Pneumococcal Epidemiology and the Impact of New Vaccine Programmes

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Abstract
Pneumococcal disease remains a global problem despite the availability of effective conjugate vaccines. This is due to serotype replacement disease in the developed world and delayed implementation in the developing world. The 13-valent pneumococcal conjugate vaccine (PCV13) is a second generation PCV that extends the valency of PCV7 by including six additional serotypes. The supplementary serotypes are highly associated with invasive pneumococcal disease and many have also been implicated in PCV7 non vaccine type replacement disease since PCV7 introduction. PCV7 and PCV13 comparisons in clinical trials have established non-inferiority to PCV7 for both safety and immunogenicity profiles for use in children. PCV13 has also been shown to be non-inferior to the pneumococcal polysaccharide vaccine for use in adults. At the end of 2011 PCV13 had been approved and launched in 104 countries worldwide, 54 of which as part of their paediatric national immunisation program. The speaker will discuss the current epidemiology of pneumococcal disease, and ongoing work to help understand the impact of PCV’s, and the current status of next generation pneumococcal vaccines.

Selected Publications
5. Tocheva AS, Jefferies JM, Christodoulides M, Faust SN, Clarke SC. Distribution of carried pneumococcal clones in UK children following the introduction of the 7-valent pneumococcal conjugate vaccine: a 3-year cross-sectional population based analysis. Vaccine 2013; 31: 3187-90.