Determination of Pneumococcal Antibodies in Serum with Multiplex Technology

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Description

Determination of pneumococcal antibodies in serum with multiplex technology. Streptococcus pneumoniae, the primary causative agent of pneumonia and otitis media, occurs in 92 different serotypes. The serotype is defined by the structure of the capsular polysaccharide.

In the Laboratory of Medical Microbiology and Immunology of the St. Antonius Hospital in Nieuwegein, The Netherlands, we have developed a multiplex assay, enabling the simultaneous measurement of antibodies against the 25 most prevalent pneumococcal serotypes. The assay requires only small amounts of blood (50 microliter) and therefore can be used for all patients, including babies. Shown is a screen-shot of an analysis using Luminex software, indicating the positioning of the 25 gates for the beads coupled with 25 different serotypes.