

RESEARCH NEWS

Ten valent vaccine prevents most invasive pneumococcal disease

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GlaxoSmithKline have confirmed that their 10 valent pneumococcal vaccine prevents invasive disease in vaccinated infants. The vaccine was licensed in 2009, on the basis that it generated a good immune response. A new trial from Finland shows that it also prevents 92-100% of invasive pneumococcal disease when given alongside routine infant vaccinations.

The company tested two or three primary doses followed by a booster. Both schedules worked well, but the trial wasn't designed or powered to compare the two directly. Control children received hepatitis vaccines. Just 16 cases of invasive disease were reported in 30 528 infants who were enrolled before 7 months of age. Fourteen cases had received control vaccines. No infants died.

Pneumococcal vaccines are already offered to infants in 88 countries, says a linked comment (doi:10.1016/S0140-6736(12)

61957-6). The new trial adds more clinical data from Europe and also fills a gap in the evidence on the less intensive schedule. Two primary doses followed by a booster (2+1) prevented 92% (95% CI 58% to 100%) of invasive pneumococcal disease in this trial, and this result strengthens the World Health Organization's recent endorsement of the lighter schedule.

GlaxoSmithKline's vaccine contains polysaccharides from 10 pneumococcal serotypes conjugated to three carrier proteins (*Haemophilus influenzae* protein D, tetanus toxoid, and diphtheria toxoid). The authors report nine serious adverse events associated with study vaccines. They were equally distributed between children given the pneumococcal vaccine and controls.

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