**E034**

**2-hour Educational Workshop**

## Treatment of Mycoplasma pneumoniae infections: antibiotic resistance and therapeutic options

C. Bebear[1]

[1]*University of Bordeaux, Bordeaux, France*

*Mycoplasma pneumoniae* is a common cause of respiratory tract infections in humans, especially in children. Standardized methods for performance and interpretation of *in vitro* susceptibility tests have been recently published for *M. pneumoniae*. The lack of a cell wall in mycoplasmas makes them intrinsically resistant to b-lactams and to all antimicrobials, which target the cell wall. *M. pneumoniae* is susceptible to macrolides and related antibiotics, tetracyclines and fluoroquinolones. Due to side effects associated with the use of tetracyclines and fluoroquinolones, macrolides and related antibiotics are the first-line treatment for respiratory infections caused by *M. pneumoniae*. However, strains having acquired resistance to macrolides have emerged worldwide and have been spreading in Europe, USA, and Asia, especially, with more than 90% of the Chinese isolates resistant to erythromycin and azithromycin. This acquired resistance can be detected by PCR methods directly from respiratory specimens and is related to 23S rRNA mutations. This high-level macrolide resistance is worrisome since treatment options for children are limited.