, Science). Sensitivity testing by the classical method of proportion on LJ solid medium, as well as, by the automated system, Bactec MGIT 960 (Becton Dickinson) and the molecular hybridization technique, Geno Type MTBDR,(Hain Life Science).

Results:
- Extrapulmonary specimens tested were 21177.
- The number of extrapulmonary specimens tested increased through out the study period, from 2197 (13%) in 1998 to 3322 (18,2%) in 2005.
- 685/21177 (3,2%) clinical specimens grew a mycobacterium.
- 622/685 (90,8%) of mycobacteria were *M. tuberculosis* (MTB), while
- 63/685 (9,2%) were Non TB (NTB) mycobacteria
- Concerning MTB isolations, most common clinical sources were pleural fluid 243/622 (39%), urine 91/622 (14,6%), lymph nodes 83/622 (13,3%) and pus 81/622 (13%).
- Concerning NTB isolations, 52/63 (82,5%) were *M. avium*, 9/63 (14,3%) were *M. chelonea*, 1/63 (1,6%) was *M. peregrinum* and 1/63 (1,6%) was *M. fortuitum*.
- Most common clinical sites for the NTB isolates were for *M. avium*, lymph nodes 21/63 (33,3%), blood 20/63 (31,7%) and pleural fluid 8/63 (12,7%), while for *M. chelonea* blood 9/9 (100%), for *M. peregrinum* pleural fluid and for *M. fortuitum* a lymph node.
- Drug resistance of MTB isolates showed that 35/622 (5,6%) were resistant to Isoniazide (INH), 15/622 (2,4%) to Rifampicin (RIF) and 12/622 (1,9%) were MDR (INH+RIF).

Conclusions: The vast majority of extrapulmonary specimens grew an MTB. Most common clinical sources for extrapulmonary MTB isolations were pleural fluid and urine, while for NTB extrapulmonary isolations, lymph nodes and blood. Concerning drug resistance and multidrug resistance of MTB, these are significantly lower in extrapulmonary compared to pulmonary specimens, according to previous studies of our laboratory.