Notification Date: June 27, 2023 Effective Date: August 3, 2023

Streptococcus pneumoniae IgG Antibodies, 23 Serotypes, Serum

Test ID: PN23M

Ordering Guidance:

This test is the preferred test for patients previously tested for *Streptococcus pneumoniae* serotypes (as part of follow up testing or part of pre/post vaccine assessment).

The preferred test for patients being evaluated for possible immunodeficiency or for assessment of pneumococcal vaccination response (initial evaluation) is PNTOR / Streptococcus pneumoniae IgG Antibodies, Total, with Reflex, Serum

The preferred test for patients previously tested for total *Streptococcus pneumoniae* antibodies (as part of follow up testing or part of pre/post vaccine assessment) is PNTO / *Streptococcus pneumoniae* IgG Antibodies, Total, Serum

Useful for:

Assessing the IgG antibody response to active immunization with nonconjugated, 23-valent pneumococcal vaccines

Assessing the IgG antibody response to active immunization with conjugated 13-valent, 15-valent and 20-valent pneumococcal vaccines

Determining the ability of an individual to produce an antibody response to polysaccharide antigens, as part of the evaluation for humoral or combined immunodeficiencies

Methods:

Microsphere Photometry

Reference Values:

Results are reported in mcg/mL.

Serotype	Normal value	
1 (1)	> or =1.0	
2 (2)	> or =1.0	
3 (3)	> or =1.0	
4 (4)	> or =1.0	
5 (5)	> or =1.0	

8 (8)	> or =1.0
9N (9)	> or =1.0
12F (12)	> or =1.0
14 (14)	> or =1.0
17F (17)	> or =1.0
19F (19)	> or =1.0
20 (20)	> or =1.0
22F (22)	> or =1.0
23F (23)	> or =1.0
6B (26)	> or =1.0
10A (34)	> or =1.0
11A (43)	> or =1.0
7F (51)	> or =1.0
15B (54)	> or =1.0
18C (56)	> or =1.0
19A (57)	> or =1.0
9V (68)	> or =1.0
33F (70)	> or =1.0

Specimen Requirements:

Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Specimen Volume: 0.5 mL

Submission Container/Tube: Plastic vial

Collection Instructions: Centrifuge and aliquot serum into plastic vial

Minimum Volume: 0.4mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	21 days
	Frozen	21 days

Cautions:

The humoral immune response to *Streptococcal pneumoniae* vaccination is affected by multiple factors, including age, immune status, vaccination history, prior infections, and carrier status.

Protective concentrations of IgG antibodies, or those required to prevent infection from *S. pneumoniae*, have not been defined for any serotype.

Quantitation of the IgG antibody response to pneumococcal serotypes does not provide any information on the functional capacity of the serotype-specific antibodies generated (opsonization efficiency).

IgG antibodies specific for the 23 serotypes included in PPSV23 are measured in this test; except for serotype 6A, IgG antibodies specific for all the serotypes in PCV13, PCV15, and PCV20 are measured in this test.

CPT Code:

86317 x 23

Day(s) Performed: Monday – Friday Report Available: 4 to 6 days

Questions

Contact Amy Ennis, Laboratory Resource Coordinator at 800-533-1710.