

86%, 91%, 86%, 0.96% for Cobas TaqMan MTB DNA qPCR kit, respectively.

**Conclusion:** Although, our preliminary results indicated that the diagnostic performance of mRNA-based RT-qPCR method is slightly better than the commercial DNA-based diagnostic qPCR assay, we may come to a more definite conclusion after the completion of the study.

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 Room: Hall 3 (Posters & Exhibition)

#### Head-to-head comparison of two multi-locus sequence typing (MLST) schemes for characterization of *Acinetobacter baumannii* outbreak and sporadic isolates

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**Background:** *Acinetobacter baumannii* is a frequent cause of nosocomial infections, in particular ventilator-associated pneumonia, urinary tract, and bloodstream infections. Patients in high-dependency care are mostly affected, and increasing multi-drug resistance worldwide is a cause of growing concern.

**Methods & Materials:** To compare the two *Acinetobacter baumannii* multi-locus sequence typing (MLST) schemes and to assess their suitability to aid in outbreak analysis we investigated the molecular epidemiology of 99 *Acinetobacter baumannii* isolates representing outbreak-related and sporadic isolates from 24 hospitals in four different countries (Germany, Poland, Sweden, and Turkey). Pulsed-field gel electrophoresis (PFGE) was used as the reference method to determine the epidemiologic relatedness of isolates and compared to MLST using both the Oxford and Pasteur scheme. Rep-PCR was used to define international clonal lineages (IC).

**Results:** We identified 26 unique outbreak strains and 21 sporadic strains. The majority of outbreaks were associated with carbapenem-resistant *A. baumannii* harbouring oxacillinase OXA-23-like and corresponding to IC 2. Sequence types (STs) obtained from the Oxford scheme correlate well with PFGE patterns, while the STs of the Pasteur scheme are more in accordance with rep-PCR grouping, but neither one is mirroring completely the results of the comparator. On two occasions the Oxford scheme identified two different STs within a single outbreak where PFGE patterns had only one band difference. The CCs of both MLST schemes were able to define clonal clusters that were concordant with the ICs determined by rep-PCR. IC4 corresponds to the previously described CC15 Pasteur (=CC103 Oxford).

**Conclusion:** It can be concluded that both MLST schemes are valuable tools for population-based studies. In addition, the higher discriminatory power of the Oxford scheme that compares with the resolution obtained with PFGE can often aid in outbreak analysis.

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#### Non-tuberculous mycobacterial empyema in an immunocompetent child



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**Background:** Non-tuberculous mycobacterium (NTM) species are free-living organisms that are ubiquitous in the environment. There are about 100 different species of mycobacteria of which few species cause human disease in immunocompromised individuals. The spectrum of disease caused by NTM range from pulmonary disease including cavity, consolidation, bronchiectasis, lymphadenitis, skin, soft tissue and injection site infections to disseminated disease in immunocompromised individuals.

**Methods & Materials:** We report a 9 years old immunocompetent female patient who presented with *Mycobacterium avium intracellulare* (MAI) empyema. There have been only two reports to our knowledge regarding NTM in immunocompetent children causing empyema both of which were due to mycobacterium chelonae.

**Results:** A 9 years old girl presented with left sided chest pain for 3 months. There was associated intermittent fever and cough for the last two weeks. Chest X-ray (CXR) revealed massive left sided pleural effusion. Pleural tap drained pus. She underwent thoracotomy and decortication. HIV Elisa was negative. TB MGIT culture at the end of 3 weeks grew non-tuberculous slow growing mycobacteria. Line probe assays revealed MAI. A thorough immune workup showed normal serum levels of IgG and IgM and lymphocyte subset assays. Child was started on clarithromycin, isoniazid, rifampicin and ethambutol. A repeat chest X-ray done after two months showed complete resolution of pleural fluid. Treatment is continued and child is on regular follow up.

**Conclusion:** MAI can lead to tuberculous empyema even in immunocompetent children.

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#### Ocular tuberculosis masquerading as retinoblastoma in a young boy



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**Background:** Ocular involvement in childhood tuberculosis is rare. We report a case of intra ocular tuberculosis in a young boy who presented with ocular discomfort and blurring of vision and was diagnosed as retinoblastoma preoperatively. Child underwent