

Serotype Competence and Penicillin Resistance in *Streptococcus pneumoniae*

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摘要

Abstract

From 2003 to 2005, we prospectively collected 118 isolates of pneumococci belonging to 7 serotypes to investigate their competence under the influence of the synthetic competence-stimulating peptides. The degree of competence of the various serotypes differed significantly. Serotype 613 had the highest competence, followed by serotypes 14, 19F, 9V, 23F, 3, and 18C. Isolates belonging to serotype 613 had greater genetic diversity than isolates belonging to serotype 3, which has high genetic clustering. Isolates belonging to serotypes 3 and 18C that were 100% sensitive to penicillin were significantly less competent than isolates belonging to serotypes 613, 14, 19F, 9V, and 23F, which were frequently resistant to penicillin. Under the 7-valent pneumococcal conjugate vaccine program, enhanced molecular surveillance of virulent clones with higher competence to detect serotype switching will become more important