Overview

*Streptococcus pneumoniae* continues to be one of the leading bacterial pathogens causing death in children under 5 years of age.\(^1\) It can be responsible for pneumonia, bacteremia, sinusitis and acute otitis media.\(^2\-4\) Current licensed polysaccharide-based vaccines for adults are poorly immunogenic in children under two years of age.\(^2\)

In February of 2000, the FDA licensed a heptavalent pneumococcal conjugate vaccine (PCV7, Prevnar\textsuperscript{TM} Wyeth Lederle Vaccines) designed to stimulate immunity in children less than 2 years of age\(^5\) against the 7 most frequent serotypes that account for 83% of invasive disease in children <4 years of age: serotypes 4, 6B, 9V, 14, 18C, 19F and 23F\(^6\).

**Specialty’s Pneumo-7\textsuperscript{TM}** quantifies specific IgG anti-capsular antibody concentrations against all 7 serotypes found in the licensed heptavalent vaccine. Antibody levels for each specific serotype greater than 1.0 ug/mL, are associated with long-term protection against invasive disease. Pre- and post-immunization monitoring identifies vaccination efficacy in achieving these protective levels.

Clinical Utility

- **Specialty’s Pneumo-7\textsuperscript{TM}** verifies that an individual vaccinated with the Pneumococcal Heptavalent Vaccine is protected against serotypes 4, 6B, 9V, 14, 18C, 19F, and 23F
- Serotype surveillance before and after vaccination helps verify immunization efficacy, especially in children <2 years\(^3\)
- Low post-vaccination IgG antibody concentrations to all 7 serotypes may suggest an IgG antibody immunodeficiency to polysaccharide antigens
- Test parameters have been standardized against the FDA 89SF Pneumococcal reference serum\(^7\)

### Ordering Information

<table>
<thead>
<tr>
<th>Test Code</th>
<th>Test Name/Components</th>
<th>Specimen Requirements</th>
<th>Set up Schedule</th>
<th>Assay Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2384</td>
<td><strong>Pneumo-7\textsuperscript{TM}</strong> <em>Streptococcus pneumoniae</em> IgG Antibodies, 7 serotypes (Heptavalent) - 4, 6B, 9V, 14, 18C, 19F, and 23F.</td>
<td>1 (0.5) mL Serum; Ambient, Refrigerated or Frozen. For vaccination studies (#2384P), please provide a pre- and a post-immunization specimen, labeling tubes “pre” and “post” respectively, and ship in the same package.</td>
<td>Wednesday, Friday, Sunday</td>
<td>2-4 days</td>
</tr>
</tbody>
</table>

*Specify “Send Pneumo-7\textsuperscript{TM} to Specialty Laboratories” For immediate attention and sample pick-up, call 800-421-4449.*

Methodology

**ImmunoArray Assay (IAA)**
Related Tests

- **2370** *Streptococcus pneumoniae* IgG Antibodies, 4 Serotypes, IAA
- **2370P** *Streptococcus pneumoniae* IgG Antibodies, 4 Serotypes Pre/Post, IAA
- **2386** *Streptococcus pneumoniae* IgG Antibodies, 12 Serotypes, IAA
- **2386P** *Streptococcus pneumoniae* IgG Antibodies, 12 Serotypes Pre/Post, IAA
- **9636** *Streptococcus pneumoniae* Antigen, LPA

References


Visit our Web site at www.specialtylabs.com
Or call Client Services at 800-421-4449