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## SEROTYPE DISTRIBUTION OF INVASIVE PNEUMOCOCCAL DISEASE IN INFANTS IN THE COMUNIDAD VALENCIANA (5 MILLION INHABITANTS), SPAIN, 2007-2010

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### SEROTYPE DISTRIBUTION OF INVASIVE PNEUMOCOCCAL DISEASE IN INFANTS IN THE COMUNIDAD VALENCIANA (5 MILLION INHABITANTS), SPAIN, 2007-2010

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**Background:** Invasive pneumococcal disease (IPD) is a cause of high mortality and morbidity worldwide. The currently available vaccines for infants include 7, (PCV7) and 13 (PCV13) serotypes.

#### Objectives:

1. To describe the serotype distribution of isolates of *S. pneumoniae* from IPD in infants ( $\leq 6$  years of age) in the Comunidad Valenciana from January 2007 until 16<sup>th</sup> of April 2010.

2. To determine the serotype coverage of the different pneumococcal vaccines.

**Materials and methods:** All strains of *S. pneumoniae* causing IPD in infants in the Comunidad Valenciana, were collected from the 22 participating hospitals. Serotyping was performed by serum slide agglutination (Denka-Seiken, Tokyo, Japan).

**Results:** 116 Strains were collected. The most prevalent serotypes in order of prevalence were: 1 (19,8%), 19A (15,5%), 7F (12,1%), and 14 (8,6%). The serotype coverage of the pneumococcal vaccine in children  $\leq 6$  years is 21,6 % by the PCV7 and 75,0 % by the PCV13.

#### Conclusions:

- The four most prevalent serotypes in infants, causing IPD in the Comunidad Valenciana during the study period were 1, 19A, 7F and 14.
- Taking into account the high serotype coverage (75,0% by PCV13) in infants of the most recent vaccine, it might be recommended to include the PCV13 vaccine in childhood immunization programs.
- To draw definite conclusions about including these vaccines in childhood immunization calendars, the results of safety and cost-effectiveness studies

about the future vaccines should be taken into account.

PS: Data used from the Surveillance Network of the Valencia Community (MIVA network). Public Health Department, Valencia, Spain

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### IMMUNOGENICITY PROFILE OF MENVEO® IN ADOLESCENTS AND ADULTS ENROLLED IN PHASE III CLINICAL TRIALS

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**Background:** Menveo®, a new quadrivalent meningococcal conjugate vaccine against serogroups A, C, W-135 and Y was approved in the US and EU for persons 11- to 55-year-olds. Integrated immunogenicity data has not been presented.

**Methods:** Results of 4 phase 3 studies with shared inclusion/exclusion criteria and immunogenicity endpoints were evaluated. Studies compared Menveo® with previously licensed vaccines (Menactra®, Menomune®) and evaluated sequential or co-administration of licensed adolescent vaccines (Tdap and HPV). Primary immunogenicity evaluations made 28 or 30 days postvaccination used serum bactericidal assays using human complement (hSBA); statistical noninferiority criteria were predefined.

**Results:** Overall, 6752 adolescents and adults were randomized to receive study vaccines at clinical centers in the United States, Italy, and Costa Rica. Comparisons to previously licensed vaccines revealed at least noninferior immunogenicity, as assessed by seroresponse for all serogroups versus both comparators as well as statistically higher results for each serogroup in various studies and age groups. Results for percentages of participants with hSBA  $\geq 1:8$  and hSBA GMTs were supportive of seroresponse results, indicating noninferiority compared with previously licensed products. Results also supported the use of Menveo® concomitantly or sequentially with Tdap and HPV; hSBA findings were inconsistent with interference among the antigens included in co-administered or sequentially administered vaccines.