

6296 S-SpnAb (NV) *Streptococcus pneumoniae* (serotypes 2, 8, 10A, 11A, 12F, 15B, 17F, 20 and 33F)

Reference values and interpretation of results

Response to pneumococcal polysaccharide vaccine

Age-specific reference values are available for interpreting the vaccine response (see table). The values have been determined based on samples taken from Finnish children and adults before and 4 weeks after the administration of a 23-valent pneumococcal polysaccharide vaccine. The vaccine response is interpreted as normal if the antibody concentration of more than half of the 9 serotypes examined (5-9/9) is above 0.35 µg/ml. In borderline cases, the vaccine response is considered normal if, in more than half of the serotypes studied (5-9/9), the antibody concentration is greater than the serotype-specific antibody concentration corresponding to a 5 per cent percentile.

Reference value table: Serotype-specific geometric mean concentrations (GMC) of pneumococcal IgG class antibody concentrations (µg/ml), 5 per cent percentile and increase factors before and 4 weeks after the administration of a **23-valent pneumococcal polysaccharide vaccine**.

2–6-year-olds (n= 56)

Serotype	Before vaccination	After vaccination		
	Antibody concentration (µg/ml, GMC)	Percentile 5%	Increase factor	
2	0.17	8.6	1.9	51
8	0.24	16	4.3	66
10A	0.22	1.9	0.38	8.9
11A	0.15	2.7	0.61	18
12F	<0.028	0.44	0.046	26
15B	0.064	1.5	0.13	24
17F	0.15	3.4	0.34	22
20A*	0.37	2.1	0.43	5.9
33F	0.078	3.4	0.49	44

7–17-year-olds (n=33)

Serotype	Before vaccination	After vaccination		
	Antibody concentration (µg/ml, GMC)	Percentile 5%	Increase factor	
2	0.25	7.9	1.03	32
8	0.33	17	5.8	52
10A	0.23	3.4	0.43	14 years old
11A	0.47	3.5	0.71	7.6
12F	<0.028	0.33	0.057	26
15B	0.27	7.3	0.58	28
17F	0.22	9.2	0.69	42 years,
20A*	0.40	3.1	0.44	7.8
33F	0.20	4.6	0.81	24

**Adults
(n=61)**

Serotype	Before vaccination	After vaccination		
	Antibody concentration ($\mu\text{g/ml}$, GMC)	Percentile 5%	Increase factor	
2	0.30	8.9	0.39	29
8	0.46	7.3	1.4	16
10A	0.43	3.4	0.26	7.9
11A	0.56	2.9	0.46	5
12F	0.029	0.29	0.033	9.6
15B	0.46	7.3	0.46	16
17F	0.19	3.1	0.28	17
20A*	0.86	5.3	0.67	6.3
33F	0.50	5	0.17	12

* The name of pneumococcal serotype 20 has been specified as serotype 20A
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