# ORAL ABSTRACTS

### 595. Community Acquired Pneumonia Immunization Trial in Adults (CAPiTA)

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***Background.*** Conjugate vaccines have shown efficacy against invasive pneumococcal disease (IPD) and otitis media in children, but have not been evaluated in the healthy elderly.

***Methods.*** This was a randomized, double-blind clinical trial in 84,496 participants 65 years of age and older in the Netherlands The CAPiTA study was designed to demonstrate the efficacy of 13-valent pneumococcal conjugate vaccine (13vPnC) in the prevention of a first episode of vaccine-type (VT) pneumococcal community-acquired pneumonia (CAP) (primary objective). The secondary objectives were to demonstrate efficacy in prevention of a first episode of nonbacteremic/noninvasive (NB/NI) VT pneumococcal CAP and a first episode of VT-IPD. Key eligibility criteria were no previous pneumococcal vaccination and immune competence. Participants were randomized 1:1 to receive either 13vPnC or placebo. They were enrolled at community-based sites and home visits, and surveillance for CAP and IPD was conducted at hospitals in the areas of enrollment. Isolation of pneumococcus from blood or other normally sterile site and/or a serotype-specific urinary antigen detection assay were used to identify episodes of vaccine-type CAP. Safety was also evaluated.

***Results.*** In the per protocol analysis vaccine efficacy of 45.56% (95.2% 21.82%-62.49%, p = 0.0006) was demonstrated for the first episode VT-CAP; 45.00% (95.2% 14.21%-65.31%, p = 0.0067) for the first episode of NB/NI VT-CAP, and 75.00% (95.2% 41.43%-90.78%, p = 0.0005) for the first episode of VT-IPD. Safety findings were consistent with prior adult experience.

***Conclusion.*** 13vPnC was effective in preventing vaccine-type pneumococcal CAP and vaccine-type IPD in adults >65 years of age.

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